



FOI2020/11829

E-mail:

Navysec-foimailbox@mod.gov.uk

11 November 2020

Dear I

Release of Information

Thank you for your correspondence of 22 October 2020 in which you requested the following information:

'I have just learned that I might not be able to join the royal navy due to my Scheuremann's disease. This is due to the fact that I have a surgery scheduled at the end of this year, and it's confusing that the fact that I can go into the navy with Scheuremann's disease, but if I get spinal surgery to treat the condition, I will be barred from entry.

What I am trying to request is to see if there is still a way to join the Royal Navy if I have a spinal surgery for Scheuremann's disease.'

Your enquiry has been considered to be a request for information in accordance with the Freedom of Information Act 2000 (the Act).

A search has now been completed within the Ministry of Defence (MOD) and I can confirm that information in scope of your request is held. Information regarding single Service entry standards in relation to Scheuermann's disease can be found in the MOD policy document titled "Joint Service Publications 950 Medical Policy Leaflet 6-7-7 Joint Service Manual of Medical Fitness", Section Four "Influence of Particular Conditions on Medical Fitness for Entry", Annex K "Musculoskeletal Pre Entry". A copy is enclosed for your information.

Given the amount of detailed information in the leaflet described above, an extract of certain paragraphs from Annex K which you may find helpful can be found at Annex A to this letter.

Under Section 16 (Duty to Provide Advice and Assistance) of the Act, it may be helpful if I explain that when releasing information under the FOI Act, the Department is also obliged to publish it on the GOV.UK website in accordance with the Cross-Government Transparency Agenda. In addition, the release of personal information relating to an

individual would contravene the principles of the Data Protection Act 2018 and we would, therefore, be obliged to withhold this information under section 40(2) (Personal Information) of the FOI Act.

If you have any queries regarding the content of this letter, please contact this office in the first instance.

If you wish to complain about the handling of your request, or the content of this response, you can request an independent internal review by contacting the Information Rights Compliance team, Ground Floor, MOD Main Building, Whitehall, SW1A 2HB (e-mail CIO-FOI-IR@mod.uk). Please note that any request for an internal review should be made within 40 working days of the date of this response.

If you remain dissatisfied following an internal review, you may raise your complaint directly to the Information Commissioner under the provisions of Section 50 of the Freedom of Information Act. Please note that the Information Commissioner will not normally investigate your case until the MOD internal review process has been completed. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF. Further details of the role and powers of the Information Commissioner can be found on the Commissioner's website at https://ico.org.uk/.

Yours sincerely

Navy Command Secretariat - FOI Section

Extract from the Joint Service Publications 950 Medical Policy Leaflet 6-7-7 Joint Service Manual of Medical Fitness Musculoskeletal Pre-Entry

Section Four - Influence of Particular Conditions on Medical Fitness for Entry

ANNEX K MUSCULOSKELETAL PRE ENTRY

Spinal Conditions

- 39. **General**. Normal structure and function of the spine is an essential requirement for military service. The following spinal conditions must be given careful consideration.
- 42. **Scheuermann's disease**. This must be a radiological diagnosis. Candidates who have achieved 3 months activity comparable with military training (especially load-carrying ability) without symptoms are to be referred to Single Service Medical Employment Standards. Candidates who are currently symptomatic are UNFIT.
- 46. **Previous spinal surgery**. Candidates with a history of any orthopaedic spinal surgery are normally UNFIT. However, candidates who have had a single-level discectomy (eg for sequestered disc) may be FIT subject to referral to Single Service Medical Entry Staff responsible for the selection of recruits providing the candidate is at least 12 months post-operation, is asymptomatic when undertaking activity comparable with military service and has been doing so for at least 3 months and there is no evidence of treatment or injury related secondary effects.





JSP 950 MEDICAL POLICY LEAFLET 6-7-7

JOINT SERVICE MANUAL OF MEDICAL FITNESS



Contents

Amendments table iii-v

Section One: Description of the PULHHEEMS System 1-1 to 1-5

Section Two: The Joint Medical Employment Standard 2-1 to 2-2

- Annex A Medical Deployment Standard 2-A
- Annex B Medical Employment Standard 2-B-1 to 2-B-6
- Annex C Medical Limitations 2-C-1 to 2-C-8

Section Three: Occupational Health Assessments 3-1 to 3-4

- Annex A Functional Interpretation of Grades for each Quality 3-A-1 to 3-A-2
- Annex B Guidelines for the Conduct of the Pre-Service Medical Assessment 3-B-1 to 3-B-6
- Annex C Assessment of Body Mass Index 3-C-1 to 3-C-2
- Annex D Assessment of hearing acuity (H) 3-D
- Annex E Assessment of distant visual acuity (E) 3-E-1 to 3-E-2
- Annex F Evaluation of Mental Capacity (M) and Emotional Stability (S) 2-F
- Annex G Assessment of Red/Green Colour Perception (CP) 3-G-1 to 3-G-3
- Annex H Health declaration example for use at demobilisation 3-H-1 to 3-H-2
- Annex I Guidelines for Undertaking Screening Pure Tone Audiometry 3-I-1 to 3-I-7

Section Four: The Influence of Particular Conditions on Medical Fitness for Entry 4-1 to 4-3

- Annex A Eyes Pre-entry 4-A-1 to 4-A-4
- Annex B Ear Nose and Throat Pre-entry 4-B-1 to 4-B-3
- Annex C Cardiovascular Pre-entry 4-C-1 to 4-C-3
- Annex D Respiratory Pre-entry 4-D-1 to 4-D-3
- Annex E Gastrointestinal Pre-entry 4-E-1 to 4-E-3
- Annex F Renal and Urological Pre-entry 4-F-1 to 4-F-2
- Annex G Neurological Pre-entry 4-G-1 to 4-G-5
- Annex H Endocrine Pre-entry 4-H-1 to 4-H-2
- Annex I Dermatological Pre-entry 4-I-1 to 4-I-2
- Annex J Reproductive Pre-entry 4-J-1 to 4-J-3
- Annex K Musculoskeletal Pre-entry 4-K-1 to 4-K-9
- Annex L Psychiatry Pre-entry 4-L-1 to 4-L-9
- Annex M Dental and Oro-Maxillofacial Pre-entry 4-M-1 to 4-M-2
- Annex N Other Conditions Pre-Entry 4-N-1 to 4-N-7

Section Five: The Influence of Particular Conditions on PULHHEEMS Assessment During Service 5-1 to 5-3

- Annex A Eyes In-Service 5-A-1 to 5-A-3
- Annex B Ear Nose and Throat In-Service 5-B
- Annex C Cardiovascular In-Service 5-C-1 to 5-C-2
- Annex D Respiratory In-Service 5-D
- Annex E Gastrointestinal In-Service 5-E-1 to 5-E-2
- Annex F Renal and Urological In-Service 5-F
- Annex G Neurological In-Service 5-G-1 to 5-G-3
- Annex H Endocrine In-Service 5-H
- Annex I Dermatological In-Service 5-I
- Annex J Reproductive In-Service 5-J-1 to 5-J-15
- Annex K Musculoskeletal In-Service 5-K-1 to 5-K-6
- Annex L Psychiatry In-Service 5-L-1 to 5-L-8
- Annex M Dental and Oro-Maxillofacial In-Service 5-M-1 to 5-M-2
- Annex N Other Conditions In-Service 5-N-1 to 5-N-7

Section Six: Harmonisation of Medical Boards Leading to Discharge

Amendme	nts table
Date and Version	Summary of amendments/remarks
JSP 950 Part 1	Leaflet 6-7-7
1 Aug16 1.0	New JSP format to comply with DRU JSP review. Merged leaflets 6-7-1 to 6-7-6 (inclusive).
Section 1 Desc	cription of the PULHHEEMS system
1 Aug16 1.0	Content unchanged. Last reviewed Jun 07.
3 Jun 19 1.5	Policy content unchanged. Minor amendments to paragraph 19 approved by MES MJP.
Section 2 The	Joint Medical Employment Standard
1 Aug16 1.0	Major review.
15 Dec 17 1.2	Major review.
3 Jun 19 1.5	Amendment to paragraph 7 a (3) regarding sS rules for temporary JMES approved by MES MJP.
Section 3 Occ	upational Health Assessments
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
29 Jul 19 1.6	Section title change only.
Section 3 Ann	ex A Functional Interpretation of Grades for each Quality
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
Section 3 Ann	ex B Guidelines for the Conduct of the Pre-Service Medical Assessment
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
Section 3 Ann	ex C Assessment of Body Mass Index
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
Section 3 Ann	ex D Assessment of hearing acuity (H)
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
Section 3 Ann	ex E Assessment of distant visual acuity (E)
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
Section 3 Ann	ex F Evaluation of Mental Capacity (M) and Emotional Stability (S)
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
Section 3 Ann	ex G Assessment of Red/Green Colour Perception (CP)
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
Section 3 Ann	ex H Health declaration - example for use at demobilisation
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
Section 4 The	influence of particular conditions on medical fitness for entry
1 Aug16 1.0	Content unchanged. Last reviewed Apr 14.
8 Sep 18 1.3	Update of paragraph 4.2 General Requirements.
	Major review.
Section 4 Ann	ex A Eyes pre-entry
1 Aug16 1.0	Content unchanged. Last reviewed 1 Feb 16.
29 Jul 19 1.6	Minor amendment to add Appendix 1 'Calculation of Spherical Equivalent'.
Section 4 Ann	ex B Ear, nose and throat pre-entry
1 Aug16 1.0	Content unchanged. Last reviewed 1 Feb 16.
	ex C Cardiovascular pre-entry
1 Aug16 1.0	Content unchanged. Last reviewed 1 Feb 16.
	ex D Respiratory pre-entry
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
	ex E Gastrointestinal pre-entry
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
	ex F Renal and urological pre-entry
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.
	ex G Neurological pre-entry
COULDII T AIIII	on a managan pro oner,

Amendme	Amendments table				
D ()					
Date and Version	Summary of amendments/remarks				
1 Aug16 1.0	Content unchanged. Last reviewed 1 Feb 16.				
Section 4 Ann	ex H Endocrine pre-entry				
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.				
	ex I Dermatological pre-entry				
1 Aug16 1.0	Content unchanged. Last reviewed Jun 07.				
15 Dec 17 1.2	Major review.				
Section 4 Ann	ex J Reproductive pre-entry				
1 Aug16 1.0	Content unchanged. Last reviewed Oct 06.				
Section 4 Ann	ex K Musculoskeletal pre-entry				
1 Aug16 1.0	Content unchanged. Last reviewed 1 Feb 16.				
29 Aug 19 1.6	Major review.				
Section 4 Ann	ex L Psychiatry pre-entry				
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.				
24 Sep18 1.4	Major review.				
Section 4 Ann	ex M Dental and oro-maxillo-facial pre-entry				
1 Aug16 1.0	Major review.				
Section 4 Ann	ex N Other conditions pre-entry				
1 Aug16 1.0	Content unchanged. Last reviewed Apr 14.				
2 Sep 16 1.1	Major review.				
3 Jun 19 1.5	New footnote 10 to paragraph 11. Update of Table 1 'Recommended allergy and immunology clinics for military referrals'.				
29 Jul 19 1.6	Amendment to paragraph 10a Huntingdon's Disease agreed by MES MJP.				
	influence of particular conditions on PULHHEEMS assessment during Service				
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.				
	ex A Eyes in-service				
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.				
29 Jul 19 1.6	Minor amendment to paragraph 5a to refer to new Appendix 1 to Annex A Section 4.				
Section 5 Ann	ex B Ear, nose and throat in-service				
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.				
Section 5 Ann	ex C Cardiovascular in-service				
1 Aug16 1.0	Content unchanged. Last reviewed Mar 14.				
	ex D Respiratory in-service				
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.				
3 Jun 19 1.5	Major Review.				
	ex E Gastrointestinal in-service				
1 Aug16 1.0	Content unchanged. Last reviewed Apr 14.				
	ex F Renal and urological in-service				
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.				
	ex G Neurological in-service				
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.				
	ex H Endocrine in-service				
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.				
Section 5 Ann	ex I Dermatological in-service				
1 Aug16 1.0	Content unchanged. Last reviewed Apr 08.				
	ex J Reproductive in-service				
1 Aug16 1.0	Content unchanged. Last reviewed Apr 07.				

Amendme	Amendments table					
Date and Version	Summary of amendments/remarks					
Section 5 Ann	ex K Musculoskeletal in-service					
1 Aug16 1.0	1.0 Content unchanged. Last reviewed Feb 15.					
Section 5 Ann	ex L Psychiatry in-service					
1 Aug16 1.0	Content unchanged. Last reviewed Jan 16.					
3 Jun 19 1.5	Major Review.					
Section 5 Ann	ex M Dental and oro-maxillo-facial in-service					
1 Aug16 1.0	Content unchanged. Last reviewed Oct 13.					
15 Dec 17 1.2	Major review.					
Section 5 Ann	ex N Other conditions in-service					
1 Aug16 1.0	Content unchanged. Last reviewed 1 Feb 16.					
3 Jun 19 1.5	Update of Table 1 'Recommended allergy and immunology clinics for military referrals'.					
29 Aug 19 1.6	Minor amendment to paragraph 5 line 3.					
Section 6 Harr	nonisation Of Medical Boards leading to discharge					
1 Aug16 1.0	Content unchanged. Last reviewed Apr 07					
3 Jun 19 1.5	Minor amendment to paragraph 10c and Annex B paragraph 1 regarding FMed 23 approved by MES MJP.					

SECTION ONE: DESCRIPTION OF THE PULHHEEMS SYSTEM

General

1. These medical standards are designed to provide a framework for the medical assessment of functional capacity of potential recruits and serving personnel from which can be derived a determination of fitness for service. They are to be applied by Service Medical Officers (MOs), Civilian Medical Practitioners (CMPs) and doctors carrying out assessments on behalf of the Service recruiting organisations. The award of an appropriate single-Service medical employment standard should be based on a sound knowledge of the individual's intended or present job and a thorough clinical assessment. MOs and CMPs may draw on the expertise of specialist clinicians to evaluate diagnosis or prognosis and on the expertise of specialists in occupational medicine in the determination of fitness for work. In all cases, care should be taken to ensure that the PULHHEEMS profile awarded truly reflects the individual's functional capacity and the medical employment standard awarded truly reflects medical employability.

Purpose

2. The PULHHEEMS system has been developed to provide a method for standardising and recording the medical functional assessment. It is used as a tool from which medical employability criteria can be derived and communicated to the Executive branches.

The system

- 3. In the United Kingdom Armed Forces, the classification system that leads to the award of the employment standard is the PULHHEEMS System of Medical Classification. The decision to award a particular employment standard must be based on function and the ability to perform the tasks involved in a given job. The presence of certain medical conditions will influence the PULHHEEMS profile; these are detailed in 3 and 4. The code letters in this acronym refer to a sub-division of physical and mental function as follows:
 - P Physical Capacity
 - U Upper Limbs
 - L Locomotion
 - HH Hearing Acuity (right and left)
 - EE Visual Acuity (right and left, uncorrected and corrected)
 - M Mental Capacity
 - S Stability (Emotional)
- 4. These subdivisions are known as qualities. The combined assessment of the group of qualities forms the PULHHEEMS profile. From this profile, each of the sSs can then award a medical employment standard appropriate to the individual that will ensure that he or she is not employed on duties for which he or she is medically unfit. Since medical employment standard systems are Service specific they will not be discussed further here; clarification is provided in Section 5.

The qualities in more detail

5. The following list clarifies the factors to be considered when assessing each of the qualities:

- a. **P Physical capacity.** This quality is used to indicate an individual's overall physical and mental development, his or her potential for physical training and suitability for employment worldwide (ie the overall functional capacity). The 'P' grading is affected by other qualities in the PULHHEEMS profile, namely the 'U', 'L', 'HH', 'EE' 'M' and 'S' gradings.
- b. **U Upper limbs.** This indicates the functionality of the hands, arms, shoulder girdle and cervical and thoracic spine. A reduced 'U' grading will also affect the 'P' grading.
- c. **L Locomotion.** The 'L' grading refers to the functional efficiency of the locomotor system. This quality must therefore take into account assessment of the lumbar spine, pelvis, hips, legs, knees, ankles and feet. Observation of gait and mobility are also important. Any conditions affecting the function of the locomotor system will result in a reduced 'L' grading which will in turn be reflected in the 'P' grading.
- d. **HH Hearing.** This quality assesses auditory acuity only. Diseases of the ear such as otitis externa are assessed under the 'P' quality. However, severe loss of hearing will affect the 'P' grading.
- e. **EE Visual acuity.** This quality assesses visual acuity only. Diseases of the eye such as glaucoma are assessed under the 'P' quality. However, severe loss of visual acuity will affect the 'P' grading.
- f. **M Mental capacity.** Mental capacity is not subject to formal medical assessment at recruitment. However, the recruit selection procedure, including interviews, and the individual's academic record will allow judgement to be made on this quality. Subject changes are only likely to occur as a result of neurological disease or head injury.
- g. **S Stability (emotional).** The 'S' quality indicates emotional stability which grades the individual's ability to withstand the psychological stress of military life (especially operations). Amendments to the 'S' grade are usually required in cases of psychiatric illness but are not restricted to these circumstances.

Grades of each quality

6. Each quality has the potential to be awarded a grade of 1 to 8. However, only the 'E' quality uses all 8 possible gradings. The permitted gradings are tabulated as follows:

P	U	L	Н	Н	Е	Е	M	S
			1	1	1	1		
2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3
4			4	4	4	4		
					5	5		
					6	6		
7	7	7			7	7	7	7
8	8	8	8	8	8	8	8	8

Additionally, the grading of P0 is used in the circumstances outlined in paragraphs 7 and 15.

Functional interpretation of each grade

7. Specific definitions for the grades of the P, U, L, M and S qualities are:

Quality	Definition
0	Medically unfit for duty and under medical care (P quality only)
2	Medically fit for unrestricted service worldwide
3	Medically fit for duty with minor employment limitations
4	Medically fit for duty within the limitations of pregnancy
7	Medically fit for duty with major employment limitations
8	Medically unfit for service

Employability includes functional capacity to deploy on operations. The following matrix should be used to provide guidance on the functional capacity of each grading under the U, L, M and S qualities:

Degree	Functional capacity	Service capacity
2	Average	Full
3	Below Average	Restricted
7	Very limited	Restricted
8	Severely limited	Unfit for any form of service
0	Unfit for duty: under medical care	Unfit for duty: under medical care

- 8. The degrees of quality of HH and EE reflect discrete levels of performance under audiometric testing and testing of visual acuity. The standard in the RIGHT eye or ear is graded first, the LEFT side second.
- 9. The audiometric standards with their corresponding gradings are detailed in Section 2, along with details of the audiometric examination and examination of the ears.
- 10. The system of grading visual acuity along with the ophthalmic examination and recording of the results are in Section 2.

Assessments of functional capacity

- On entry to the Armed Forces individuals are awarded a PULHHEEMS profile which is deemed permanent. The letter P signifying 'Permanent' may be inserted after the degree of P quality or after the single-Service Medical Employment Standard. Subsequent re-gradings are referred to as medical boarding, whether carried out at unit level or by a formally constituted Medical Board. Individuals who remain on duty with medical conditions that do not require immediate in-patient treatment are classified according to their functional capacities, but no lower than a grading of 7. Where a condition is expected to resolve, the letter R (signifying remediable) may be inserted after the degree of P quality or other quality, for example P3R L3 or P3R L3R. Non-remediable conditions do not require the R suffix. These gradings may be held in a temporary capacity indicated by a T suffix after the degree of P quality or after the single-Service Medical Employment Standard. The maximum period for which an individual may hold such a temporary grading is subject to single-Service regulations but should not normally exceed 18 months. Where a condition persists beyond 18 months, or it can be predicted that this will be the case at an earlier stage, a definitive standard (permanent) is to be awarded, without the letter R for remedial conditions. Reference is to be made in the medical board report on the likely duration of time before recovery might be expected if there remains a possibility of continuing improvement.
- 12. Personnel who are due to exit the Service, but who hold a temporary medical employment standard, may leave and a medical board may be held dependent upon single-Service employment regulations. An individual would not normally be given an extension of Service solely to allow assignation of a definitive (permanent) medical employment standard. Where an individual has a condition that would result in invaliding, but whose discharge date precedes medical board assessment, the case is to be discussed with the single-Service President of the medical board to determine the most suitable course of action.
- 13. The medical employment standard of an individual admitted to a hospital is not to be changed purely for this purpose unless the in-patient period exceeds or is expected to exceed one month. If this is the case, the award of a P0 grading is appropriate. Medical boarding prior to admission and after discharge is to make a functional assessment with respect to the PULHHEEMS profile and award an appropriate single-Service category in the normal way.
- 14. Individuals who are discharged from hospital and are fit for limited duty only, but whose full recovery is expected within a total period of 18 months of downgrading, are to be awarded R and T annotations as appropriate (see para 11). If their condition is expected to remain extant beyond 18

months or is not remediable, a permanent category is to be awarded by a Medical Board. In all remediable cases, an expectation of the recovery period is to be recorded in the medical board record. Those discharged from hospital directly to a short period of sick leave need not be reassessed until the end of the period of sick leave, but before return to work.

- 15. Individuals who are discharged from hospital but are expected to remain unfit for duty for a prolonged period (greater than one month) are to be awarded a P0 grading. If it becomes apparent that a return to work is unlikely for medical reasons, P8 medical boarding is to be considered. Alternatively, an appropriate working medical category is to be awarded on return to duty. An individual should not normally be discharged from the Service with a P0 grading. Medical discharge will attract a grading of P8; administrative discharge associated with medical conditions may occur in those graded P7 or higher.
- 16. Pregnant serving women who are fit for duty are to be graded P4 with appropriate single-Service medical employability limitations. Where other clinical conditions occur during or after pregnancy which merit re-grading in their own right, medical boarding is to take account of these and reflect them in the normal way.

Assessment of the individual

- 17. Medical assessment is carried out under the PULHHEEMS system at entry and discharge, and at intervals during service (see Section 3).
- 18. All PULHHEEMS qualities and gradings should be governed by their functional assessment definitions found in Section 3. The P quality takes account of deployability and is affected by the ability to carry out the duties required within the individual's employment group.

Recording of assessments

- 19. The PULHHEEMS assessment is to be recorded on medical forms and electronic medical templates where boxes or drop-downs are provided for this purpose¹. When a change is made through medical boarding, the new profile is to be recorded on the medical record. Medical board reports are to include the review date of the medical standard awarded if necessary.
- 20. Illustrative examples of medical board PULHHEEMS assessment for a number of conditions are given below:

	_	
7	4	
•	ı	

Year of birth	Р	U	L	Н	Н	Е	Е	M	S
1979	3R	2	2	1	2	1	1 -	2	2
Ht180cm CP2 Wt89kg	P U L S			ical det		peratior	า.		

This individual has a left inguinal hernia, which is considered remediable. The grading P3R will be retained until he is ready to be awarded a permanent grade. This may be P2, assuming full recovery.

¹ Appropriate FMed Forms (paper or electronic), or within the Grading Templates in the electronic medical record system.

b.

D.									
Year of birth	Р	U	L	н	н	E	Е	М	S
1969	3	2	2	3	4	4 2	5	2	2
Ht179cm	P U L S			cal deta	nils hearing	loss L>F	₹.		
Wtkg									

This individual has marked noise induced hearing loss in both ears. Note that in this case the HH gradings affect his physical capacity and thus his permanent P grading; a grade of P3 has been awarded.

C.

Year of birth	Р	U	L	н	н	Е	Е	М	S
1966	7R	2	2	2	2	1	1	2	7
Ht185cm CP3 Wt62kg	P U L S			inical d					

This individual has a chronic depressive illness and has been awarded a grading of 7 under the 'S' quality. Note that the illness will also affect the individual's physical capacity and deployability, so the 'P' grading has also been reduced to 7.

SECTION TWO: THE JOINT MEDICAL EMPLOYMENT STANDARD

Background

- 1. Prior to Nov 09 the single-Services used variations on a common theme to describe medical employability of service personnel. However, because no common denominator existed, direct comparisons could not be made. To resolve this, the Joint Medical Employment Standard (JMES) system of classification was introduced. However, following its introduction differences in the extent of single-Service adoption meant that only some data (Medical Deployment Standard) was available for reporting to the Defence People and Training Board (DPTB) and the Defence Board (DB), and this data lacked sufficient granularity for useful reporting purposes (such as numbers fit for deployment to specific locations or environment) and manpower planning.
- 2. In Feb 15 The JMES Harmonisation Working Group¹ recommended modifications to the existing JMES system to promote consistency of use across the single-Services to provide better information for Executive decision-making purposes and the ability to offer more accurate information to the DPTB and the DB.
- 3. This Leaflet describes the harmonised JMES system.

Introduction

- 4. The JMES is awarded by medical staff in order to inform commanders and career managers of the deployability and employability of Service Personnel. It describes the deployability, functional and geographical employability and specific medical limitations.
- 5. Employment or deployment of a Service Person outwith their JMES must not be done lightly. The Chain of Command retains the authority to employ or deploy the Service Person outwith their JMES, but only in exceptional circumstances and after conducting a risk assessment. 'Exceptional' is defined as:

In an emergency; in extremis; where there is no other choice and not using that Service Person would result in very serious consequences. Financial reasons or standard manning difficulties would not necessarily be regarded as reasonable considerations. Unless life is at stake, it would be considered unreasonable to task a Service Person with a duty outwith their JMES.

In this case, the risk of employment or deployment of the Service Person lies with the Chain of Command and medical advice from a consultant occupational physician must be sought. A Service Person's JMES should not be altered to comply with Chain of Command requirements unless it is appropriate to do so and the patient has provided consent. Further direction for the Chain of Command can be found in Joint and single Service Employment Policy.

- 6. Changes to the entry JMES and any subsequent changes will require a medical grading review in accordance with single-Service policy.
 - a. BRd 1750A Handbook of Naval Medical Standards.
 - b. AGAI 78 Army Medical Employment Policy PULHHEEMS Administrative Pamphlet (PAP).
 - c. AP 1269A Royal Air Force Manual of Medical Fitness.

¹ JMES Harmonisation Working Group Final Report to SG Hd Med Strat Pol dated 27 Feb 15

JMES elements

7. The JMES classification system is divided into 4 x Primary Elements and 2 x Detailed Elements:

a. Primary elements

- (1) **Date of award.** This is the date the JMES assessment took place or the date when the medical assessment was last reviewed.
- (2) **Date of review.** The next review must take place in accordance with single-Service policy by this date.
- (3) **Permanency.** When a Board awards a JMES a decision should be made as to whether the JMES is temporary (Temp), permanent (Perm) or not applicable (NA). The maximum period of validity of a temporary JMES is (except where an extension is approved under single Service rules):
 - 12 months for the Army
 - 12 months before referral to NSMBOS / Regional OH Board for the RN
 - 18 months for the RAF

A permanent JMES may be awarded at any time if clinically indicated. When a temporary JMES is to become permanent, a formal Medical Board will be convened in accordance with single-Service policy. Permanent does not imply that the JMES can never change but serves to distinguish for personnel staff the longer-term health problems affecting function from the relatively short term, in order to assist with employment decisions.

(4) **Medical Deployment Standard (MDS).** This is an overall deployability summary coding with the sub-categories of Medically Fully Deployable (MFD), Medically Limited Deployability (MLD) and Medically Not Deployable (MND). Further details are at Annex A.

b. **Detailed elements**

- (1) **Medical Employment Standard (MES).** This is an alphanumeric code reflecting an individual's fitness to be employed in the Air (A), Land (L) and Maritime (M) environments together with any additional specific Environment and Medical Support (E) considerations eg A4 L3 M4 E3. On DMICP the suffix 'Legacy' distinguishes between legacy and harmonised JMES awards. On JPA the inclusion of a hyphen, for example 'A-1', distinguishes between legacy and harmonised JMES awards. Further details are at Annex B.
- (2) **Medical Limitations (MedLims).** MedLims are applied as necessary and are visible on JPA eg 1206 Unfit to work in confined spaces. Further details are at Annex C.
- 8. A typical JMES might read:

Date of Award	Date of Review	Permanency	MDS	MES	MedLim
10 Aug 16	10 Feb 17	TEMP	MLD	A4 L3 M4 E3	1206

9. Communication of occupational medicine advice to the Chain of Command. JMES is communicated to the Chain of Command through JPA via a direct feed from DMICP. In addition, the single-Services utilise the following to provide additional information:

- a. RN JMES Electronic Signal.
- b. Army PAP Appendix 9 document.
- c. RAF Reassessment of Employment Standard Patient Advice Notice.

- 1. The Medical Deployment Standard (MDS) describes the medical capacity for deployment.
- 2. Table 1 details the MDS codes and their meaning.

Table 1 Medical Deployment Standard codes

MDS code	Description
MFD Medically Fully Deployable	Fit to deploy to all parts of the world on contingent or follow-on operations without any limitations or requirements for routine medical support beyond deployed Primary Healthcare.
MLD Medically Limited Deployability	 2. Deployment limited due to: a. A medical condition. b. Medical treatment needs. c. Medical support requirements. d. Risk arising from exposure to specific climates eg heat or cold. e. The need to avoid specific exposures eg noise or chemicals. 3. A grade of MLD requires a medical risk assessment (MRA) to be carried out for deployment. The decision on that deployment will depend on the medical condition, individual function, the proposed employment, length of the deployment and the medical support available. 4. MLD personnel may vary from those with minimal limitations who can be used in a wide range of roles and situations to those who can only undertake a limited role or Career Employment Group (CEG) within a specific, well supported setting.
MND Medically Not Deployable	5. Not deployable outside the United Kingdom.6. May be admitted to or under the care of a Medical Facility (MF) or awaiting medical discharge (A6 L6 M6 E5 or 6).

MEDICAL EMPLOYMENT STANDARD

ANNEX B

- 1. The Medical Employment Standard (MES) relates to an individual's employment in their branch/trade duties and is expressed as numerical degrees in four functional areas (detailed elements), indicated by the letters A, L, M and E. These reflect medical fitness for duties in the Air, Land and Maritime environments and any additional specific Environment and Medical Support considerations. All detailed elements of the MES are to be allocated for each individual.
- 2. **Distinguishing between legacy and harmonised JMES awards.** On DMICP the suffix 'Legacy' distinguishes between legacy and harmonised JMES awards. On JPA the inclusion of a hyphen, for example 'A-1', distinguishes between legacy and harmonised JMES awards.
- 3. Where single-Service supplementary guidance is not present, information contained in the 'Description' and 'Guidance' columns apply.
- 4. Table 1 details the MES codes and their meaning.

Table 1 Medical Employment Standard codes

	AIR					
MES	December 1 and	2	Single-Service Supplementary Guidance			
Code	Description	Guidance	RN	Army	RAF	
A1	Fit for flying duties without restriction.	Only for aircrew.				
A2	Fit for flying duties but has reduced hearing or eyesight.	Only for aircrew.				
А3	Fit for duties in the air within the stated employment or MedLims.	Aircrew ¹ .			May be used for: Remotely Piloted Air Systems Operators ² , Gliding Instructors ³ , Flight Medical Officers, Air Stewards.	
A4	Fit to be flown in a passenger aircraft.					
A5	Unfit to be taken into the air.	Except as aeromedical evacuation patients.				
A6	Unfit for any duties in the aviation environment.	Duties in the aviation environment include, but not limited to, air traffic control, baggage handling, aircraft towing, aircraft maintenance, airfield driving and duties on a flying station/base.			Personnel will usually be non-effective or given a medical board recommendation for discharge.	

 ¹ Including other Career Employments Groups defined in <u>AP 1269A Royal Air Force Manual of Medical Fitness</u>
 ² RPAS Operators AP1269A Lft 4-02 para 20d <u>AP 1269A Royal Air Force Manual of Medical Fitness</u>
 ³ VGS Gliding Instructors AP1269A Lft 4-02 para 16 <u>AP 1269A Royal Air Force Manual of Medical Fitness</u>

	LAND						
MES	Description	Guidance	Single-Service Supplementary Guidance				
Code	Description	Guidance	RN	Army	RAF		
L1	Fit for unrestricted duty.						
L2	Fit for high readiness roles with minor limitations.	Must have appropriate level of musculoskeletal fitness to undertake role and all expected duties in austere environments. Must be able to undertake Pre-Employment Training (PET) and Individual Pre-Deployment Training (IPDT) to deliver the minimum personal military skills to allow an individual to carry out the requirements of their job specification while maintaining their own Force Protection (FP) and positively contributing to the FP of those around them. ⁴	RN ⁵ / RM ⁶ unfit for defined aspects of mandatory fitness testing or modifications to command courses required but fully employable and deployable in branch/trade.	May undertake Operational Fitness Tests (OFTs) ⁷ with appropriate build-up training. Must be fit PJHQ ⁴ Global Low to Medium Threat environments. Operational deployments are subject to Deployed MRA only if MDS is MLD. No limitation on exposure to weapons noise. Must be E1 or E2.			
L3	Fit for limited duties but with some restriction subject to MRA.	Should not impose a significant and/or constant demand on the medical services if deployed, on exercise or deployments. The individual may deploy on operations or overseas exercises following completion of a MRA. Have no limitations in their ability to function wearing personal equipment demanded of the environment, branch/trade and rank.		Operational deployments require deployed MRA (PAP App 26) to be completed by Unit CoC. ROHT input to deployed MRA will not be required unless annotated on App 9. Routine activities (as defined in PAP Chapter 5) are covered by App 9.	Able to undertake all branch/trade duties but has difficulty with specified general Service activities eg running.		

⁴ <u>Joint Operational IPDT Policy</u>. IPDT requirements are set against the overall risk to deployed personnel within an individual theatre. This assessment takes into account the identified risk from terrorism, armed attack, criminality and environmental factors including Road Traffic Accidents. Whilst there may be variations in IPDT requirements for personnel deployed on certain operations given their role and exposure to risk, the nature of certain Global operations require all personnel to be trained to a single standard to mitigate the expected threat. **Global Low Threat**. Environments where the identified threats or risks to deployed personnel may not require FP restrictions to be imposed. This category also includes personnel deployed within Medium and High threat environments where the nature of their deployment does not expose them to the threat. **Global Medium Threat**. Environments where there is an identified threat from terrorism, armed attack or high risk of environmental hazards to personnel operating in remote or isolated locations. Personnel deployed on Global Medium Threat deployments are required to complete enhanced training as defined by the JTRs, relevant to role or specific risks. **Global High Threat**. Environments where there is an identified high threat from terrorism, armed attacks, Insider Threat or violent criminality. Personnel deployed on Global High Threat deployments are required to complete enhanced training as defined by the JTRs, relevant to role or specific risks.

⁵ BRd 51 (2) Physical <u>Education and Executive Health Manual - RNFT Policy and Protocols</u>

⁶ Royal Marines Fitness Test Annex A Feb 16

⁷ MATT 2 Fitness Issue 11 Apr 19

	LAND						
MES	ES Barrett	Guidance	Single-Service Supplementary Guidance				
Code	Description	Guidance	RN	Army	RAF		
L4	Fit for certain deployed roles into well-established MOB locations subject to Consultant Occupational Physician MRA.	Individuals whose medical conditions have the potential to pose a significant risk on deployment in the land environment. May be reliant on an uninterrupted supply of medication and/or a reliable cold chain. Must be able to function wearing a helmet and the minimum theatre entry standard body armour.	Likely to be restricted to Major Overseas Bases only.	Operational deployments require deployed MRA (PAP App 26) completed by Unit CoC. ROHT input to deployed MRA required in all circumstances. Routine activities (as defined in PAP Chapter 5) are covered by App 9.	Not able to undertake all branch/trade duties. May only deploy if accepted by deployed location SMO and cleared by a Consultant Occupational Physician or Manning Medical Casework.		
L5	Unfit deployment. Fit for branch/trade and limited UK operations.	Individuals who are unable to deploy due to significant MedLims. May be fit limited UK operations. Able to provide regular and effective service in the non-deployed land environment subject to meeting the minimum requirements as specified in single-Service employment policy.	May be employed within their branch/trade and are fit for UK internal operations within the bounds of their MedLims.	Must be fit for branch / trade subject to allowable limitations as defined in PAP Table 6 (Functional Interpretation of JMES).			
L6	Unfit for service in the land environment.	Unfit for any duties.		L6 temp requires ROHT sanction to extend > 6 months and DM(A) sanction to extend >12 months.	Personnel will usually be non-effective or given a medical board recommendation for discharge.		

	MARITIME						
MES	Description	Guidance	Single-Service Supplementary Guidance				
Code	Description	Guidance	RN	Army ⁸	RAF		
M1	Fit for unrestricted duties.	May be employed and deployed worldwide in the maritime environment.			RAF personnel who are augmentees or fit to be borne as augmentees ⁹ to a ship's company.		
M2	Fit for restricted duties afloat within the limitations as stated.	Fit for duties at sea but may be restricted to specific size or type of vessel, have medical support needs or environmental limitations as indicated by the MES and MedLims.	To be employed or deployed within the MedLims specified.		RAF personnel who are augmentees or fit to be borne as augmentees to a ship's company with specific MedLims.		
М3	Fit for restricted duties in a vessel in harbour or alongside with the limitations as stated.	Able to safely move around a ship alongside or within the confines of a harbour including the ability to evacuate from the vessel and take emergency action (eg fire fighting and damage control) without assistance.	Unfit to serve in a vessel at sea but may serve within the confines of a port or harbour.		Augmentees able to move safely around a ship alongside or within the confines of a harbour. Able to evacuate and take emergency action.		
M4	Fit to be carried as embarked forces in transit.	Fit to move safely around a ship at sea, in harbour or alongside including using ladders and stairs, opening heavy hatches, stepping over hatch combings and tolerating a moving/rolling platform. Not to be part of the fire fighting or damage control organisation but must be able to take emergency response and evacuation actions unaided. Usual grading for Army and RAF personnel who do not have a regular maritime role.	RN personnel should not be graded M4. RM personnel should not normally be graded M4.	Commando and Port and Maritime personnel should not normally be graded M4.	Fit to travel by sea as a passenger.		

⁻

⁸ Army personnel employed in the maritime environment should follow RN single-Service guidance.

⁹ Augmentees are personnel who will work as part of or alongside the ship's personnel as part of their role and may be expected to undertake damage control of fire fighting duties.

¹⁰ Ladders may be vertical or sloping, hatch combings are up to 30 cm above the deck, hatches may weigh >100 Kg and require up to 8 clips (rotating metal handles) to be moved to allow opening and closing the hatch. Some hatches are horizontal and require to be lifted open. The ability to complete these tasks whilst the platform is rolling or being subject to the motion of the seas should be considered. The ability to hear alarms and move around in poor lighting or smoke are essential to the ability to safely evacuate from the vessel unaided in case of an emergency.

	MARITIME						
MES	Description	Cuidenes	Singl	Single-Service Supplementary Guidance			
Code	Llaccrintian	Guidance	RN	Army ⁸	RAF		
M5	Fit for restricted duties ashore within the limitations as stated.	Not to work on ships/submarines alongside and may not be able to complete all duties required of their branch/trade ashore.			Embedded RAF personnel with severe seasickness or other medical condition(s) incompatible with being on board a ship.		
M6	Unfit for any duties in the maritime environment.	Long-term sick or in a MTF for >28 days or given a medical board recommendation for discharge.					

		ENVIRONMENT AND MI	EDICAL SUPPORT			
MES	Description	Guidance	Single-Service Supplementary Guidance			
Code	Description	Guidance	RN	Army	RAF	
E1	Fit for worldwide service in all environments.	Fit to deploy on contingent and enduring operations with no requirement for medical care within the deployed location beyond deployed Primary Healthcare (or equivalent).				
E2	Fit for unrestricted duties but with a medical risk marker.	Has a specific medical condition, which does not currently affect employability or deployability but may do so in future. Has no climatic restriction and no requirement for medical support bar adequate supply of medication. The medical condition is stable with treatment. Should loss of medication occur for ≤ 1 week this should not lead to clinical deterioration in the condition or functional degradation during that time.	Examples of medical risk markers are early noise induced hearing loss, stable chronic condition requiring medical monitoring.	Excludes any medical condition that would require review by a MO before authorising deployment.	No functional limitation but has a stable controlled condition such as high blood pressure.	
E3	Restricted employment outside UK due to medical support or environmental requirements.	Fit subject to limitations as will require access to enhanced medical support, or has specific medication requirements unlikely to be compatible with contingent operations. Fit to be in areas within limitations eg climatic injuries, hearing loss, susceptibility to environmental exposure.	Personnel may require guaranteed access to an MO outside UK waters or only be deployable where access to Secondary Healthcare is possible.	Personnel may be employed in locations with reduced health care provision. When advising on employment or deployment away from the firm base the MO must ensure that intheatre medical provision can meet the individual's routine and emergency needs.	Environmental limitations or the individual requires access to additional medical provision, but not full UK care level (eg access to a physiotherapist, dentist, Mental Health Nurse, GP or a general hospital doctor). Requires basic MRA by station MO. Confirmation of the adequacy of medical support by receiving medical authority is required. ¹¹	

¹¹ An MRA may be enduring for a period of up to of 3 years across short-term deployments to a specified location. It should be reviewed by an MO if the risk assessment changes during this time (ie change in medical condition, treatment, follow-up requirements, JMES or medical support).

	ENVIRONMENT AND MEDICAL SUPPORT						
MES		Guidance	Single-Service Supplementary Guidance				
Code	Description	Guidance	RN	Army	RAF		
E 4	Only to be employed out of the UK where there is access to established, 'NHS equivalent or better' Primary and Secondary Healthcare.	Has a medical condition requiring access either routinely or as an emergency to medical care at a level available equivalent to that provided in the UK.	Limited to major Overseas Bases only (excludes Falklands and Diego Garcia).	When advising on employment outside the UK the MO must ensure that in-theatre medical provision can meet the individual's routine and emergency needs.	Individual must have access to significant additional medical provision to full UK care level. Requires enhanced MRA by Consultant in OM, normally Manning (Medical Casework). Confirmation of the adequacy of medical support by receiving medical authority is required.		
E 5	May be employed within the UK only.	To be employed appropriately to their MedLims within the UK.	See M grade for ability to be employed on a ship.	Personnel with on-going health care needs, which would be adversely affected by employment outside of the UK.	Personnel for example requiring medical treatment or follow-up more frequent than 6 monthly.		
E 6	Pregnancy/Maternity.	Only to be used when the woman has formally informed her employer of her pregnancy (eg using Mat B1) and she has given her consent in writing for MES to be displayed as E6 or a contemporaneous record has been made in the clinical notes confirming permission granted. E6 is to be maintained until the Service woman has successfully completed a return-to-work medical post pregnancy and/or maternity leave.	Prior to formal declaration, to be graded MND A4 L4 M3 E5.				

MEDICAL LIMITATIONS

ANNEX C

- 1. The JMES provides sufficient information to the Executive and line management to enable them to understand employability and deployability but does not give sufficient information to allow a precise understanding of how an individual may be employed. This is achieved by the use of Medical Limitations (MedLims) and their accompanying codes.
- 2. In DMICP MedLims are listed in the order they are applied. More than 12 MedLims can be applied in DMICP but only 12 will be visible to personnel staff on JPA. If >12 MedLims are applied, MedLim '000' will automatically appear on JPA. This MedLim directs the CoC to seek further medical advice on employability.
- 3. Medical Officers must only apply MedLims if they are fully conversant with the implications of doing so. If required, advice must be sought from suitably qualified and experienced medical personnel.
- 4. Where sub-domains are annotated '(App 9)', additional Appendix 9-specific MedLims are available, but only within DMICP Appendix 9 template drop-down menus.

Table 1 Medical Limitation codes

	10	000 Series - Miscellaneous Domain
Sub-domain	MedLim Code	Description
MedLims (>12)	000	> 12 MedLims allocated – CoC to seek further medical advice on employability
Not otherwise specified	1100	Restrictions on Service duties and employment not specified by a MedLim (details in med docs)
Working conditions	1200	Unfit shift work
Working conditions	1201	Unfit for night work
Working conditions	1202	Unfit for lone working
Working conditions	1203	Unfit to work at height
Working conditions	1204	Unfit to work on gantries
Working conditions	1205	Unfit to work underground
Working conditions	1206	Unfit to work in confined spaces
Working conditions	1207	Unfit to work without direct supervision
Working conditions	1208	Fit limited duties in trade or branch (type will be specified in Med Docs)
Working conditions	1209	Office duties only
Working conditions	1210	Fit limited working hours agreed between MO and Line Manager
Working conditions	1211	Unfit to conduct EPPs
Working conditions (App 9)	1212	Passenger - land vehicles restriction
Working conditions (App 9)	1213	Workplace restrictions
Employment	1300	Medical marker (no functional limitation) ¹
Employment	1301	Employment subject to single-Service manning restriction
Employment	1302	Enlisted below entry standards
Employment (App 9)	1303	Refer to Appendix 9
Safety critical duties	1400	Unfit to conduct safety critical duties
Safety critical duties	1401	Unfit to undertake service driving
Safety critical duties	1402	Unfit to undertake service driving with passengers
Safety critical duties	1403	Unfit to drive specific vehicle (type will be specified in Med Docs)
Safety critical duties	1404	Not to be responsible for operating machinery
Safety critical duties	1405	Unfit for work with unguarded machinery
Safety critical duties	1406	Below required colour perception standard requires supervision for colour discrimination tasks
Food handling	1500	Unfit food handling
Food handling	1501	Unfit for galley / kitchen duties
Diet	1600	Must have opportunity for regular meals
Diet	1601	To have access to a gluten free diet at all times
Diet	1602	To have access to specialist diet (type will be specified in Med Docs)

¹ or additional medical condition(s) requiring a medical marker (no functional limitation)

	2000 Series - Aviation Domain				
Sub-domain	MedLim Code	Description			
Flying	2000	Unfit solo pilot - must fly with a pilot suitably qualified on type			
Flying	2001	Unfit solo (aircrew category will be specified in Med Docs)			
Flying	2002	Unfit specific aircraft (type(s) to be specified in Med Docs)			
Flying	2003	Fit (details to be specified in Med Docs) flying duties only			
Flying	2004	Unfit (conditions of flight to be specified in Med Docs)			
Flying	2005	Permanently unfit flying duties			
Flying	2006	Unfit to climb on aircraft			
Flying	2007	Unfit ejection seat aircraft			
Flying	2008	Restricted employability because of anthropometric limitations			
Controlling	2100	Unfit aircraft controlling duties			
Controlling	2101	Fit to control only when another qualified controller is on duty and in close proximity			
Hearing / Vision	2200	Aircrew assessed as hearing standard <h1 a="" ap1269a<="" but="" functional="" hearing="" iaw="" satisfactory="" td="" test="" with=""></h1>			
Hearing / Vision	2201	Must wear approved visual correction when flying or controlling aircraft			
Hearing / Vision	2203	Must carry approved corrective flying spectacles when flying or controlling aircraft			
Respirators	2300	Unfit aircrew respirators			
STASS	2400	Fit dry/poolside STASS training only			
STASS	2401	Unfit any STASS training			
Parachuting	2500	Unfit land parachuting			
Parachuting	2501	Unfit sea parachuting			

3000 Series - Land Domain				
Sub-domain	MedLim Code	Description		
Deployment	3000	Limited operational land deployments. Employable within the confines of a rear echelon only		
Deployment	3001	No operational land deployments. Must not deploy to any operational arena		
Deployment (App 9)	3002	Fit for short land deployments subject to Medical Risk Assessment		
Deployment	3003	Fit detachments in worldwide areas not exceeding 30 days		
Mobility (App 9)	3100	Infantry activities (including digging) restrictions		
Mobility (App 9)	3101	Travel on foot across rough terrain restrictions		
Mobility (App 9)	3102	Move tactically and adopting fire positions restrictions		
Field conditions (App 9)	3200	Living in field conditions restrictions		

4000 Series - Maritime Domain				
Sub-domain	MedLim Code	Description		
Ships / submarines	4000	Fit to serve in frigates and above only		
Ships / submarines	4001	Fit for short visits to a ships / submarine alongside only		
Ships / submarines	4002	Fit to serve in ships or submarines at sea in UK waters only		
Ships / submarines	4003	Fit to serve in ships or submarines at sea in UK and Northern European waters only		
Ships / submarines	4004	Fit for submarines in UK and US fleet exercise areas within medevac range		
Ships / submarines	4005	Temporarily unfit submarine service		
Ships / submarines	4006	Permanently unfit submarine service		

Ships / submarines	4007	Permanently unfit service on a submarine at sea (fit SM duties
Ships / submarines	4008	alongside / ashore) Permanently unfit service on a submarine at sea or alongside (fit SM duties ashore only)
Marine Craft	4100	Unfit fast boat transits and boat operations in rough sea states
Royal Marines	4200	Permanently unfit for Royal Marines General Service
Diving	4300	Temporarily unfit diving
Diving	4301	Permanently unfit diving
Diving	4302	Fit to dive, with restrictions assigned by SMO Underwater Med/NSMBOS. DW MO for medical restrictor
Diving	4303	Unfit mixed gas diving, navigation and watch keeping duties – (for CP4 divers iaw BR1750A 1219b)
Sea survival / fire fighting	4400	Unfit for BSSC or ISSC
Sea survival / fire fighting	4401	Unfit BSSC / ISSC but fit Embarked Forces Fire Fighting Training
Sea survival / fire fighting	4402	Unfit fire fighting training and duties
Dockyard	4500	Unfit to work on dockyard edges
Medical review	4600	Fit for short embarked deployments subject to MRA
Medical support	4601	Fit to serve in ships, submarines or RM Units with a permanent MO borne only
Medical support	4602	Needs access to a MO within 24 hours when deployed outside UK waters
Medical support	4603	Needs access to a MO within 2 days when deployed outside UK waters
Medical support	4604	Needs access to a MO within 3 days when deployed outside UK waters
Medical support	4605	Needs access to a MO within 5 days when deployed outside UK waters
Medical support	4606	Needs access to a MO within 7 days when deployed outside UK waters

5000 Series - Environment and Medical Support Domain		
Sub-domain	MedLim Code	Description
Geographical	5000	Geographical/Regional assignment restrictions (details specified in medical documents)
Geographical	5001	Unfit to deploy, travel or reside in malarious areas
Geographical	5002	Unfit Service outside base areas
Climatic (App 9)	5100	Climatic restrictions - To be employed in appropriate thermal environment
Climatic	5101	Unfit for work outdoors
Climatic	5102	Unfit exposure to hot environments (including within the UK) seek guidance from medical staff
Climatic	5103	Unfit exposure to cold environments (including within the UK) seek guidance from medical staff
Climatic	5104	Unfit exposure to excessively wet environments
Climatic	5105	Unfit exposure bright light / strong sunlight
Climatic	5106	To wear Service / civilian PPE to ensure hands and feet are kept warm
Climatic	5107	Fit to be employed in temperate climates only
Environmental hazards	5200	Unfit exposure skin irritants / sensitizers (type will be specified in Med Docs)
Environmental hazards	5201	Unfit exposure to dusts, fumes and vapours (type will be specified in Med Docs)
Environmental hazards	5202	Has (or may have) been exposed to environ hazard, avoid further exposure, refer to med docs/JPA

Climatic	5101	Unfit for work outdoors
Climatic	5102	Unfit exposure to hot environments (including within the UK) seek guidance from medical staff
Climatic	5103	Unfit exposure to cold environments (including within the UK) seek guidance from medical staff
Climatic	5104	Unfit exposure to excessively wet environments
Climatic	5105	Unfit exposure bright light / strong sunlight
Climatic	5106	To wear Service / civilian PPE to ensure hands and feet are kept warm
Climatic	5107	Fit to be employed in temperate climates only
Environmental hazards	5200	Unfit exposure skin irritants / sensitizers (type will be specified in Med Docs)
Environmental hazards	5201	Unfit exposure to dusts, fumes and vapours (type will be specified in Med Docs)
Environmental hazards	5202	Has (or may have) been exposed to environ hazard, avoid further exposure, refer to med docs/JPA
Med support	5300	Not to conduct safety critical duties if medical support device(s) unavailable
Med support	5301	To have access to appropriate power supply for medical equipment
Med support	5302	Requires access to irradiated Blood Products
Auto-upgrade	5400	ROHC auto-upgrade: if not upgraded MFD within 12 mths is to return to NSMBOS/FMB
Auto-upgrade	5401	ROHC upgrade: if not upgraded MFD or MFD (8001 + or - 5504) within 12 mths return to NSMBOS/FMB ²
Auto-upgrade	5402	PMO/SMO upgrade: if not upgraded MFD or MFD (8001 + or - 5504) within 12 mths return to NSMBOS/FMB
Medical review	5500	Must have MRA undertaken by ROHC prior to Exercise / IPDT / deployment
Medical review	5501	To be made available for regular medical reviews
Medical review	5502	For annual review by PMO / SMO
Medical review	5503	For annual review by Regional OH Consultant
Medical review	5504	Requires MRA prior to attendance on Command Course
JCC / SCC	5600	Fit for modified JCC or SCC / JCC or SCC (RM Band) only

6000 Series - Locomotion, Lifting and Carrying Domain		
Sub-domain	MedLim Code	Description
Locomotion	6000	Unfit strenuous physical exertion
Locomotion	6001	Requires to be seated at place of work
Locomotion	6002	Fit sedentary duties only
Locomotion	6003	Unable to sit for long periods
Locomotion	6004	Unable to stand for long periods
Locomotion	6005	Unfit for work kneeling down
Locomotion	6006	Unfit marching / drill
Locomotion	6007	Able to walk short distances only
Locomotion	6008	Unable to climb stairs regularly in course of duty
Locomotion	6009	Unable to climb vertical ladders
Upper Limbs	6100	Fit limited use of one hand / arm (details will be specified in Med Docs)
Lifting/Carrying	6200	Unfit heavy lifting
Lifting/Carrying	6201	No load carrying

 $^{^2}$ To be revised at next template revision to: "5401: ROHC auto-upgrade: if not upgraded MFD or MLD (iaw current policy) within 12 mths return to NSMBOS"

7000 Series Hearing and Vision Domain			
Description	MedLim Code	Description	
Hearing	7000	To have annual audiograms with subsequent review by PMO / SMO	
Hearing	7001	To ensure correct use of hearing personal protective equipment iaw Hearing Conservation Programme	
Hearing	7002	To avoid unprotected exposure to loud noise	
Hearing	7003	Unfit exposure to noise above (to be specified) level	
Hearing	7004	Unfit wearing of headsets	
Hearing	7005	Unfit split headsets	
Vision	7100	To wear appropriate eye protection including specialist or tinted eyewear	

8000 Series - Physical Fitness and Rehabilitation Domain		
Sub-domain	MedLim Code	Description
Fitness testing	8000	Medically exempt from all requirements of RNFT / RAFFT / PFA
Fitness testing	8001	Fit for Alternative Aerobic Assessment or Rockport Walk element of RNFT / RAFFT
Fitness testing	8002	Unfit upper body / strength test element of the RNFT
Fitness testing	8003	Unfit RM BFT / CFT / ACFT / speed marches
Fitness testing	8004	Unfit AFT / OFT / speed marches
Fitness testing (App 9)	8005	Unfit to walk 3.2km carrying 15kg
Fitness testing	8006	Unfit OFT
Fitness testing	8007	Unfit Alternative Aerobic Assessment
Fitness testing	8008	Unfit press-ups
Fitness testing	8009	Alternative press-up hand position allowed
Fitness testing	8010	Unfit sit-ups
PT	8100	Unfit running
PT	8101	Unfit impact activity
PT	8102	Unfit organised physical training; fit individual PT programme only
PT	8103	Unfit Upper body PT
PT	8104	Restricted lower limb non-impact physical training
Rehabilitation	8200	Individual to be made available to follow rehabilitation PT programme
Rehabilitation	8201	Graduated Rehabilitation as directed by Clinical Lead
Rehabilitation	8202	Graduated rehab including supervised phased return to limited sea duties as directed by Clin Lead
Rehabilitation	8203	Fit travel outside UK on duty for adaptive sport/adventurous trg/represent the Service following MRA
Rehabilitation	8204	Unfit Multi Activity Course
Rehabilitation	8205	Unfit Core Recovery Event 1
Rehabilitation	8206	Unfit Core Recovery Event 2
Rehabilitation	8207	Unfit Core Recovery Event 3
Sport	8300	Unfit sport (to be specified in Med Docs)
Sport	8301	Unfit contact sports
Sport	8302	Unfit solo swimming

9000 Series - Military Tasks Domain		
Sub-domain	MedLim Code	Description
Weapon handling	9000	Unfit handling live arms ³
Weapon handling	9001	Unfit live weapons / fit simulation
Weapon handling	9002	Unfit APWT
Weapon handling (App 9)	9003	Ranges restrictions
Weapon handling (App 9)	9004	Weapon handling restrictions
Guard / Ceremonial	9200	Unfit guard duties
Guard / Ceremonial	9201	Unfit for ceremonial duties
Personal Kit and Equipment	9300	Clothing restrictions / military PPE (to be specified in med docs)
Personal Kit and Equipment	9301	Unfit wearing Service footwear (to be specified in Med Docs)
Personal Kit and Equipment	9302	Unfit non-aircrew respirators
Dog handling	9400	Unfit for dog handling
CBRN	9500	Unfit CBRN threat areas, unable to tolerate CBRN protection and / or prophylactic measures
Unit	9600	Unfit to return to original unit
UKSF	9700	Permanently unfit UKSF Selection

³ Unable to bear arms whether through psychiatric or physical reasons. Individuals are still fit to undertake weapons handling without live ammunition.

SECTION THREE: OCCUPATIONAL HEALTH ASSESSMENTS

Aim

1. The aim of this Section is to describe the requirements and processes of medical assessment for Armed Forces personnel. It applies to both regular and reserve forces.

General

- 2. Medical assessment including both history and examination where appropriate must be systematic and thorough. The medical assessment should produce not only an accurate picture of the person's health, but also their functional capacity with regard to their current and likely future employment (including deployment). Careful assessment for age-related decrement of functional capacity or ill health is required. Any change in employment may require a further assessment. In all cases the medical assessment is to be carried out by medical personnel with sufficient training to recognise abnormal results in the screening tests used and to be able to deal with any health concerns raised, by onward referral if necessary. This Section does not cover statutory health examinations (eg isocyanate workers) for which reference should be made to the appropriate policy, guidelines and single-Service publications.
- 3. Medical assessments are to be conducted on the following occasions for the purposes stated. Guidelines on the conduct of each assessment are provided in the following paragraphs. At each assessment a PULHHEEMS grade¹ is to be recorded on the medical record and (with the individual's consent) the result passed to the appropriate administrative office². Each quality and the factors that affect it are described in Section 1 and the functional interpretation of grades for each quality are summarised at Annex A. Further guidance for the allocation of a grading by medical condition is given in the annexes to Sections 4 and 5.
 - a. **Pre-Service**. The purpose of the pre-service medical examination is to determine medical fitness for employment (with respect to the period of engagement). Comprehensive guidelines are provided in paragraphs 5-7 and at Annex B.
 - b. **In-Service**. In-Service assessments may be routine, for a specific requirement³ or on occasions when a medical board is required. Their purpose is to confirm continued fitness for present employment and they provide an opportunity for health promotion (activities in this latter respect are outwith the remit of this JSP). Further guidelines are provided in Paragraphs 8-10.
 - (1) Routine medical assessments are conducted for employment purposes at 5-yearly intervals from age 30, more frequently for special employment groups (eg aircrew) and biennially after the age of 50 in line with single-Service requirements.
 - (2) Service Medical Boards⁴ are conducted to re-grade personnel following changes in their functional capacity and medical employability resulting from illness and/or injury, either on a temporary or permanent basis.
 - c. **Mobilisation and demobilisation (Reserve forces only)**. The purpose of the mobilisation medical assessment is to confirm fitness for mobilisation and/or deployment. The aim of the demobilisation medical is to identify any changes in health status that have occurred during mobilisation and to confirm fitness for future reserve service. Further guidelines are provided in paragraphs 11-13.

¹ Including suffixes to the grading in accordance with single Service guidelines.

² In accordance with single Service policy.

³ Eg change of commission or re-engagement.

⁴ Refer to single Service guidelines for further instructions.

- d. **Discharge.** The discharge medical assessment is conducted at the termination of employment. Its purpose is to assess and record the medical status and functional capacity at the time of discharge including an appropriate PULHHEEMS grade. Further guidelines are provided in paragraph 14.
- 4. Annexes C-G are provided to assist the assessment of Body Mass Index and the H, E, M, S and CP qualities respectively.

Guidelines for the pre-Service medical assessment

- 5. **General**. The aim of pre-service medical assessment is to determine fitness for employment for the terms of initial engagement and (implicitly) fitness to join the Armed Forces Pension Scheme. Because the pre-service medical assessment must be particularly thorough, comprehensive guidelines are provided at Annex B. Section 3 provides specific details of conditions of relevance for entry to service. The requirements for assessment for special employments (eg aircrew, divers) are not included in this Section and for which reference should be made to single-Service guidelines.
- 6. **History**. Although a pre-employment health questionnaire may have been reviewed prior to personal assessment of the candidate, the guidelines are restricted to general principles and the verification of the history at the time of the examination. For guidelines on the evaluation of the **M** and **S** qualities, see Annex F.
- 7. **Physical Examination.** Functional fitness must be determined and therefore the physical examination must be comprehensive in all cases.

Guidelines for in-Service medical assessments

- 8. **General**. The aim of the in-service medical assessment is to confirm continued fitness for present employment. It may also provide an opportunity for health promotion although a full description of activities in this respect is outwith the remit of this JSP. Reference may be made to the guidelines for assessment at Annex B but the assessment need not in all cases be as comprehensive. Section 5 provides specific details of conditions of relevance during Service.
- 9. **History**. There is more to be gained from a comprehensive review of medical history (since the last examination) than there is through physical examination. Episodes of ill health should be reviewed and in particular, an assessment made and recorded on whether there has been any interaction between health and work⁵. For guidelines on the evaluation of the **M** and **S** qualities, see Annex F.
- 10. **Physical examination**. Any mandatory health surveillance examinations must be conducted (eg audiometry for those on Hearing Conservation programmes). The examination may be targeted but sufficient evidence is to be gained from the examination to enable an accurate assessment for each PULHHEEMS quality. If there has been a significant decrement of functional capacity, adjustment to the P quality may be required. Audiometry and measurement of distant visual acuity, height, weight, blood pressure and urinalysis are to be recorded at each assessment.

Guidelines for the assessment at mobilisation and de-mobilisation of Reserves

11. **Mobilisation**. The aim of the mobilisation medical assessment is to determine fitness for a reservist's mobilised and/or deployed role(s). Reservists will already have had a pre-service medical assessment and may have had in-service assessments. However, as primary health care records may not be readily available⁶ the assessment must be thorough in order to detect conditions that may constrain performance of their role. Additionally, experience has shown that

-

⁵ Elucidation of all biopsychosocial factors is recommended.

⁶ Reservists normally receive primary health care from their civilian GP.

reservists tend to be older than regulars. It is therefore recommended that the assessment should be as comprehensive as that described at Annex B.

- a. **History**. All aspects of the medical history since the last medical assessment should be explored and any intended deployed role⁷ determined to inform the decision on fitness for mobilisation. For guidelines on the evaluation of the **M** and **S** qualities, see Annex F.
- b. **Physical examination**. Sufficient evidence is to be gained from the examination to enable an accurate assessment for each PULHHEEMS quality. Audiometry and measurement of distant visual acuity, height, weight, blood pressure and urinalysis are to be recorded.
- 12. **Demobilisation of Reservists**. The following procedures apply:
 - a. The purpose of the demobilisation medical is to identify any changes in health status that have occurred during mobilisation and to confirm fitness for future reserve service.
 - b. A Health Declaration by the individual is to be completed, indicating whether or not there has been any change in health status during the period of mobilised service. Where there has been a change, the declaration is to include any known causes for the change and action taken as a result. An example of such a health declaration is at Annex H.
 - c. All personnel are to be offered the opportunity for a consultation with a doctor.
 - d. Appropriate disposal of the F Med 965 theatre medical record is to be confirmed.

Guidelines for the discharge medical assessment

- 13. **General.** The aim of the discharge medical assessment is to assess and record the medical status and functional capacity at the time of discharge including an appropriate PULHHEEMS profile. This assessment may be required as evidence of illness or injury attributed to service⁸ and to inform any decision for re-enlistment. The results of the assessment must therefore be recorded meticulously. In particular, known exposures to hazards (physical, biological, chemical, psychological) that have potential adverse health effects (such as disease vectors or environmental and industrial hazards) must be listed. Reference may be made to the guidelines for assessment at Annex B but the assessment need not in all cases be as comprehensive. For discharges from Service for medical reasons, these instructions are complementary to Section 6 Harmonisation of Medical Boards Leading to Discharge. The FMed 133 is normally completed at this assessment.
- 14. **History**. All episodes of ill health during service should be reviewed and in particular, an assessment made and recorded on whether there has been any interaction between health and work⁹. For guidelines on the evaluation of the **M** and **S** qualities, see Annex F.
- 15. **Physical Examination**. The examination may be targeted but sufficient evidence is to be gained from the examination to enable an accurate assessment for each PULHHEEMS quality. If there has been a significant age-related decrement of functional capacity, adjustment to the P grade may be required. Audiometry and measurement of distant visual acuity, height, weight, blood pressure and urinalysis are to be recorded.

3-3

⁷ Both geographic and activity aspects are to be determined.

⁸ The examining medical officer is not required to determine attributability.

⁹ Elucidation of all biopsychosocial factors is recommended.

Annexes

- A. Functional Interpretation of Grades for each Quality.
- B. Guidelines for the Conduct of the Pre-Service Medical Assessment.
- C. Assessment of Body Mass Index.
- D. Assessment of hearing acuity (H).
- E. Assessment of distant visual acuity (E).
- F. Evaluation of Mental Capacity (M) and Emotional Stability (S).
- G. Assessment of Red/Green Colour Perception (CP).
- H. Health declaration example for use at demobilisation.
- I. Guidelines for undertaking screening Pure Tone Audiometry

Grade	Р	U	L	нн	EE	М	s
Factors to considered	Age, build strength and stamina	Strength, range of movement and general efficiency of upper arm, shoulder girdle and back	Strength, range of movement and efficiency of feet, legs pelvic girdle and lower back.	Audiometrically assessed acuity of hearing. The sum of the hearing loss at: FREQUENCIES Lower Upper	Visual acuity.	Mental capacity.	Emotional stability.
1				45dB or less or less Good hearing *(RN only: Level not to be more than 30 dB at 6 kHz or 20 dB at any other frequency)	Not less than 6/6.		
2	Medically fit for unrestricted service worldwide.	Muscle power average. Able to handle arms and do heavy manual work.	Can run, jump, climb crawl and perform all kinds of manual labour.	84dB or less or less Acceptable practical hearing for Service purposes	Not less than 6/9.	Ability under service conditions to learn to perform successfully all Service duties. Includes capability to be trained as trades-person or specialist	The absence of a medical condition affecting normal emotional stability.
3	Medically fit for duty with minor employment limitations	Must be able to use personal weapon and be capable of wearing protective clothing.	Capable of walking at least 5 miles and able to stand for periods of at least 2 hours.	150dB or less Impaired hearing. The hearing level at which most personnel are unfit for entry to the Service.	Not less than 6/12.	Ability under Service conditions to learn to perform simple unskilled duties.	The presence of a minor limitation to emotional stability likely to affect the individual's ability to perform their normal military duty and general military skills. Limitations to employment are to be stated (eg working patterns) preferably following discussion between clinicians and the individual's linemanager (following consent). Fit to handle live arms and perform mandatory military training but must be reviewed by a service-appointed medical officer prior to deployment.
4	Medically fit for duty within the limitations of pregnancy.			More than than 150DB 210dB Very poor hearing. Below entry standard for the Services.	Not less than 6/18.		

Grade	Р	U	L	нн	EE	М	s
5					Not less than 6/24.		
6					Not less than 6/36.		
7	Medically fit for duty with major employment limitations.	Capable of sedentary and routine work of a lighter type.	Able to walk 2 miles at own pace. Can stand for a moderate period.		Not less than 6/60.	Capable of performing simple duties under supervision. Not able to bear arms. Fit for restricted service only.	The presence of a major limitation to emotional stability likely to significantly affect the individual's ability to perform their normal military duty and general military skills. Able to function within a military work environment. However, unfit to handle live arms or be deployed.
8	Medically unfit for service.	Medically unfit for service.	Medically unfit for service.	Medically unfit for service.	Less than 6/60.	Medically unfit for service.	Defect of emotional stability such that the individual is below P7 criteria.

- 1. **Introduction.** This Annex describes the pre-service medical assessment process. It includes an element of screening to assess an individual's fitness for service, including the likelihood of developing a condition during service.
- 2. **Documentation.** A pre-employment health questionnaire is to be completed in accordance with single-Service guidelines. The date and details of the pre-service medical assessment are to be recorded on the appropriate single-Service form, whether paper¹ or electronic and, with the individual's consent, the result passed to the appropriate administrative office.

Preliminary assessments

- 3. Appropriately trained medical staff may conduct and record the following preliminary assessments before a medical officer conducts the examination.
 - a. The NHS Number is to be recorded (if not already recorded on the health questionnaire).
 - b. Height, weight, BMI² and, when applicable³, body fat percentage.
 - c. Blood pressure⁴ (sitting). Two additional measurements are to be taken if the first recording is abnormal.
 - d. Urinalysis (blood, protein and glucose). Two additional samples are to be tested if the first recording is abnormal⁵.
 - e. Peak Expiratory Flow Rate (PEFR). The predicted PEFR is to be calculated and the actual PEFR measured. Two additional measurements are to be taken if the first recording is abnormal. Forced Expiratory Volume (FEV₁) and Forced Vital capacity (FVC) are to be measured if indicated⁶.
 - f. Audiometry. See Annex D for further guidance on assessment and recording.
 - g. Distant Visual Acuity (**EE**) and Red/Green Colour Perception (**CP**). See Annexes E and G for further guidance on assessment and recording.
- 4. It is good practice for the examining medical officer to collect the individual from the waiting area and this is an ideal time for gait to be observed. Personal identity is to be verified, and completeness of medical documentation (health questionnaire and a record of preliminary assessments) confirmed.

History

5. Although the pre-employment health questionnaire will have been reviewed prior to personal assessment of the candidate, these guidelines are restricted to general principles and the verification of the history at the time of examination. It must be confirmed that there is no history of any conditions incompatible with service. Section 4 provides specific details of the influence of

¹ The individual's name is to be recorded on each sheet of the paper record.

² See Annex C for Body Mass Index Guidelines.

³ In accordance with single Service instructions.

⁴ In accordance with British Hypertension Society guidelines. available at: https://bihsoc.org/Latest_BHS_management_Guidelines.stm

⁵ See Chapter 3, Leaflet 7, Paragraph 3.7.1.

⁶ See Chapter 3, Leaflet 5, Paragraphs 3.5.2 – 3.5.6.

conditions on PULHHEEMS assessment at entry. At this stage of the assessment, an evaluation of both the \mathbf{M} (intelligence or ability to learn) and \mathbf{S} (emotional stability) qualities should commence in order for an appropriate grade to be allocated at the end of the assessment. Further guidance on assessment of these qualities is provided at Annex F.

- 6. The examining medical officer is to carefully review and verify the history. A summary of pertinent information eg significant illness/operations and dates is to be entered on the assessment record. In particular, the examining medical officer is to ensure that the individual is asked specifically, and expand where appropriate on a history of the following conditions:
 - a. Asthma, wheezing, inhaler use.
 - b. Mental ill-health issues, deliberate self-harm.
 - c. Migraine.
 - d. Skin conditions.
 - e. Musculoskeletal conditions.
 - f. A family history of disease, in particular if there is a history of sudden death particularly at an early age (<40 years) or lipid disorder.
 - g. Use of tobacco, alcohol and any substance misuse.
 - h. Specific dietary requirements/sensitivities.
- 7. The following details should also be recorded on the assessment record:
 - a. Occupational history.
 - b. Current sporting and physical activity levels.
 - c. Current medical problems together with medication (including oral contraception).
 - d. Women are to be asked for the date of their last menstrual period, the date and result of their last cervical smear and any abnormal cervical smear results.
- 8. Following a review of the history, the individual is to read, sign and date the verification declaration, and the examining medical officer is to countersign as a witness.

Examination

- 9. **Introduction**. A comprehensive clinical examination as set out below is to be performed and all systems are to be assessed. Medical Officers should use their clinical judgement in interpreting these guidelines to determine the depth and detail of examination required in each case. If abnormalities are suspected, further information may be sought from the individual's normal providers of primary and secondary care. Any abnormality discovered by the examiner should be pursued to a level sufficient to make a PULHHEEMS grading. The functional interpretation of grades for each quality is given at Annex A. Specific medical conditions which affect entry and employment when serving are detailed in Sections 4 and 5 respectively.
- 10. **Caveats**. Chaperones are to be used in accordance with best practice⁷ and the name of the chaperone should be recorded. If a chaperone is declined, this must also be recorded. The

-

⁷ http://www.gmc-uk.org/guidance/current/library/maintaining_boundaries.asp#9

routine pre-service assessment does not require examination of the female breasts or genitalia. Inspection of the anus is not necessary in either male or female candidates.

- 11. **General considerations**. The nature of the medical examination should be explained to the candidate together with the reasons for examination of particular systems throughout the examination. At appropriate stages during the physical examination, individuals should be asked to undress down to their underwear to facilitate a full inspection and also to gain an overall impression of their physique⁸. The candidate's speech, general appearance and any external signs of systemic disease should be noted throughout the interview and examination. Similarly, the skin appearance can be assessed throughout the examination although the examining doctor should specifically examine the scalp. If necessary, confirmation of the nature and location of declared tattoos are to be recorded⁹. The recommended procedure for examination in a logical order is set out below. A record of the findings is to be made against each element.
- 12. **Head and neck.** The inspection of the head and neck is to include:
 - a. **General**: observation of faces and facial movements.
 - b. **Visual examination and function**: external examination, pupil reaction to light and accommodation, ocular movements in all directions of gaze, visual fields by confrontation and fundoscopy¹⁰.
 - c. **Ears**: Tympanic membranes, Valsalva manoeuvre.
 - d. **Nose**: deformity, patency of nasal passages.
 - e. **Mouth**: teeth, tongue, palate, speech.
 - f. Cervical lymph nodes.
 - g. **Thyroid**.
 - h. **Scalp**: to exclude skin disease.
 - i. Other cranial nerves and special senses. The sense of smell need not be tested.
- 13. **Chest**. Examination of the chest is to be performed with upper body clothing removed but there is no routine requirement for females to remove the bra. If it is necessary to move the bra in order to listen to heart sounds an explanation should be given to the patient. Examination should include:
 - a. Pulse (rate and rhythm). Peripheral pulses and radiofemoral delay if indicated.
 - b. Confirmation of blood pressure recording (by reference to previous clinical measurement). Repeat if indicated.
 - c. Location of apex beat, cardiac thrills and auscultation of the heart sounds. Carotid auscultation.
 - d. Respiratory rate, symmetry of chest, expansion, percussion and auscultation of breath sounds.
 - e. Axillary lymph nodes.

⁸ Physically immature candidates may not be acceptable.

⁹ In accordance with single Service procedures.

¹⁰ With the examination room darkened.

- 14. **Abdomen.** Upper body clothing may now be replaced. The candidate should be asked to lie on their back on the couch to facilitate examination of the abdomen. Formal examination of the liver, spleen, kidneys, inguinal lymph nodes and testes is to be performed, and the absence of any herniae confirmed. *Examination of female genitalia is not to be undertaken*.
- 15. **Examination of the musculoskeletal system**. A formal and comprehensive clinical and functional examination¹¹ of the musculoskeletal system is essential. Where relevant, movements should be conducted against resistance to determine muscle strength and neurological examination performed if indicated. For convenience, the assessment is described below by region.
- 16. **Upper limbs**. The upper limbs may be examined with the candidate standing, or sitting on the edge of the examination couch:
 - a. **Shoulder**. Confirm symmetry, normal power, full active and passive movement (abduction, adduction, internal and external rotation).
 - b. **Elbow**. Confirm symmetry, normal power, full active and passive movement (flexion, extension, pronation and supination). Tendon reflexes.
 - c. **Wrist**. Confirm symmetry, normal power, and full active and passive movement (flexion and extension). Tendon reflexes.
 - d. **Hands**. Confirm full function of fingers and thumb, dexterity and grip strength.
 - e. Coordination. Confirm normal upper limb coordination.
- 17. **Lower limbs**. Examination of the lower limbs should be performed with the candidate lying or reclined on the examination couch for hips and knees, and with the legs hanging over the couch for ankles and feet.
 - a. **General**. Confirm equal length of the legs.
 - b. **Hips**. Confirm normal power, normal and symmetrical flexion, extension, adduction and straight leg raise, and with the knee and hip flexed at 90°, normal internal and external rotation.
 - c. Knees.
 - (1) **Inspection**. Confirm symmetrical quadriceps muscle mass.
 - (2) **Palpation.** Confirm the absence of effusion and joint line and tibial tubercle tenderness.
 - (3) **Movement**. Confirm normal power, symmetrical and normal flexion and extension and absence of crepitus. With the leg in extension confirm the integrity of the medial and lateral collateral ligaments. Confirm the integrity of the anterior and posterior cruciate ligaments (posterior sag, anterior drawer test, Lachman's test), and of the menisci by McMurray's test. Finally, patellar apprehension testing should be performed.
 - (4) Tendon reflexes.

3-B-4

¹¹ A DVD titled: The Functional Orthopaedic Examination of the Potential Recruit is available from BDFL (Catalogue Number C52127/07).

- d. **Ankle**. Confirm the absence of Achilles tendon tenderness or thickening. Confirm normal power, full and symmetrical movement: dorsiflexion, plantar flexion, inversion and eversion (both passively and actively). Perform the ankle anterior drawer test to demonstrate integrity of the anterior talo-fibular ligament. Tendon reflexes.
- e. **Feet and toes**. Confirm normal power, normal and symmetrical movement of the midfoot and forefoot joints. Confirm normal movement of all toes and exclude the presence of deformities (club feet, flat feet, claw toes, scars and hard corns).
- 18. **Spine**. The spine is best examined with the candidate standing.
 - a. **Cervical spine**. Confirm normal and symmetrical flexion, extension, lateral flexion and rotation.
 - b. **Thoracic spine**. Exclude kyphosis and scoliosis and confirm full thoracic rotation.
 - c. **Lumbo-sacral spine**. Confirm flexion and a smooth spinal curve without bending the knees¹², extension, lateral flexion and rotation.
 - d. Coordination. Confirm normal spinal and lower limb coordination.
- 19. **Dynamic functional assessment**. Performance of the following exercises will further inform the assessment of the **U** and **L** qualities:
 - a. **Press-ups**. The candidates should be asked to perform 3 or 4 press-ups: males knees off floor, straight back, at shoulder width with the palms flat on the floor. The rise must be from nose-on-floor to elbows fully extended. Observation must ensure that the elbows are at the same level on each side and that there is no asymmetry of the upper limbs or thorax. If necessary, females may perform the exercise using the knees as the fulcrum point.
 - b. **Normal gait**. Gait will already have been observed as the candidate enters the examination room but should be confirmed by taking normal steps across the room.
 - c. **Toe walking**. The candidate should walk across the room on the tips of their toes with the feet fully extended.
 - d. **Heel walking**. The candidate should walk across the room on the heels of their feet.
 - e. **Walking on the outer border of the feet**. The candidate should walk across the room on the outer borders of the feet.
 - f. **Duck walking**. The candidate takes 5-6 steps whilst squatting with the knees and hips flexed and the ankles fully dorsiflexed.
 - g. **Heel raises**. 5 single heel raises should be performed with both arms outstretched and fingertips only in contact with the wall. The other leg is held with the knee flexed to 90°.
 - h. **Further dynamic functional assessment**. Medical officers may request physical selection staff to further assess dynamic qualities during physical selection tests (eg gait during running tests, shoulder performance during chin-ups).
- 20. **Summary**. The examining medical officer is to ensure that a record of findings against each element has been made, provide a summary of the medical examination, provide the candidate with a PULHHEEMS grading together with a Pass / Fail / Deferral statement and then sign and date the record, with a note of their name in block capitals. If appropriate, the medical officer must

-

¹² Ideal: touch the floor. Minimum acceptable: reach the level of the ankle.

also indicate if the candidate may undertake physic examination record must be indicated.	cal selection tests.	Any attachments to the	

- 1. **Introduction**. The height weight tables published in previous versions of JSP 346 Section 2 are no longer relevant. It is recommended that the relationship between height and weight should be assessed with reference to Body Mass Index (BMI). Although BMI does not measure body fat directly, research has shown that BMI correlates well with direct measures of body fat. It is an inexpensive and easy-to-perform method of assessment of weight categories that correlate with health problems and is accepted by health authorities (including WHO) as a valid indicator of obesity for health risk assessment. Of particular importance are the relationships between BMI and (a) the risk of injury during military training and (b) cardiovascular risk. Body Mass Index is measured as follows: mass in kilograms divided by height in metres, squared, and therefore has the units kg/m².
- 2. A classification of cardiovascular disease risk based on both BMI and waist circumference has been adopted by the National Institute for Health and Clinical Effectiveness (NICE). The NICE classification of BMI and waist circumference is shown in tables below. A recent INM report¹ has recommended that the latest guidance from NICE², that BMI and waist circumference should be recorded. In addition the INM report recommends that the disease risk criteria within the NICE guidelines be modified to provide statements on suitability for entry to the Armed Forces.

Table C1: NICE classification of BMI.

Classification	BMI (kg/m ²)
Underweight	≤18.5
Healthy weight	18.5-24.9
Overweight	25.0-29.9
Obesity Class 1	30.0-34.9
Obesity Class 2	35.0-39.9
Obesity Class 3	≥40

Table C2: NICE classification of risk for waist circumference(cm).

Waist Circumference Risk	Men	Women
Low	<94	<80
High	94-102	80-88
Very High	>102	>88

3. **Pre-service assessment**. Although sSs may have their own policies for entry for absolute height and weight³, the recommended BMI guidelines for entry into service are as follows:

Table C3: Upper and lower BMI limits for entry.

Age (years)	Male and female minimum	Male and female maximum	Male maximum with additional assessment	Female maximum with additional assessment
18+	18	28	32	30
16 to <18	17	27	27	27

- 4. The additional assessments required are measurement of waist circumference and satisfactory aerobic fitness⁴. For males waist circumference must be less than 94cm; for females waist circumference must be less than 80cm.
- 5. These requirements are based upon both research into risk of and type of training injuries and the health effects of the extremes of BMI. It is generally considered that health becomes an

¹ INM Report No. 2007.026 dated Jun 07.

² http://www.nice.org.uk/CG43

³ Based on anthropometric and other considerations.

⁴ As assessed by pre-employment physical selection tests and subject to single Service requirements.

issue when the BMI is outside of a range of 18-30 and the health effects of being underweight or overweight are well known. However, the overall fitness and functional capacity of the individual should also be considered. For example some individuals, such as body builders, who are lean but have a high BMI due to a high lean body mass, may be suitable for service. However, there is clear evidence that there is a significantly increased risk of musculoskeletal injury (particularly during military training and in females) in those with a low BMI⁵. Similarly, there is evidence that in individuals with a high BMI there is decreased muscle endurance and an associated increase in fatigue⁶.

- 6. **In-service**, **mobilisation** and **discharge** assessments. BMI should not be used alone as a reason to change the **P** quality but should be used as part of a comprehensive functional assessment to determine suitability for employment.
- 7. **Specialist employment groups.** Single-Service height and weight standards will apply for entry into specialist employment groups, such as aircrew, parachutists, Royal Marines and submariners. These standards can be found in the relevant single-Service publications.
- 8. **Protocol for the assessment of waist circumference.** The following protocol should be followed to ensure consistency in the assessment of waist circumference^{7,8}:
 - a. The candidate's waist should be exposed, sufficient for the relevant bony landmarks to be identified.
 - b. The candidate should be standing with the feet together, weight evenly distributed and with a relaxed arm position.
 - c. The candidate should breathe normally and the waist measurement is to be taken at the end of normal expiration.
 - d. The correct position is midway between the bottom of the ribcage and the uppermost border of the iliac crest.
 - e. The tape should be snug but not compress the skin.
 - f. If there is difficulty locating the bony landmarks the tape is to be placed at the level of the umbilicus.

⁵ Identifying Risk Factors for the Development of Training Injuries among Female Army Recruits. Greeves J, Leamon S, Bunting A, Panchel R, Mansfield H. QinetiQ Report 05/01990. Jul 2006.

⁶ Fitness, performance and anthropometric characteristics of 19,195 Canadian Forces personnel, classified according to body mass index. Jette M, Sidney K, Lewis W. Mill Med. 1990;155:120-6.

⁷ http://hcna.radcliffe-oxford.com/obesity.html

⁸ World Health Organization. *Measuring obesity—classification and description of anthropometric data*. Report on a WHO consultation on the epidemiology of obesity. Geneva: World Health Organization, 1987.

- 1. Personnel working in noisy working environments are at risk of hearing damage, which may result in deafness and/or tinnitus. Audiometry is the standard health surveillance tool for the assessment of noise-induced hearing loss and all new entrants must have their hearing acuity assessed by pure tone audiometry. This requirement will provide a baseline against which future audiometry can be compared and will also highlight any disorder of hearing at recruitment. The standards of hearing acuity required by individual trade groups are a single-Service issue and the relevant single-Service publications contain detailed information on these standards. For detailed information on health surveillance once in service see the Surgeon General's Policy Letter 12/06¹.
- 2. **Audiometric basis of assessment.** The basis of audiometric assessment is the summing of high and low frequency levels in decibels (dB) over six frequencies. The frequencies used are 0.5, 1, 2, 3, 4 and 6 kilohertz (kHz); the low frequencies being 0.5, 1 and 2 kHz and the high frequencies 3, 4 and 6 kHz. The hearing in each ear is assessed and recorded separately. The assessment is recorded under the first H for the right ear, and under the second H for the left ear. The higher value digit, representing the worst frequency group, determines the individual's overall hearing category for each ear.
- 3. **Audiometric standards.** There are five grades of hearing acuity: 1, 2, 3, 4 and 8, described in the following table:

Table D1: Grades of hearing acuity.

Grades	Sum of hearing level at low frequencies in dB	Sum of hearing level at high frequencies in dB	General description
1	Not more than 45. (RN only: No single level to be more than 20dB)	Not more than 45. (RN only: Level not to be more than 30 dB at 6 kHz or 20 dB at any other frequency)	Good hearing
2	Not more than 84	Not more than123	Acceptable hearing
3	Not more than 150	Not more than 210	Impaired hearing.
4	More than 150	More than 210	Poor hearing where continuing employment is subject to specialist assessment.
8	More than 150	More than 210	Poor hearing that has been assessed as being incompatible with continued service.

- 4. During service any change in the H degree, other than a fall from H1 to H2, must be referred for an ENT opinion. Unilateral hearing loss also requires specialist assessment, with investigation as necessary. Those with unilateral or bilateral hearing loss who are considered suitable for continued employment in the Services must be subject to appropriate controls and education (both of the individual and their managers) to ensure appropriate protection from exposure to noise and to reduce the risk of any further deterioration in hearing.
- 5. It is important to remember that hearing acuity does not necessarily correlate closely with hearing function or ability to undertake effectively and safely any particular employment role. Any functional impairment that is found to be due to impaired hearing should be reflected in the P quality. Restrictions on employment that are as a direct result of impaired hearing should also be reflected in the P quality. In both these cases the impaired hearing acuity will be reflected in the H quality for each ear.

_

¹ SGPL 12/06: Noise at work health surveillance.

1. This Annex provides details of distant visual acuity (VA) assessment only. Other ophthalmological examination requirements are detailed in Annex B and Annex G (red/green colour vision perception).

Pre-Service assessment

- 2. Accurate assessment of distant visual acuity (VA) is essential, as specified visual standards are critical in many Service trades. Failure to meet the standards is a cause of premature discharge and examiners must be wary of potential pit-falls in testing. Examining medical officers are to be aware of the potential for long term wear contact lens users to forget to declare their use of visual correction.
- 3. Before being given an appointment for a pre-Service medical examination, the candidate is to be questioned as to whether he or she wears spectacles or contact lenses and one of the following procedures applied. All candidates who wear spectacles or contact lenses are to provide a visual correction prescription dated in the previous 6 months which may be requested prior to the pre-service assessment. However, if there is a discrepancy between VA measured at an optician and that recorded at the pre-service assessment, the latter should take precedence.
 - a. New entrants who wear spectacles only are to be instructed to bring their spectacles with them when attending the medical examination.
 - b. Contact lenses alter the curvature of the cornea and VA assessment immediately following their removal functionally improves VA. New entrants who wear contact lenses (hard or soft) and already have spectacles are therefore:
 - (1) To be instructed not to wear their soft contact lenses for at least a period of 48 hours prior to their medical examination, or 10 days in the case of hard contact lenses.
 - (2) To be instructed to bring their spectacles with them when attending the medical examination.
 - (3) To be given an appointment at a date which will allow (1) above.
 - c. New entrants who wear contact lenses but do not have spectacles are:
 - (1) To be instructed not to wear their soft contact lenses for at least a period of 48 hours prior to their medical examination, or 10 days in the case of hard contact lenses. They must however, bring them to the examination.
 - (2) To be given an appointment at a date which will allow (1) above.
 - (3) To have their VA assessed and recorded **unaided** first, and then to fit their contact lenses and have their **aided** VA assessed and recorded.
 - (4) At the pre-service medical examination, to be warned that if in all other respects their selection is successful, they will be required to be in possession of spectacles and an appropriate prescription at their initial medical examination
 - (5) To have the medical examination record¹ annotated "corrected VA assessed with contact lenses only."

¹ For example, serial 89 of FMed 1.

In-Service assessment

4. Distant visual acuity (both uncorrected and corrected) is to be measured and recorded at each assessment.

Distant visual acuity testing and recording

- 5. **Snellen chart**. The following instructions should be observed to ensure accuracy in the use of distant vision test charts. A standard 6 metre Snellen chart is to be used, adequately illuminated, and set at exactly 6 metres² from the candidate.
 - a. Commencing with the right eye, each eye is tested separately. The eye not under examination is to be properly occluded, be directed towards the chart and the candidate must not be allowed to turn their head.
 - b. The candidate may not screw up the eyes during testing; this includes the eye under cover.
 - c. Since it is easy to memorise the top three letters of the chart, a prior view of the chart invalidates the test. The chart must be changed and the examination repeated.
- 6. **Near visual acuity testing**. Near visual acuity testing is required for certain branches and trades. Single-Service guidance provides details of the testing procedures required and standards to be achieved.
- 7. **PULHHEEMS equivalents for visual acuity**. The PULHHEEMS equivalents for corrected and uncorrected visual acuity are as follows:

Visual acuity	PULHHEEMS 'E' grade
Not less than 6/6	1
Not less than 6/9	2
Not less than 6/12	3
Not less than 6/18	4
Not less than 6/24	5
Not less than 6/36	6
Not less than 6/60	7
Less than 6/60	8

8. **Recording**. The recording of visual acuity under EE shows the uncorrected and corrected vision in each eye separately, the first E representing the RIGHT eye, the second the LEFT eye. Under EE the upper numbers denote the uncorrected visual acuity and the lower numbers the corrected visual acuity. For example, a person with uncorrected vision R = 6/12, L = 6/18, corrected vision R = 6/6, L = 6/9 is recorded as:

P	J	L	Н	Н	Е	Е	M	S
					3	4		
					1	2		
Period	Period of validity of MES							

A person whose unaided vision is R = 6/6, L = 6/6 is recorded as:

P	U	L	Н	Н	Е	Е	M	S
					1	1		
Period	of validi	ty of MI	ES					

² If space is limited, an optician's mirror may be used to double the distance of a 3m test lane, but the 6m chart must be used in all cases (ie the 3m un-reflected version is not to be used).

3-E-2

General

1. The physician is not expected to perform an exhaustive psychiatric examination; however, a limited enquiry should always be made. The most effective method is one of professional interest coupled with a respect for the candidate's personality and feelings. Questioning should begin with points relevant to the situation but of low emotional content. This can lead onto a more general discussion of social background, work history and emotional relationships.

Pre-Service assessment

- 2. M quality. The M quality is assessed in the recruit selection process by intelligence testing.
- 3. **S quality**. Emotional stability (**S**) must be assessed by the examining medical officer. There is no adequate group test for temperament or personality and reliance must be placed on history. Contact with psychiatric services, substance abuse, eating disorders and contact with police and social services should all be elicited. Any history of self-harm or post-traumatic stress must be sought.
- 4. **Further guidance**. The medical examiner should follow the specific psychiatric guidance for entry as detailed in Section 4.

In-Service assessment

- 5. **M quality.** The **M** quality for serving personnel is not equivalent to that applied in the preservice assessment. It is a clinical classification distinguishing those whose mental capacity makes them suitable for normal employment or deployment from those whose limited capacity may affect employability. Although the examining medical officer may make a recommendation, permanent re-grading of the **M** quality must always be made following assessment by a Service neurologist or clinical psychologist.
- 6. **S quality**. Although the examining medical officer may make a recommendation, permanent re-grading of the **S** quality must always be made following assessment from Service mental health specialists¹.
- 7. **Further guidance**. The medical examiner should follow the specific psychiatric guidelines for serving personnel as detailed in Section 5. Those who are below M2 and S2 will exhibit a reduction in their overall functional capacity, and this should be reflected in a reduced P guality.

¹ Normally a psychiatrist but on occasions a community psychiatric nurse or clinical psychologist.

- 1. Testing of colour perception is conducted using the standard Ishihara plates and, when necessary, the Holmes-Wright colour vision testing lantern. Lantern testing is to be done by medical officers or opticians trained in its use. Apart from certain uncommon cases of injury or disease, colour perception alters little during Service life. The test on entry is regarded as final and re-testing is only done for strong executive or medical reasons.
- 2. Standards of colour perception. Standards are as follows:
 - a. **Standard 1 (CP 1).** The correct recognition of coloured lights shown through the paired apertures of the Holmes-Wright lantern at LOW brightness at 6m distance in complete darkness.
 - b. **Standard 2 (CP 2).** The correct recognition of the first 17 plates of the Ishihara test (24 plates abridged edition 1969) shown at a distance of 50 –100cm.
 - c. **Standard 3 (CP 3).** The correct recognition of the coloured lights shown through the paired apertures on the Holmes-Wright lantern at HIGH brightness at 6m distance in complete darkness.
 - d. **Standard 4 (CP4).** Army and RAF. Unable to pass standard 3. RN. The correct recognition of colours used in relevant trade situations and assessed by simple tests with coloured wires.
 - e. Standard 5 (CP 5). RN only. Unable to pass any of the above tests.

Procedures for colour perception testing

3. Ishihara book test:

- a. **Examination method**. The test is conducted using only good diffused daylight direct onto the test plates or the alternative illuminant (fluorescent daylight lamp to BS 950 Part 1; 1967 (1980), all other light being excluded.
- b. The test plates are presented to the examinee at a distance of 50 100 cm (20-40 inches) for not more than 5 seconds. The examinee may wear spectacles if appropriate. The winding line plates for illiterates normally need not be presented.
- c. Each number is read aloud by the examinee. They are not allowed to trace or handle the plates.
- d. The number of plates miscalled is recorded in the box on the examination form (not applicable to the RAF).
- e. **Assessment**. If no error is made the examinee is graded CP2, but it should be noted that certain numbers might be miscalled by colour normals, particularly when under stress. If not more than 3 plates are miscalled, the miscalled plates are shown again. If no errors are made on the second presentation a grading of CP2 may be given. Those failing the test are made CP4 pending lantern testing. RAF candidates failing the test are graded CP4 unless they are designated to trades requiring CP3 or are required to drive on an airfield; in these cases a lantern test is arranged.

4. Lantern test:

a. **Description**. This test is usually performed by Service ophthalmologists or other trained persons. The lantern is regarded as a form of trade test displaying pairs of vertically

arranged lights in combination of red, green and white. These are viewed at a distance of 6m (20ft), either by direct vision or mirror reversal, in light surroundings or in total darkness as laid down in current instructions. The colour pairs can be changed by rotating the colour setting flange at the rear of the lantern, the colour pairs presented being indicated by the code number visible in windows on each side and at the rear of the lantern. The code numbers represent:

1	R2	2	G2	3	W	4	G2		
	W		R1		W		R2		
5	R1	6	R1	7	W	8	G1	9	G1

The intensity of the lights presented can be varied by the filter change at the rear of the lantern, the settings being:

- (1) DEM for demonstration only.
- (2) HIGH brightness for testing in light surroundings.
- (3) LOW brightness for testing in total darkness.
- b. **Examination method**. In order to reduce errors the examination method and instructions to the examinee should be followed exactly in each case.
 - (1) Seat the examinee, wearing spectacles as appropriate, at the correct viewing and in the prescribed testing surroundings with the lantern aperture at eye level.
 - (2) Connect the lantern to a 220/240 volt supply and switch on the rotary switch at the rear of the lantern. No warming up period is necessary.
 - (3) Turn the filter change level to DEM and the colour flange setting to Code 1.
 - (4) Say to the examinee: 'This is a test to find out whether you can readily recognise red, green, or white signal lights. The colours are shown in pairs one above the other in any combination of red, green or white. Name both colours calling the one on top first. The top colour you see now is red'.
 - (5) Turn the colour setting flange to Code 2. Say to the examinee: 'The top colour you see now is green'.
 - (6) Turn the colour setting flange to Code 3. Say to the examinee: 'The top colour you see now is white'.
 - (7) Turn the filter lever to HIGH or LOW brightness depending on the testing surroundings. Turn the colour setting flange to Code 4, 6, 8 or 2 (that is any red/green combination). Say to the examinee: 'Start now, naming first the top then the bottom colour. Do not use any words other than red or green or white. You will be given five seconds to name the colours'. If the examinee uses any colour name other than red, green or white remind him that only these words should be used. Make no other comments to the examinee.
 - (8) Show each colour pair to the examinee in consecutive order, the responses being recorded on the examination form. Each response must be given within five seconds.

5. Assessment of CP3 and CP4:

- a. The lantern test is carried out in a dark room using a HIGH brightness setting.
- b. If no error is made with one complete run of all colour pairs, the examinee is graded CP3 (Colour defective Safe).
- c. If any error naming green as red or red as green is made the Army and RAF examinee is graded CP4 (Colour defective Unsafe) without further testing.
- d. If any other error is made two further runs at HIGH brightness are carried out.
 - (1) If no error in either run is made, the examinee is graded CP3. If one or more errors are made the examinee is dark adapted for 15 minutes and one final run at HIGH brightness carried out.
 - (2) If no error is made the examinee is graded CP3 If one error is made the Army and RAF examinee are graded CP4.
- e. RN examinees failing CP3 require further trade testing to enable grading as CP4 or CP5.
- f. If the Holmes-Wright lantern is not available, candidates may be tested using the Fletcher CAM lantern.
- 6. The lantern is not to be opened except for routine annual servicing, at which the lamp is changed.

DEMOBILISATION HEALTH DECLARATION EXAMPLE

ANNEX H

The requirement for and minimum content of medical assessments for Reserve Forces on demobilisation are mandated by the Surgeon General¹. The health declaration that follows is an example that is currently used at RTMC Chilwell.

_

¹ D/DMSD/3202/2 dated 28 Apr 03.

OFFICIAL SENSITIVE PERSONAL

Medical in Confidence (when completed)

Heal	Health declaration (to be attached to FMed 4 on demobilisation)									
Serv	ice Number	Rank/	Rate	Su	rname		Forename	(s)	DOB	
								. ,		
Marit	ime Reserves	Army	Reserves	s RA	F Reserve	es 🗆	Unit			
1110111							· · · · ·			
1a.	Have you su	,	ess or in	jury, consu	ulted your	doctor or	received a	ny medication	Yes	No 🗆
1b.	Have you att		ntist in th	neatre durii	ng your de	ployment	t?		Yes □	No □
1c. Have you attended the physiotherapist in theatre during your deployment? Yes \(\scale \) No \(\scale \)										
10.	1d. If you have answered yes to question 1a-c. or believe that your health has changed in any way during your deployment, please give details below:									
2a.	Are you awa uranium, noi:	se, vibration o	or infection	ous diseas	e)? If yes				Yes	No 🗆
2b.	Do you requi								Yes 🗆	No 🗆
2c.	Have you be				s/depleted	uranium	warning ca	irds?	Yes 🗆	No 🗆
3. 4.	Do you want								Yes 🗆	No 🗆
	Do you want ature	to see a mer	itai neait	n worker?			Date		Yes	INO U
Sigil	ature						Date			
Inve	stigations									
Urina	alysis	Peak Flow	BP	Pulse	Hearing	l	Eyes	sight		
Prote					R	L	R		L	
Bloo	ose							orrected)	L (corrected))
Sign	ature of medi	ical staff					Date	•		
	atient will nee g deployment		edical off	icer if there	e has beer	n any sigr	nificant cha	nge in medical/	health condition	on
Sum	mary of medi	cal examina	tion							
Disp	osal									
Fit C		Referred to	GP	Referred	to NHS s	pecialist	Refe	rred to other h	nospital speci	alist
Sign	ature of medi	ical officer					Date			

OFFICIAL SENSITIVE PERSONAL

- 1. Pure tone audiometry is the standard health surveillance tool for hearing loss, including Noise Induced Hearing Loss (NIHL). Audiometry is undertaken in medical centres using automated pure tone audiometry. In this form it is equivalent to industrial screening audiometry. More accurate clinical audiometry is available in Service approved audiology departments, such as the Defence Audiology Service (DAS) based at Institute of Naval Medicine.
- 2. This leaflet deals with screening audiometry. It should be carried out in accordance with the guidelines below and at a frequency determined by appropriate risk assessment in line with JSP 950 Lft 6-4-4, and as directed by single-Service and other relevant hearing conservation policy, eg operational mounting orders.

Environment

- For screening audiometry to be as accurate as possible, it is necessary to minimise extraneous noise, in case this masks the test tones and gives a false result. Criteria are laid down for test rooms and should be adhered to¹. The frequencies most sensitive to environmental interference are the low frequencies of 1 kHz and below. These frequencies may result from people walking through or past a testing area this should be taken into consideration when siting the test room. The requirements for audiometry should be considered during all new building work or contracts for facilities where audiometry will take place.
- 4. In all but exceptional circumstances, it is necessary to use an audiometric soundproof booth to achieve acceptable testing conditions. Testing within MoD should be undertaken in an appropriate booth, which must be serviced and maintained to the correct standard². A minority of people find audiometric booths claustrophobic and need to be tested outside the booth. Noise excluding headsets are not deemed suitable for MOD purposes, and so personnel should be referred for clinical audiometry in this scenario.

Equipment

- 5. Screening audiograms may be performed using an automatic screening audiometer. The audiometer is to be set to record in 5 dB increments, and not used in Bekesy mode. The currently approved audiometer is the Amplivox CA850 4A, although units with previous models³ which comply with requirements may continue to use them. The CA850 is available from MG&S Abbey Wood (NSN 6515-99-773-4626 Audiometer Screening CA850-4A Automatic Screening Incorporating Internal Database & Integrated Graphics c/w Audiocups+Designated Printer).
- 6. Each audiometer should only be used with the earphones supplied with it. Earphones are calibrated to a particular audiometer, and it is not acceptable to swap earphones between audiometers. If earphones need to be changed, the audiometer must be sent for recalibration with the new earphones as laid out in Paras 8-10 below.
- 7. Manual pure tone audiometry is the gold-standard of hearing threshold measurement. Manual audiograms are only to be conducted by personnel trained, as a minimum, to current British Society of Audiology Education Committee Guideline on The Training of Industrial Audiometricians standard. This is to ensure that manual audiometry is carried out in a repeatable and accurate manner. Where manual audiometry is required a request for testing should be sent to an appropriate clinical audiology department such as DAS.

_

¹ BS EN ISO 8253-1:2010 Acoustics. Audiometric test methods Pure-tone air and bone conduction audiometry Jan 11.

² BS EN 60645-1 (IEC 60645-1) and the relevant BS EN ISO 389 (ISO 389) series standards.

³ eg Microlab seriès.

Equipment maintenance, calibration and daily checks4

- Screening audiometers should comply with BS EN IEC 60645-1:2001, and are to be calibrated in accordance with BS EN ISO 389-1:2000.
- All equipment should be maintained, calibrated and used according to the recommendations of BS 6655:1986 EN 26189:1991 ISO 6189:1983 Specification for pure tone air conduction threshold audiometry for hearing conservation purposes. A basic calibration of each audiometer is to be performed by a competent laboratory annually. It is acceptable to use the manufacturer for this check.
- The annual check must incorporate calibration of the earphones used with the audiometer. This is important, as the earphones are often the weakest link in the calibration chain, being easily damaged in use.
- A listening check should be undertaken daily before use. An experienced and trained individual with good hearing⁵ should listen at each frequency and at 3 sound intensities to ensure that no extraneous noise is generated by the apparatus.

Training for those carrying out audiometry

In order to ensure that screening audiometry is as accurate as possible, and does not miss early changes in hearing acuity, the test must be performed in a consistent manner with care. Personnel undertaking screening automatic audiometry should be trained in the procedure. Some training in audiometry is currently provided in Phase 2 at DMSTC and this will be expanded in early 2014. In addition an e-learning package is being developed for use for update and refresher training in medical centres. Personnel newly arrived on a unit are to be supervised until they have demonstrated a satisfactory standard. All personnel undertaking audiometry are to be checked annually to ensure understanding of the procedure by a senior member of staff nominated by the senior MO - this check is to include independent validation of an entire audiometric screening test. This check may be undertaken locally, but should be recorded in local training documentation in a manner that is available to Healthcare Governance Assurance Visit teams. Any individual who has not performed audiometry within the past year is to undergo the local refresher training before performing unsupervised audiometric testing.

Quality Control

- It is important that audiometry is undertaken under standardised test conditions with close attention to quality control procedures. Quality control is important to improve the repeatability and reliability of the data produced. Comparisons between audiometric results taken over a period of time on one individual are an important part of interpretation in an on-going and effective audiometric programme. To ensure that results are comparable it is essential that standardised method of testing is used. Careful explanation to the subject of the procedure and familiarisation with the test tones before the test begins are also essential for the collection of reliable data. The criteria used to determine the accuracy with which results are obtained include:
 - Whether repeat audiometry on the same individual and same day is consistent⁶, a.
 - b. Appropriate and timely equipment calibration and
 - The presence of background noise in the test environment. C.

⁴ To be conducted in accordance with single-Service policy (AP 1269 11-04, APHCS Infrastructure and Equipment Policy) until replaced by DPHC Instructions.

⁵ Preferably a Senior NCO or Practice Nurse with hearing no worse that H2 H2.

⁶ Only required if there are clinical concerns over an audiometric result, or more general concerns about the quality of audiometry at a

Procedure

- 14. An aide memoire for the procedure below is detailed in the protocol for performing screening audiometry flow-diagram.
- 15. It is civilian best practice that before undertaking an audiogram the identity of the individual should be checked against a photographic identity document (eg MOD 90, a photographic driving licence, or passport) to confirm their identity; this should be followed in DMS facilities⁷. If they had not had an audiogram before, the initial noise and health questionnaire at Appendix 2 should be completed. For subsequent audiograms, the previous medical records including last audiogram(s) should be available. Any significant changes to personal details, job or noise exposure should be noted, and if necessary the questionnaire at Appendix 2 should be completed again.
- 16. Specific enquiry should be made about current problems, to include subjective hearing loss, Upper Respiratory Tract Infection (URTI) symptoms, earache, discharge from the ear, tinnitus or balance problems. With the exception of subjective hearing loss, individuals with any problems should be referred to an appropriate clinician⁸ before the test proceeds. The clinician should decide if audiometry can be performed same day or deferred.
- 17. The ear should be examined using an otoscope. If significant amounts of wax are present (here defined as obscuring more than 80% of the view of the tympanic membrane), the wax should be removed by somebody trained in the procedure. If ear drops or ear syringing are used, at least 48 hours should be allowed post treatment before audiometry. If otoscopy reveals abnormalities, such as inflammation, fluid behind the tympanic membrane, perforation, blood or discharge) the individual should be referred to an appropriate clinician before the test proceeds. The clinician should decide if audiometry can be performed same day or deferred.
- 18. An explanation of the test procedure should be provided to the individual. They should be seated in the booth, and the tester should fit the earphones in the correct orientation (red right ear, blue left ear), ensuring they are properly seated and positioned over each ear, lining the speaker up with the ear canal. The individual should be observed throughout the test to ensure that they do not attempt to falsify the test (eg swapping headphones over halfway through, watching the light on the audiometer or rhythmically pressing the response button). The test should be completed using automatic computer mode, not Bekesy or manual mode. The frequencies 500 Hz, 1 kHz, 2 kHz, 3 kHz, 4 kHz, 6 kHz and 8 kHz are to be recorded on every occasion for both ears. If automatic mode fails to record a valid result at any frequency, these should be repeated and added using manual mode.
- 19. When the audiogram is complete the tester should remove the headphones for the patient to reduce the likelihood of damage to the headphones. On completion of the test, results should be compared with the most recent previous audiogram (unless this is the initial test). If there is a difference of 15 dB or more⁹ at any frequency from the previous result, the test should be repeated on the following day¹⁰. Until the test has been repeated, the individual should be protected from further noise exposure. If a change of 15dB or more is confirmed on repeat testing, this may be regarded as reliable. Further action is detailed in the following paragraphs.
- 20. Inspect the audiogram for any obvious problems. See JSP 950 Lft 6-4-2 for guidance on inspection of audiometry. If urgent concerns are identified, the individual should be referred to an appropriate clinician immediately. A DMICP algorithm is being developed to aid this decision-making process.

JSP 950 Lft 6-7-7 (V1.6 Aug 19)

⁷ Any attempt at impersonation should be dealt with as a disciplinary matter.

⁸ This will normally be a medical officer, but could include an appropriately trained nurse or audiologist.

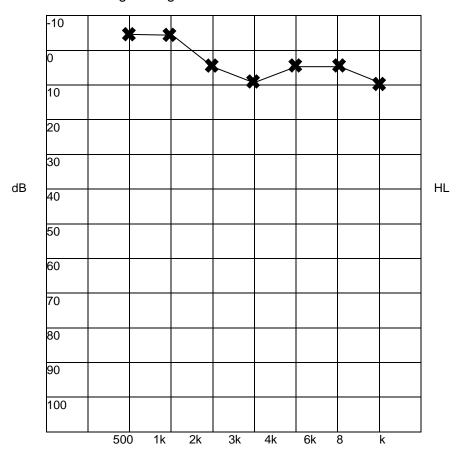
⁹ Changes up to and including 10dB at a single frequency between screening audiograms may not be reliable, and may occur without ear disease being present.

¹⁰ A minimum of 16 hours should be allowed between tests, ideally 24 hours. If there are no appointments available in an appropriate timescale, the test should be repeated within a maximum of 2 weeks

21. If no urgent concerns are identified, the audiogram should be referred for routine review by an appropriate clinician. The individual should be booked for repeat audiometry at the appropriate frequency, and a diary entry made on DMICP

Documentation

- 22. The audiogram is to be handled under a "Protect Medical" caveat. The result is to be entered onto DMICP via the audiometry template, and the audiogram itself scanned onto DMICP as part of the patient record for medico-legal reasons. Once the audiogram has been successfully scanned into the patient record, the original audiogram can be shredded under normal arrangements for clinical records. Where there is no DMICP record (eg Civil Servants), the audiogram is to be stored in the individuals Medical File for a minimum of forty years.
- 23. When recording audiograms on DMICP, negative values are to be recorded as negative values, and not set to 0. Similarly, negative values are to be summed as negative, and not rounded up to 0. This is to ensure that the audiogram permits subsequent changes to be detected. For example look at the following audiogram:



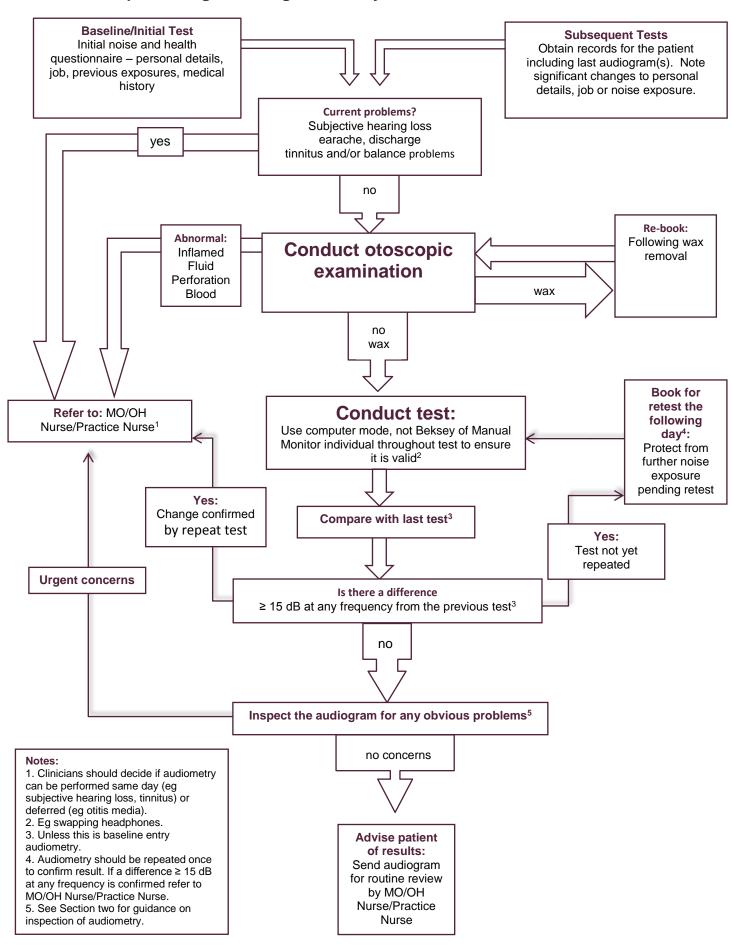
Frequency (Hz)

This should be recorded as:

Frequency	dB
500	-5
1kHz	-5
2kHz	5
3kHz	10
4kHz	5
6kHz	5
8kHz	10
sum low tones	-5
sum high tones	20

24. Policy on interpretation of audiograms can be found in <u>JSP 950 Lft 6-4-2 'Guidance on the assessment of audiograms'</u>.

Protocol for performing screening audiometry



AUDIOMETRY HEALTH QUESTIONNAIRE											
Service Number		Rank/Rate	Surname			Forenam	ne(s)	DOB			
RN/RM □		Army	RAF	RAF 🗆		Unit			ı		
				eat Initial			Repeat Pre)-			
					- 1				Deploymen		
Periodic/Routine Post-Deployment Rep		eat \Box			Repeat Pos						
			odic/Routine Deployment								
						eat Special Repeat Clinical					
Date of audiogram											
Ear N	lose and Th						lease give o	details			N =
1. Have you noticed any change in your hearing?					Yes □					No 🗆	
	Do you have trouble heavier or an alternative						Yes				
2.	Do you have trouble hearing or understanding normal conversation?						res 🗆				
	Do other people complain about your hearing and/or						Yes □				
3.	the loudness at which you listen to radio/TV?										No 🗆
	Have any o	nmediate blood relativ	her,	Yes 🗆					No 🗆		
4.		d brother(s)) had heari									
	to the age o										
5.			frequent earaches, ea		ions,	Yes □					No \square
<u> </u>			or discharge from the								N =
6.	Do you exp	erience	ringing or buzzing in	the ear?	,	Yes □					No 🗆
	Цоло лоп о	vor had	a perforated/burst ea	r drum?	1f	Yes □					No 🗆
7.	yes, when a			i uiuiii?	11	165					INO \Box
			d an Ear Nose & Thro	at speci	alist	Yes 🗆					No 🗆
8.	in the last y			at speci	anst	103 🗆					
			surgery recommended	or		Yes 🗆					No 🗆
9.											
			ng aid, or have you ev	ver beer	1	Yes □					No \square
10.	fitted for one	e?									
Past	Medical His		ld flu or cinus problem	n in tha	naat	Yes 🗆					No.
11.	7 days?	au a co	ld, flu or sinus problen	n in the	pasi	res 🗆					No 🗆
• • • •	ruays!										
	Have you suffered any head injuries or loss of						Yes				
12.		yes, when and reason						No 🗆			
Occi	ıpational He										
13.			nt occupation?			Yes □					No 🗆
13.			hat is your civilian occ								
			role (including civilian			Yes □					No \square
14.	14. for Reserves) involve regular exposure to any loud										
	noise? (eg firearms, artillery fire, power tools,										
	aircraft, motor boats, heavy machinery). Do you regularly use an i-Pod, MP3 player or					Yes 🗆					No 🗆
15.	equivalent device?					169					140 🗆
4.0	Do you have any noisy hobbies og shooting?						Yes □				
16.	,	,							No 🗆		
17	Have you h	Have you had a past exposure to explosion or blast?				Yes 🗆					No 🗆
17.	•	•									
18.	In the past	48 hour	s have you been expo	sed to I	oud	Yes □					No □
	noise?										
Post	-Deploymen			'''		T.V					I NI- C
			any change eg loss of			Yes □					No 🗆
1.	or ringing in test?	ı ıne ea	rs, in your hearing sind	ce your	iast						
		xnnsed	to any explosions or l	nlasts w	hen	Yes 🗆					No 🗆
2.	Were you exposed to any explosions or blasts when on operations?										
Did you wear hearing protection when exposed to						Yes					No 🗆
3.	noise? What did you use?						100				
	Were the po	otential	noise hazards that ma			Yes □					No 🗆
4	encountere	d in the	operational theatre ar	nal theatre and their							
7.	control measures covered during your PDT and										
RSOI training?						D :					
Signature						Date					
I						Ī					

SECTION FOUR: THE INFLUENCE OF PARTICULAR CONDITIONS ON MEDICAL FITNESS FOR ENTRY

- 1. **Introduction.** These standards represent the agreed tri-Service minimum medical standards for entry. The single Services may apply a higher standard, particularly in relation to branches or trade groups where there are specific occupational fitness requirements eg aircrew, divers, marines, parachutists and submariners. Specific regulations on these groups are found in single Service publications¹ and referenced as appropriate in the annexes to this Section.
- 2. **General requirements.** New entrants to the Armed Forces must be medically fit to meet the various challenges of Service roles in which they will be expected to deploy; potentially anywhere in the world, at short notice, in locations remote from established medical care. Those with pre-existing conditions requiring periodic medical care or review, or with a requirement for long term medication, must be appropriately screened according to JSP 950 Leaflet 6-7-7 Section 3, in conjunction with the medical condition annexes.
- 3. **Physical activity.** Prior to their application, potential recruits should be capable of undertaking regular and substantial levels of exercise comparable with military training without experiencing adverse effects (eg symptoms of lower limb pain). This is to ensure that applicants can achieve levels of exercise that will be encountered during initial military training and Service. The following activities may be considered representative of the type of activities required:
 - a. Running 30 40 minutes a minimum of 3 x weekly.
 - b. Hill walking with 10 kg load (backpack) for 90 120 minutes (6 8 miles) weekly.

It is this level of activity that is implied when the phrase "activity comparable with military service/training" is used in relevant annexes. Demonstrable evidence of said activity should be considered and highlighted in any specialist referral (if indicated).

Note: the potential candidate can only be advised to achieve an appropriate level of activity. Care must be taken to ensure that an "order" (and thus responsibility to the MOD) is not implied.

4. Medical assessment.

- a. The recruitment medical assessment is to be based upon a functional assessment of the physical and mental potential to undertake military training, all general Service duties and serve in any environment worldwide for the period of the initial engagement being offered. Many conditions which may not limit civilian employment or sporting/recreational pursuits may be incompatible with military service.
- b. Potential recruits are normally only accepted where they meet the standard for full deployability.
- c. Candidates with a lesser grading will not normally be accepted unless formal authority has been granted by the relevant Personnel or Executive Branch following medical advice².
- 5. **Definitions**. The following definitions apply throughout this section.

FIT - Meets the Medical Entry Standard. Fit to undertake entry training and Service without restriction.

_

¹ Current versions of BRd 1750A (RN), AGAI 78 (Army), AP1269A (RAF) and any associated DINs or single Service Policy Letters.

² BRd 1750A (RN), AGAI 78 (Army), <u>AP 3391 Vol 3 Part B Lflt 220</u> (for RAF).

UNFIT - Not fit to undertake entry training and Service without additional medical risk.

Normally UNFIT - The expectation is that the candidate is UNFIT, but in exceptional circumstances an experienced clinician may determine that the candidate is FIT³.

- 6. **Determining a candidate as FIT for Entry**. The annexes to this section give policy on when a candidate can be found FIT. There are 3 scenarios where a candidate may be found FIT:
 - a. In the absence of conditions that are listed as excluding entry. Candidates who meet the standard may be found FIT by examining clinicians.
 - b. When candidates have a condition that determines they are 'Normally UNFIT'. An examining clinician may determine that a candidate does not meet a medical standard and the Annex defines their condition as "are normally UNFIT". In such a scenario, after taking into account medical history, examination and function (in the context of the proposed Career Employment Group (CEG)), such candidates may be found FIT. The decision that these candidates are FIT may only be made by single Service Medical Entry Staff⁴ (SSMES) or their delegated authority. The clinical justification for such decisions must be documented in the pre-employment medical assessment healthcare record. These candidates will still be fit to undertake entry training and Service without restriction.
 - c. When candidates have a condition that determines they are 'UNFIT'. Candidates who fulfil the criteria in the Annexes that would normally fulfil the definition of "are UNFIT" can, in some limited situations, after detailed consideration of medical history, examination and function and CEG be determined FIT in accordance with paragraph 9. Paragraph 9 gives single Service Occupational Physicians, responsible for Service Entry, discretion to use their clinical judgement. Such candidates will still be fit to undertake entry training and Service without restriction. The clinical justification for such decisions must be documented in the pre-employment medical assessment healthcare record.
- 7. **Determining a candidate UNFIT for Entry**. The annexes to this section give guidance on when a candidate is UNFIT.
 - a. These candidates will not normally be recruited.
 - b. Exceptionally candidates who are determined to be medically UNFIT may enter service through a single Service Executive/Personnel 'waiver'⁵. Advice must be sought by the Executive/Personnel from an Occupational Physician from the SSMES on restrictions which may be needed in training and in Service to inform the Executive decision. The responsibility for the final decision to accept a candidate into service and the recruiting risk lie solely with the Executive/Personnel function⁶.
 - c. When a JMES is allocated, these candidates are to have Med Lim 1302 allocated to facilitate longitudinal analysis and inform review of standards in future.
- 8. **Seeking additional guidance.** While this section and its annexes provide general direction, each case must be assessed on merit, with the intention to facilitate decision-making by examining clinicians. In addition, advice can be sought from SSMES on any candidate and in particular for those conditions not covered in the appropriate section.

⁴ SSMES must have appropriate oversight from a Consultant in Occupational Medicine.

³ See paragraph 6b.

⁵ See Paragraph 4. Detail is included in single Service publications listed at Footnote 1.

⁶ The Army's waiver use relates to special enlistment (specialist Knowledge, Skills & Experience). It is not a route open to most candidates who are rejected as UNFIT as it is not another level of appeal.

- 9. Discretion for single-Service Occupational Physicians responsible for Service Entry. Occasionally, exclusion of a candidate in particular circumstances may be considered unreasonable. In such cases some discretion, consistent with single Service policies or on advice from the SSMES, may be appropriate and would normally require an Occupational Medicine Consultant opinion. Such candidates will be determined to be medically FIT. Candidates who the SSMES declare UNFIT can still enter if supported by the Executive through the waiver system (see paragraph 7).
- 10. It may be appropriate to seek clinical opinion from civilian consultants, Service-appointed consultants or single Service or Defence Consultant Advisers through the SSMES (as required by single Service recruiting policy). In these cases, it is important for the referring medical officer to ask for an opinion about the nature and prognosis of a condition including likely requirements for treatment/medication and follow-up. The effect on function and fitness for service can then be determined by discussion with SSMES. In many cases an opinion rather than a formal consultation with the candidate will satisfy this requirement.
- 11. **Incidental findings.** Where previously undiagnosed conditions are discovered by examining clinicians, candidates are to be informed and their permission sought for their usual general practitioner (GP) to be notified. When such permission is not obtained, candidates should be encouraged to report the circumstances to their own GP. Agreement to notify or not is to be recorded in the entry medical assessment paperwork. A letter to the GP is to be given to the candidate and a copy of the letter is to be retained in the applicant's entry medical examination record.
- 12. **Specific conditions.** Annexes A N contain guidance on the effects of specific conditions on the fitness of a potential recruit to enter initial military training. The annexes are laid out by system, except for Annex N which contains a mixture of conditions that do not sit in the other annexes. Where the candidate presents with a condition not listed in the annexes, the opinion of the SSMES must be sought.

EYES PRE-ENTRY ANNEX A

1. Diseases of the eye and orbit are assessed and recorded under P. The entries under EE are records of visual acuity only (see Section 3); however, the refractive limit below at sub-paragraph 2a(3), is included as, outside this range, eyes are rarely structurally normal. Consideration must be given to whether a lesion is progressive and likely to lead to future incapacity. Where doubt exists advice should be sought from the single-Service Occupational Physician responsible for the selection of recruits who will seek an ophthalmology opinion where required. The minimum standards for both uncorrected and corrected visual acuity on recruitment are determined by single-Service authorities. These standards are dependent upon the proposed employment and trade group; irrespective of this, the minimum standard is subject to the magnitude of correction required stated below.

2. The following conditions, in either or both eyes, will normally exclude entry:

a. General.

- (1) Orbital fractures and reconstruction if causing, or having the potential to cause, disability. The presence of metalwork, provided ocular function and mobility are normal, would not be a bar to entry.
- (2) Monocular (or uniocular) vision¹; or reduction of corrected vision in one eye to below either entry EE standard.
- (3) Refractive errors; greater than a total of +6.00 and -6.00² dioptres in any meridian³. To calculate the refractive error see Appendix 1.
- (4) History of penetrating injury to either eye with abnormal function is graded P8. Those with such a history who achieve the VA and other visual functional requirements should be referred for a Service ophthalmological opinion.
- (5) Scotoma or limitation of binocular visual field, from all causes.
- (6) Night blindness whether congenital or acquired.
- (7) Neoplasm.
- (8) Ophthalmic migraine (see Annex G Neurological).
- (9) Glaucoma or history of ocular hypertension.

b. Ocular motility.

- (1) Nystagmus that impairs visual function.
- (2) History of incomitant squint.
- (3) Squint surgery within preceding 6 months.
- (4) Diplopia.

¹ Uniocular: When one eye is normal and the other eye is either absent or is blind. Blind Eye: An eye possessing a best attainable corrected Snellen visual acuity (VA) of 6/60 or worse. Monocular. When an individual has two seeing eyes, one eye with normal vision but the other eye possessing a best corrected VA between 6/60 and 6/24.

² Letter DCA Ophthalmology 4 Apr 13 to align with RCOpth definition of high myopia

 $^{^3}$ These limits apply only to any one dimension of spherical or cylindrical correction unless the mathematical sign (+ or -) is the same for both – in such cases the sum of the correction applies, e.g. sphere of -6.00 and cylinder of +3.00 = -6.00, sphere of -1.00 and cylinder of +6.00 = +6.00, sphere of -6.00 and cylinder of -3.00 = -9.00, sphere of +3.00 and cylinder of +5.00 = +8.00

c. Lids.

- (1) Blepharitis, chronic; acute, until controlled.
- (2) Blepharospasm that impairs visual function.
- (3) Damage to the eyelids or eyelid movement sufficient to impair protection of the eye or affecting the visual fields.
- (4) Entropion or ectropion
- (5) Ptosis, affecting the visual fields.

d. Lacrimal apparatus.

- (1) Persistent chronic epiphora.
- (2) Dacryocystitis, chronic; acute, until cured.
- (3) Keratoconjunctivitis sicca (dry eye syndrome).

e. Conjunctiva.

- (1) Conjunctivitis, chronic; acute, until cured.
- (2) Pterygium⁴; if threatening the visual axis.

f. Cornea.

- (1) Keratitis, more than one episode; acute until cured.
- (2) Keratoconus.
- (3) Any type of corneal dystrophy.
- (4) Corneal graft.
- (5) Refractive surgery: Radial Keratotomy (RK) and Astigmatic Keratotomy (AK) remain an absolute bar to entry. However, Photorefractive (Excimer) Keratectomy (PRK) or Laser Epithelial Keratomileusis (LASEK) or Intrastromal corneal rings (ICRs), otherwise known as Intrastromal Corneal Segments (ICSs), if meeting the specific requirements given below at Corneal refractive surgery section below, may be acceptable.
- (6) Ulcer, recurrent.
- (7) Vascularisation or opacity reducing visual acuity (VA) below single-Service entry standards.

g. Lens.

- (1) Aphakia.
- (2) Pseudophakia (intraocular lens implant).

⁴ Recurrence is 10-30% after surgery, depending on type of surgery.

- (3) Opacity (including cataracts or past cataract surgery). Specialist opinion is normally required.
- (4) Dislocation, partial or complete.
- h. Uveal tract.
 - (1) Coloboma (excluding iris)⁵.
 - (2) Uveitis⁶ that is chronic or recurrent; anterior, intermediate or posterior (syn-iritis, pars-planitis, vitritis, choroiditis, panuveitis).
- i. Retina.
 - (1) Vascular lesions.
 - Retinitis, active or recurrent.
 - (3) Retinal detachment ⁷All cases with a history of retinal detachment are to be referred to an ophthalmologist.
 - (4) Retinitis pigmentosa. Non progressive sectoral RP may be acceptable following ophthalmological review.
 - (5) Macular dystrophies or degenerations.
- j. Sclera. A history of scleritis.
- k. Optic Nerve.
 - (1) Neuritis.
 - (2) Neuropathy.
 - (3) Atrophy (primary or secondary).
 - (4) Papilloedema.

Corneal Refractive Surgery

- 3. It is recommended that the following methods of surgical correction of myopia or hypermetropia are now considered suitable for entry on an individual, case by case basis for non-specialist employment groups and subject to single-Service requirements:
 - a. Photorefractive keratectomy (PRK)
 - b. Laser epithelial keratomileusis (LASEK)
 - c. Laser in-situ keratomileusis LASIK.
 - d. Intrastromal corneal rings (ICRs), otherwise known as intrastromal corneal segments (ICSs)

⁵ Iris colobomata are generally benign, unless associated with other systemic syndromes and are normally acceptable.

⁶ Prognosis after traumatic uveitis, eg. from intra-ocular foreign body, is good and recurrence uncommon. Candidates may be graded P2 following a favourable assessment by a specialist.

⁷ There will be cases that may be acceptable, eg. if the retina has been adequately reattached and the vision is good, the refraction stable and within limits, no significant anisometropia, the visual field full and the ocular motility normal.

Entry will not be considered for radial keratotomy (RK), or astigmatic keratotomy (AK), or any other form of incisional refractive surgery, other than those procedures listed above. All invasive intraocular surgical procedures will remain a bar to entry.

- 4. In order to be considered the prospective entry candidate must provide appropriate documentary evidence that they fulfil the following criteria:
 - a. The total preoperative refractive error was not outside the limits for selection, and in no case than +6.00 or –6.00 dioptre [Equivalent Spherical Error (ESE)] in either eye.
 - b. The preoperative best spectacle corrected visual acuity was within selection limits and;
 - c. At least 6 months have elapsed since the date of the last surgery or enhancement procedure;
 - d. The candidate is at least 22 years old and;
 - e. There have been no significant visual side effects secondary to the surgery affecting daily activities or night vision, such as glare, halos or discomfort, no requirement for topical eye medication and;
 - f Stability of refraction post procedure; no more than 0.50 dioptre difference in the spherical equivalent of either eye should be demonstrated by two consecutive post-treatment refractions separated by a minimum of 3 months and;
 - g. Paper case review by a Service ophthalmologist or Service-approved ophthalmologist for confirmation that the candidate is acceptable.
- 5. A single revision of CRS is acceptable, subject to the candidate meeting all the criteria as above, including the preoperative limits before the first CR

Calculation of Spherical Equivalent (Equivalent Spherical Error (ESE))

- 1. The spherical equivalent is the sum of the spherical component of refraction added to (or subtracted from) HALF of the cylindrical component of refraction. For example:
 - a. Spherical +4.00D with cylindrical +2.00D = (+4) + (2/2) = ESE 5.00
 - b. Spherical -7.00D with cylindrical +3.00D = (-7) + (3/2) = ESE -5.50
- 2. The standard refers ONLY to the calculated spherical equivalent, and the individual components, namely spherical and cylindrical are NOT to be used in isolation. For example:
 - a. Spherical +7.00D with cylindrical -4.00D = (+7) + (-4/2) = ESE + 5.00. In this example, even though the spherical component is greater than +6.00, the calculated Spherical Equivalent is only +5.00. The candidate is therefore FIT.
 - b. Spherical -5.50D with cylindrical -3.00D = (-5.5) + (-3/2) = ESE -7.00. In this example, even though the spherical component is less than -6.00 and the cylindrical component is less than -6.00, the Spherical Equivalent is greater than -6.00. The candidate is therefore UNFIT.

EAR, NOSE AND THROAT PRE-ENTRY

ANNEX B

Introduction

1. Disorders of the ear nose and throat are assessed and recorded under the P factor. Entries under HH are records of auditory acuity only. Consideration must be given as to whether a condition gives rise to a degree of incapacity that is sufficient to impair an individual's ability to perform the normal tasks expected of the individual, either currently or in the future; whether the condition may be exacerbated by exposure to the service environment, or whether the condition is likely to give rise to a continuing need for medical supervision or treatment. In cases of doubt, an opinion should be sought from the single-Service Occupational Physician responsible for the selection of recruits who may request advice from a Service consultant otorhinolaryngologist (ORL).

Ears, nose and throat – general

- 2. Candidates with the following conditions will normally be graded P8:
 - a. Existing or past history of malignant disease.
 - b. Wegener's granulomatosis¹.
 - c. Narrowing of the airway sufficient to cause limited exercise tolerance.
 - d. Persistent facial nerve palsy².

Ears

- 3. **Deformity of the external ear.** Candidates with deformity of the external ear sufficient to interfere with the wearing of normal hearing protection or use of communication headsets are normally graded P8.
- 4. **Otitis Externa.** Candidates with recurrent or persistent otitis externa are graded P8.
- 5. **Acute Otitis Media (AOM).** Candidates with recurrent AOM are normally graded P8. However, candidates may be graded P2 provided the last episode was not less than one year³ ago, the tympanic membrane (TM) has healed, the hearing acuity is within entry limits and tympanometry is normal. Following an isolated episode of AOM, a candidate may be graded P2 as soon as the TM and hearing have returned to normal.
- 6. **Perforation.** Candidates with a perforated TM are graded P8. However, candidates may be graded P2 not less than three months⁴ after spontaneous healing or successful surgery to repair a perforation, provided that the TM has returned to normal, hearing acuity is within entry limits and tympanometry is normal.
- 7. **Ventilation tubes.** Candidates with ventilation tubes (grommets, T tubes) are graded P8. As 'glue ear' may recur, candidates may be graded P2 not less than six months after the tube has been expelled or removed, provided that the TM has healed, hearing acuity is within entry limits and tympanometry is normal⁵.
- 8. **Myringitis.** Candidates with myringitis are graded P8.

¹ This is one of a number of conditions whose main feature is vasculitis.

² JSP 950 6-7-4 Annex A

³ Service ORL consultant opinion.

⁴ Service ORL consultant opinion.

⁵ Tympanometry is not mandatory if the ventilation tube was expelled more than 12 months ago, the TMs appear mobile and hearing is within normal limits.

- 9. Chronic Otitis Media (COM). Candidates with active COM (including cholesteatoma) are graded P8. However, candidates with inactive or healed COM who are no longer under ORL follow-up may be graded P2 provided that the TM has healed, hearing acuity is within entry limits and tympanometry is normal.
- 10. **Mastoidectomy.** Candidates may be graded P2 not less than two years after successful mastoid surgery provided that the tympanic membrane has healed, hearing acuity is within entry limits and tympanometry is normal. All cases should be reviewed by a Service ORL consultant prior to acceptance to determine whether the cavity is stable and whether the condition is likely to give rise to a continuing need for medical supervision or treatment.
- 11. **Otosclerosis.** Otosclerosis is a progressive condition resulting in hearing loss. Candidates with this condition are therefore graded P8 even if hearing acuity is within the entry limits.
- 12. **Hearing loss.** Candidates with hearing loss sufficient to require external or intra-aural hearing aids or cochlear implants are graded P8. Entry limits for hearing acuity are based on unaided hearing thresholds.
- 13. Meniere's disease. Candidates with Meniere's disease are graded P8.

Nose and sinuses

- 14. **Nasal deformity.** Candidates with deformity of the nose sufficient to interfere with the use of face masks, breathing apparatus and other similar devices are graded P8. Candidates may, however, be graded P2 following successful reconstructive surgery on the advice of the single-Service Occupational Physician responsible for the selection of recruits.
- 15. **Epistaxis.** Candidates with recurrent epistaxis (more than one episode per week (average) over three months or more), unless treated and free of recurrence for at least six months, are graded P8. Candidates with hereditary haemorrhagic telangiectasia are graded P8.
- 16. **Rhinosinusitis**. Candidates with chronic rhinosinusitis requiring medication are normally graded P8 but may be referred to single-Service Occupational Physician responsible for the selection of recruits.
- 17. **Nasal polyposis.** Candidates with active nasal polyposis are normally graded P8. Those with a history of treated polyposis may be acceptable following referral to the single-Service Occupational Physician responsible for the selection of recruits.

Pharynx, larynx and trachea

- 18. Adenoid hypertrophy. Candidates may be graded P2 following successful adenoidectomy.
- 19. **Obstructive sleep apnoea/hypopnoea syndrome.** Candidates with obstructive sleep apnoea/hypopnoea syndrome are graded P8.
- 20. **Cleft lip/palate.** Candidates who have had successful surgery to correct a cleft lip/palate may be graded P2. Candidates with persistent/uncorrected cleft lip/palate should be referred to the single-Service Occupational Physician responsible for the selection of recruits. Those who have on-going treatment requirements should be deferred until treatment is complete.

- 21. **Laryngeal conditions.** Candidates with respiratory papillomatosis or a history of respiratory papillomatosis, whether treated or not, are graded P8. Other laryngeal conditions will be assessed on their likelihood of recurrence and functional impact.
- 22. **Tracheostomy.** Candidates with an open tracheostomy are graded P8. Candidates presenting with a healed tracheostomy may be graded P2⁶.

 $^{\rm 6}$ The reason for tracheostomy should be explored to ensure there are no associated disabilities.

Heart disease

- 1. Candidates with established heart disease are graded P8, except in the following specific circumstances.
- 2. **Congenital heart conditions.** Candidates who have undergone successful correction of the following conditions may be graded P2, subject to the availability of relevant specialist correspondence:
 - a. Patent Ductus Arteriosus (PDA)
 - b. Atrial Septal Defect (ASD)
 - c. Ventricular Septal Defect (VSD)

All cases must be referred to the single-Service occupational physician responsible for the selection of recruits.

- 3. **Cardiac murmurs.** Although cardiac murmurs may be of no pathological significance, all murmurs are to be assessed by a consultant cardiologist or consultant general physician. The following guidance applies after confirmation of the cause of the murmur:
 - a. Benign physiological murmurs. Grade P2.
 - b. **Mitral Valve Leaflet Prolapse.** If uncomplicated, functionally acceptable and requiring no treatment, grade P2.
 - c. Bicuspid aortic valve and other valvular conditions. Normally graded P8.
- 4. Disturbances of rhythm.
 - a. Candidates with any symptomatic dysrhythmia or those who require medication to suppress disturbance of rhythm should be graded P8.
 - b. Candidates with asymptomatic dysrhythmia or who have had dysrhythmic foci or accessory pathways ablated should be assessed on an individual basis with the benefit of a full report from that individual's specialist physician. Advice should be sought from the single-Service occupational physician responsible for the selection of recruits. Many of these candidates may be graded P2 if a procedure is deemed to have been curative.
 - c. Where candidates are required to have an ECG as part of their entry medical this should be formally read by a service approved physician¹ to allow the exclusion of subtle, asymptomatic cardiac diagnoses such as Brugada Syndrome or undiagnosed accessory pathways.
- 5. **Cardiomyopathy.** A family history, which must be specifically sought, of sudden death before the age of 40 raises the question of inherited cardiomyopathy. Where there is a familial history, assessment by a consultant cardiologist is required, with as much information about the family as possible. If a diagnosis of cardiomyopathy is made all such candidates should be graded P8.

¹ For Royal Navy divers ECGs may be read by the HSE AMED conducting the diving medical.

Hyperlipidaemia

- 6. Candidates with a diagnosis of familial hypercholesterolaemia or familial hyperlipidaemia are graded P8. Candidates with a treated total cholesterol level of 8.0 mmol/l or more are graded P8 due to the increased morbidity associated with hypercholesterolaemia².
- 7. Candidates with previously elevated lipids, on appropriate primary prevention medications, should be referred to the single-Service occupational physician responsible for the selection of recruits for case review by a single-Service cardiologist or endocrinologist with expertise and experience in managing dyslipidaemia. Candidates with elevated lipids, whether treated or untreated, must also be referred for discussion with a single-Service cardiologist or endocrinologist with expertise and experience in managing dyslipidaemia.
- 8. Due to the possibility of side-effects of statins on muscle, candidates taking a statin should be referred to the single-Service occupational physician responsible for the selection of recruits with details of their current exercise abilities. Those with stable medication history for 6 months and normal exercise tolerance whilst completing exercise compatible with military training requirements over at least the last 3 months without unusual muscle pain or fatigue will normally be acceptable for entry. If acceptable for entry they are to be graded P2 L2.

Hypertension

9. Blood pressure should be measured in accordance with the British Hypertension Society (BHS) guidelines (BHS IV). Cases of suspected "white coat" hypertension must be carefully evaluated. Where there is doubt, a 24-hour ambulatory record, should be obtained and interpreted^{3,4,5}. Candidates with uncontrolled hypertension⁶ should be graded P8. Candidates with treated hypertension will normally be graded P8.

Peripheral vascular diseases

- 10. **Raynaud's phenomenon or vasospastic disease**. Candidates with primary or secondary Raynaud's or similar phenomena are graded P8⁷.
- 11. **Congenital arterio-venous malformations.** Candidates with congenital arterio-venous malformations affecting function are graded P8. Other congenital A-V malformations should be discussed with the single-Service consultant occupational physician responsible for the selection of recruits.
- 12. Congenital lymphoedema. All candidates with congenital lymphoedema are graded P8.
- 13. **Deep venous thrombosis (DVT).** The opinion of the single-Service occupational physician responsible for the selection of recruits should be sought on candidates with a previous history of DVT. The referral should detail the clinical circumstances and investigations of the DVT episode.
- 14. **Thrombophilia.** All candidates with thrombophilia should be referred to the single-Service occupational physician responsible for the selection of recruits for an opinion as to medical suitability for Service.

² Oxford Textbook of Medicine Ch15 Cardiovascular Medicine. Oxford University Press 2004.

³ http://www.bhsoc.org/pdfs/BHS_IV_Guidelines.pdf - accessed Nov 2009

⁴ http://www.bhsoc.org/bp_monitors/ESH_BP_rec.pdf

⁵ Ambulatory BP monitoring values are usually lower than clinic measurements and thresholds and targets should, therefore, be adjusted downwards (eg by 10/5mmHg) (http://www.bhsoc.org/pdfs/BHS_IV_Guidelines.pdf)

⁶ BHS IV defines hypertension as a sustained systolic BP ≥ 140 mm Hg and/or sustained diastolic BP ≥ 90 mm Hg

⁷ Candidates deemed manageable by lifestyle changes alone are unfit for entry as the ability to keep the periphery warm at all times cannot be guaranteed and the functional capacity of affected individuals is likely to be impaired.



Introduction

1. It is important that conditions adversely affecting respiratory fitness are identified at the preemployment stage. Active disease, or a significant decrease in pulmonary function (standardised for age, gender and race) from whatever cause, is a bar to entry.

Wheezing

- 2. Wheezing (including asthma) is common and recruiting medical officers must take a careful respiratory history including:
- a. Symptoms of wheezy bronchitis, night-time or recurrent cough.
- b. Exercise and cold induced wheeze.
- c. Previous use of bronchodilators, inhalers and/or oral medication¹.
- d. Admission to hospital (including Emergency Department) for wheeze.

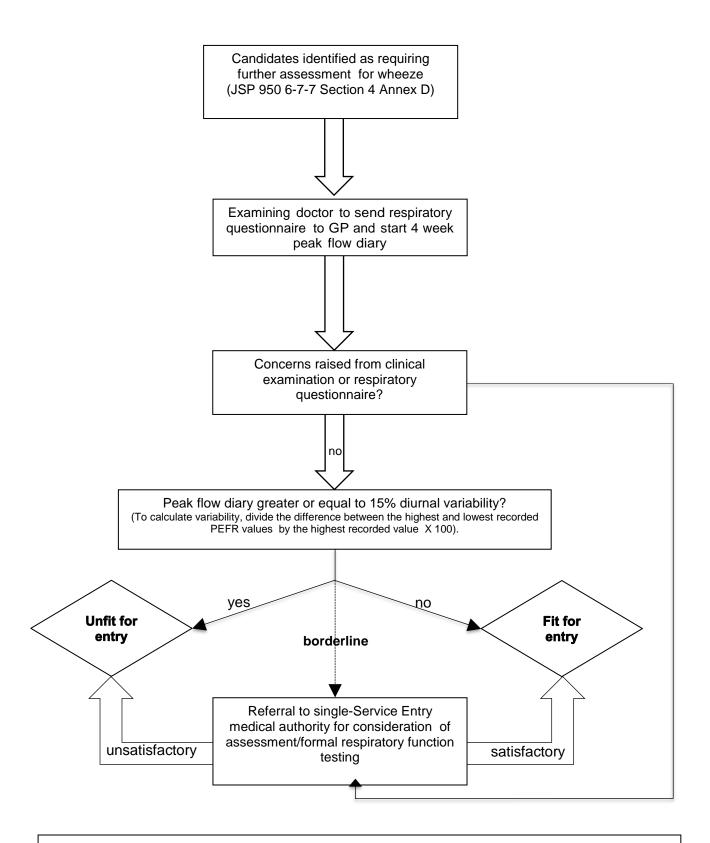
It may be necessary to obtain a report from the applicant's general practitioner to clarify the history.

- 3. In cases where the examining medical officer has concerns or the diagnosis is in doubt, guidance should be sought from the single-Service occupational physician responsible for recruiting. This includes where the PEFR result at selection examination is less than 80% of predicted, adjusted for age, gender, height and ethnicity.
- 4. Candidates with symptoms confined to age less than 5yrs of age², or a single episode of wheeze associated with an acute respiratory tract infection (during which bronchodilator / inhaled steroid treatment may have been prescribed) may be graded P2.
- 5. Candidates with a recorded history of asthma, with the following features, would be normally graded P8.
 - a. Those who have experienced symptoms or taken, or been prescribed any form of treatment within the last 4 yrs.
 - b. Those who have required more than one **course** of oral steroids³.
 - c. Those who have required more than one nebulisation since the age of 5.
 - d. Those who have had a single admission to Intensive care or high dependency, or multiple admissions to hospital.
- 6. All others with a history of wheeze, particularly those with an atopic tendency require investigation by the protocol below.

¹ Includes oral steroids, repeated courses of antibiotics and other oral asthma treatments.

² BTS Guidelines

³ Past treatment is used as a proxy for severity. Those treated abroad may have been given more aggressive therapy than in usual in UK, which might unnecessarily debar some individuals. If there is concern this may have been the case, efforts should be made to obtain the medical records from the event to gauge severity, and a candidate may be assessed by the protocol at 6.



In accordance with single service policy, individual services may require additional respiratory function testing for specific occupational groups.

Pneumothorax

- 7. **Spontaneous pneumothorax.** If left untreated, ipsi and contra-lateral recurrence rates of this condition are high⁴. Therefore, candidates who have had a spontaneous pneumothorax **at any time without** definitive treatment should normally be graded P8. Candidates who have had definitive treatment (normally bilateral open or Video-Assisted Thoracostomy (VAT) pleurectomy⁵) may be graded P2 provided there is no evidence of subpleural blebs or bullae and they have achieved activity compatible with military service for a period of at least 3 months⁶, subject to approval from the single-Service occupational physician responsible for recruiting.
- 8. **Traumatic pneumothorax.** Candidates who have suffered traumatic pneumothorax are at no greater risk of recurrence than the normal population. Therefore once these candidates have made a full clinical recovery, they may be graded P2 provided lung function is normal.

Chronic bronchitis, emphysema and bronchiectasis

9. Candidates with chronic bronchitis, emphysema, bronchiectasis, cystic fibrosis or other chronic pulmonary condition are graded P8.

Tuberculosis

10. Candidates with active tuberculosis should be graded P8⁷. Full details of those with a history of confirmed, latent or suspected tuberculosis should be obtained and the candidate referred to the single-Service occupational physician responsible for the selection of recruits. Individuals with a history compatible with an increased risk of TB should be referred to their GP for investigation prior to selection.

1

⁴ 4 54.2% incidence of recurrence over four years following primary spontaneous pneumothorax . Sadikot RT,Greene T,Meadows K,Arnold AG. Recurrence of primary spontaneous pneumothorax. Thorax, September 1997, vol./is. 52/9(805-9).

⁵ Pleurodesis is not considered definitive treatment for certain occupational groups (e.g. aircrew and divers). VÁT is not acceptable for aircrew.

⁶ See Section 4, Paragraph 3.

⁷ Health clearance for serious communicable diseases – Report from the Ad hoc Risk Assessment Expert Group, Dec 2002.

Upper GI Tract Disorders

- Oesophageal disease. Candidates with a current or past history of oesophageal disease. including, but not limited to ulceration, varices, fistula or achalasia are graded P8. Gastro Oesophageal Reflux Disease (GORD) responding to lifestyle changes and not requiring regular medication may be graded P2.
 - Motility disorders and oesophagitis. Candidates with a current history of motility disorders, chronic, or recurrent oesophagitis are graded P8.
 - Hiatus hernia surgery. Candidates who have had any form of surgical correction for hiatus hernia are graded P8.
 - Anti-reflux surgery. Those who have undergone surgery purely to resolve reflux and who are asymptomatic and free of any complications 12 months post-surgery should be referred to the single-Service consultant occupational physician responsible for recruiting for a final decision on fitness for entry.
- Dyspepsia. Those with a history of dyspepsia that has caused frequent disability, no matter how long ago, are unfit for service and should be graded P8. Those with mild and infrequent symptoms not requiring any medication may be graded P2. The exception is where dyspepsia has been attributed to H pylori infection which has been successfully eradicated. In this case, candidates may be accepted if symptom-free for one year after treatment.
- 3. **Peptic ulcer disease.** Candidates with a history of surgery for peptic ulceration or perforation are graded P8. Medically resolved peptic ulcer disease should be assessed as for dyspepsia above.
- Pernicious anaemia. Candidates with pernicious anaemia may be graded P2 subject to the 4. following caveat. The history must be confirmed and an appropriate autoantibody screen² and fasting blood glucose should not show any abnormality (apart from the antibodies involved in pernicious anaemia). Those with other antibodies or elevated fasting blood sugar should normally be graded P8 (due to the risk of developing other auto-immune conditions).

Bowel conditions

- Irritable bowel syndrome. Candidates with a current or past history of irritable bowel syndrome requiring medical follow-up/review, requiring medication within the previous two years or of sufficient severity to interfere with normal daily activities³ are graded P8. Those with mild symptoms not requiring any medication, who are able to cope with a varied diet⁴ may be graded P2 with a L2 risk marker. In cases of doubt an opinion should be sought from the single-Service Occupational Physician responsible for selection of recruits.
- 6. Inflammatory bowel disease. Candidates with a history of inflammatory bowel disease, including but not limited to unspecified regional enteritis. Crohn's disease, ulcerative colitis or ulcerative proctitis are graded P8, regardless of treatment (including surgery).

¹ Complications include dysphagia, gas trapping (inability to belch) or return of reflux.

² Associated with auto-immune thyroid disease, vitiligo, hypoparathyroidism, Addison's disease and diabetes. As antibody tests can be false positive, it may be necessary to refer for confirmation of diagnosis.

³ Examples include time off school or work.

⁴ The requirement to cope with the diet while deployed, at sea or on field rations, should be borne in mind.

- 7. **Familial adenomatous polyposis (FAP).** Opinion should be sought from the single-Service Occupational Physician responsible for selection of recruits⁵.
- 8. **Hirschsprung's disease.** Candidates with Hirschsprung's Disease are normally graded P8⁶.

Intestinal malabsorption syndromes

- 9. **Gluten sensitivity.** Candidates with a history of gluten sensitive enteropathy (Coeliac Disease) or gluten sensitivity are graded P8.
- 10. Lactose and other food intolerance. Candidates with a confirmed history of lactose intolerance and/or any other food intolerance which requires an exclusion diet to prevent symptoms and/or which require any form of medical intervention are graded P8.

Herniae

11. Candidates should normally be graded P8 if any hernia (inguinal, epigastric or incisional) is present. However, those with an easily reducible periumbilical hernia that does not affect physical activity may be graded P2. Candidates with repaired and soundly healed herniae may be graded P2 provided that they are able to tolerate activities comparable with military training/Service over a minimum period of 3 months⁷. However, candidates with a repaired incisional hernia (especially if originally extensive) should be referred for specialist surgical advice as this type of hernia is more liable to recur.

Surgical procedures

- 12. Candidates with a history of open or laparoscopic abdominal surgery should be assessed following the guidance below. Care should be exercised to ensure that the original reason for such surgery is not disqualifying in itself.
 - a. Candidates who have undergone surgery during the preceding 6 months are normally graded P8.
 - b. **Laparoscopy**. Candidates who have had diagnostic laparoscopy and other procedures such as appendicectomy and laparoscopic sterilisation with a low risk of late complications may be assessed as P2 on return to full physical activity.
 - c. **Bariatric surgery.** Any candidate who has undergone bariatric surgery should be graded P8 as they all require prolonged follow-up and have significant long-term morbidity.
 - d. **Pouch surgery.** Any applicant who has undergone colectomy and pouch surgery should be graded P8 as they all require prolonged follow-up and have significant long-term morbidity.

Anal and perianal conditions

13. **Pilonidal sinus.** Candidates with active disease or a history of more than two planned, definitive surgical procedures for pilonidal sinus are graded P8. A past history of acute abscess drainage does not on its own bar entry. Those who have had wide excision with healing by secondary intention will not be accepted until 12 months have elapsed since complete healing of the wound.

.

⁵ Practice parameters for the treatment of patients with dominantly inherited colorectal cancer (Familial Adenomatous Polyposis and Hereditary Nonpolyposis Colorectal cancer). Diseases of the Colon & Rectum 2003;46 (8):1001-1012. http://www.acpgbi.org.uk/. Association of Coloproctology of Great Britain and Northern Ireland. http://www.acpgbi.org.uk/content/uploads/2007-CC-Management-Guidelines.pdf

⁶ Even after surgery, perfect continence is unlikely and usually requires management with intermittent laxatives, enemas, and revision surgery.

⁷ See Section 4 Introduction.

14. **Haemorrhoids.** Candidates with active haemorrhoids (internal or external), when large, symptomatic, or with a history of bleeding within the last 8 weeks, are graded P8.

Liver, biliary tree and pancreas

- 15. Candidates with a developmental or chronic disease of the liver, biliary tree or pancreas are normally graded P8.
 - a. **Viral hepatitis.** Candidates with a current acute or chronic hepatitis, hepatitis carrier state, hepatitis in the preceding 6 months, or persistence of symptoms after 6 months, or objective evidence of impairment of liver function are graded P8⁸.
 - b. **Pancreatitis.** Candidates with a single episode of acute viral pancreatitis with complete recovery and no evidence of chronic pancreatitis or diabetes may be graded P2 at least 1 year after recovery. However, candidates with a history of alcohol-induced pancreatitis are graded P8.
 - c. Cholecystitis. Candidates with a current or past history of symptomatic cholecystitis, acute or chronic, with or without cholelithiasis, or other disorders of the gallbladder and biliary system are graded P8 unless surgically treated. Cholecystectomy is acceptable if performed greater than 6 months prior to examination and the candidate remains asymptomatic. Candidates who have had fibre-optic procedures to correct sphincter dysfunction or cholelithiasis if performed more than 6 months prior to examination and remain asymptomatic may be graded P2.
 - d. **Metabolic liver disease.** Candidates with a current or past history of metabolic liver disease, including, but not limited to haemochromatosis, Wilson's disease and alpha-1 anti-trypsin deficiency, are normally graded P8.
 - e. **Hepatosplenomegaly.** Candidates with hepatosplenomegaly from whatever cause are graded P8.
 - f. **Gilbert's syndrome.** Gilbert's syndrome affects 5% of the population and may present as jaundice under a variety of stressors such as minor illness and reduced calorie intake. It can also be discovered as an isolated hyperbilirubinaemia (<100umol/l)⁹. Candidates with Gilbert's syndrome may be graded P2 if asymptomatic.

Splenectomy

16. Policy on splenectomy is at Annex N - Other Conditions.

⁸ See also Section 4 Annex N Miscellaneous Conditions.

⁹ Davidson's Principles & Practice of Medicine 19th Ed; p. 843.

RENAL AND UROLOGICAL PRE-ENTRY

ANNEX F

- 1. Where not otherwise stated in the text, Glomerular Filtration Rate (GFR) can be either measured or calculated (eGFR)¹.
- 2. **Abnormalities of urinalysis.** A persistent abnormality of urinalysis is defined as painless haematuria ≥1+ and/or proteinuria ≥1+ (trace can be ignored). For the management of proteinuria and painless non-visible haematuria see fig 1. The candidate is graded P8 until pathology has been excluded to satisfaction of the single-Service occupational physician responsible for recruiting. Any episode of clot colic is graded P8.
- 3. **Nephritis.** Candidates with a history of nephritis are normally graded P8. However, they may be accepted subject to review by the single-Service Occupational Physician responsible for selection of recruits providing that:
 - a. There is no persisting abnormality on urinalysis.
 - b. Blood pressure is normal.
 - c. There is a GFR or eGFR of at least 60ml/min.

Those having made a complete recovery from acute glomerulonephritis or a single attack of pyelonephritis (without predisposing factors) more than two years earlier, may be graded P2. If urinalysis shows proteinuria, then this should be assessed objectively. If protein excretion exceeds 400 mg/24 hours² then the candidate should be rejected unless specialist consultation determines the condition to be benign orthostatic proteinuria. Those with a history of asymptomatic haematuria for several years and are normotensive, have no pathological proteinuria and normal renal function may be acceptable subject to formal nephrological assessment. [DCA Medicine]

- 4. **Urinary Tract Infection.** Candidates with a history of recurrent infection in childhood, or one proven infection in a male or two in a female since puberty should not be accepted until a full report from their GP confirms that they have a normal urinary tract (such patients will require urological assessment). If an abnormality is discovered then referral to the single-Service Occupational Physician responsible for selection of recruits is indicated. A history of mild vesicoureteric reflux (Grades I-III) where an individual has been discharged from follow-up, has been free of infection³, has no requirement for antibiotic prophylaxis, normal urinalysis and normal blood pressure may be graded P2. Those with Grades IV-V that required surgical correction and have been discharged from follow-up, should additionally demonstrate a GFR or eGFR of at least 60ml/min.
- 5. **Urethral abnormality.** Candidates with unsuccessful or continuing treatment for urethral abnormalities are graded P8. Those who have been successfully treated for minor urethral stricture may be graded P2 on the condition that they have been discharged from follow-up. Candidates with genital piercing (excluding the urethra) that has fully healed without complications may be graded P2. Due to the risk of developing urethral stricture at a later date, candidates with history of genital piercing involving the urethra may only be accepted P2 on a case by case basis after obtaining the relevant urologists opinion. Those deemed at unacceptable risk by the Service urologist are graded P8.
- 6. **Urinary incontinence.** Candidates with a history of diurnal urinary incontinence, or of nocturnal enuresis in the two years preceding entry are graded P8 and barred from entry regardless of the presence of normal neurological and psychological investigations.

¹ If calculated then the preferred method is the CKD-EPI Calculator Levi A.S, Steven L.A et al A new equation to estimate glomerular filtration rate Ann Intern Med 2009; 150 (9) 604-612 (Calculator found at http://touchcalc.com/e_gfr accessed 07 Apr 15)

² Or equivalent albumin/creatinine or protein/creatinine ratio.

³ There is no published time period but 12 months is suggested by military urology adviser.

- Genital infections. Candidates with a current or past history of genital infection or 7. ulceration, including, but not limited to herpes genitalis or condyloma acuminatum, if of sufficient severity to require frequent intervention or to interfere with normal function, are graded P8.
- Congenital Abnormality. Candidates with known polycystic disease, mega-ureter or other congenital anomalies are normally graded P8. The following exceptions apply:
 - Polycystic kidney disease. Candidates with a family history of polycystic kidney disease require screening ultrasound after the age of 16 years before being accepted.
 - Hypospadias. Candidates with current hypospadias, when not accompanied by evidence of urinary tract infection, urethral stricture, or voiding dysfunction, may be graded P2 after urological assessment.
 - Pelviureteric Junction (PUJ) Obstruction. Candidates with surgically-corrected PUJ obstruction may be graded P2 provided there is evidence of correction and preservation of good renal function (as assessed on isotope renography, no earlier than 12 months postsurgery). Candidates with unilateral PUJ obstruction with a non-functioning kidney or those treated with nephrectomy should be regarded as having a single kidney (see 09).
 - Mega-ureter. Candidates with a history of surgically corrected mega-ureter may be graded P2 if the GFR exceeds 60ml/min⁴ and they have been discharged from follow-up. All candidates should be referred to the single-Service Occupational Physician responsible for selection of recruits.
- Absence, loss or malfunction of a kidney. Candidates with only one functioning kidney may be acceptable provided that there is no evidence of disease in the remaining kidney, ie no persistent abnormality on urinalysis and a GFR or eGFR of at least 60ml/min, in the absence of raised blood pressure. All cases meeting the above criteria and potentially acceptable should be referred to the single-Service Occupational Physician responsible for selection of recruits. Candidates with renal transplants are graded P8.
- **Urolithiasis.** Candidates who have a confirmed history of calculus formation are graded P8. A candidate with a history of a single episode of ureteric spasm (renal colic), which has been investigated without demonstration of underlying pathology, may be graded P2. Those with a history of recurrent (more than one) ureteric spasm are graded P8.
- Urological malignant disorders. Candidates with successfully treated malignant disease of the bladder or kidney should be referred to the single-Service Occupational Physician responsible for selection of recruits. Candidates with malignant urological diseases are normally graded P8 but those with Wilms' tumour treated in early childhood may be graded P2.
- Other painful urological conditions. Candidates with non-specific groin or pelvic pain or undiagnosed loin pain are unsuitable for service and graded P8. Candidates may re-apply after being symptom-free and off treatment for one year, the presence of normal neurological and psychological investigations.

⁴ Total residual GFR/eGFR.

NEUROLOGICAL PRE-ENTRY

ANNEX G

- 1. Candidates with a history of some nervous system diseases may be acceptable for service but be excluded from employments that require more stringent medical standards including aircrew and occupational diving. Where there is doubt about either the diagnosis or suitability for entry, cases should be referred to the single-Service Occupational Physician responsible for the selection of recruits.
- 2. Candidates with diseases of the nervous system with a progressive or recurrent course are normally graded P8.

Seizures and epilepsy

- 3. Candidates diagnosed as having epilepsy¹ or who have had more than one seizure after their sixth birthday are to be graded P8. The following should be noted:
 - a. **Febrile convulsions.** Candidates with febrile convulsions before their sixth birthday², and with no subsequent seizures, may be graded P2.
 - b. **Single seizures.** Candidates with a single seizure less than 5 years prior to entry are graded P8. Candidates who **have** had a single seizure more than 5 years before entry, and who have not been on treatment during this interval, can be graded P2 (in accordance with DVLA Group 2 entitlement standards³). They may still be unable to enter some trades or branches, subject to single-Service regulations. Such candidates must be referred to the single-Service Occupational Physician responsible for the selection of recruits.
 - c. **Provoked seizures.** Those with a history of provoked seizures should be assessed on a case by case basis and advice sought from the single-Service Occupational Physician responsible for the selection of recruits. Consideration will also need to be given to fitness for service in relation to the provoking stimulus. It must be clear that the seizure had been provoked by a stimulus that does not carry any risk of recurrence and does not represent the unmasking of any underlying vulnerability.
 - d. **Petit Mal (absence seizures).** Candidates with a history of typical childhood absence seizures with onset before the age of 10 years⁴, who have had no such seizures for 5 years (without treatment) may be graded P2.
 - e. **Benign rolandic epilepsy of childhood.** Candidates with a confirmed diagnosis of typical rolandic epilepsy of childhood, who have been seizure-free for 5 years (without treatment) may be graded P2.

Headache

- 4. Headaches are common and those who have infrequent mild headaches may be accepted as P2. Candidates with headaches with any of the following features in the last 2 years should be graded P8:
 - a. Are severe enough to disrupt normal activities, including loss of time from school or work.
 - b. Require treatment by pharmacy (GSL) or prescription only medicine.

¹ Diagnosis of epilepsy must be made by a medical practitioner with expertise and training in epilepsy (NICE Clinical Guideline 20)

² Advice from Consultant Adviser in neurology to the RAF.

DVLA Current medical guidelines: DVLA guidance for professionals
 https://www.gov.uk/government/collections/current-medical-guidelines-dvla-guidance-for-professionals (Accessed 1 Feb 16)
 Advice from Defence Consultant Adviser in neurology.

- Are aggravated by lack of sleep, missed meals or anxiety and occur more often than C. once every six months.
- d. Require prophylactic treatment.

Migraine

- 5. The diagnostic criteria for migraine⁵ without aura are at least 5 attacks fulfilling criteria a-c:
 - Headache attacks lasting 4-72 hours (when untreated in adults). a.
 - b. Headache has at least two of the following characteristics:
 - (1) **Unilateral location**
 - (2) Pulsating quality
 - (3)Moderate or severe pain intensity
 - (4) Aggravation by or causing avoidance of routine physical activity
 - During the headache, at least one of the following is present: C.
 - (1) Nausea and/or vomiting
 - Photophobia and phonophobia (2)
 - Not attributable to another disorder. (3)
- The following are known trigger factors for migraine that should be sought in any candidate presenting with recurrent headaches:
 - a. Relaxation after stress.
 - Missing meals, sleep deprivation, long distance travel etc. b.
 - Bright light and loud noise. C.
 - d. Dietary eg alcohol, cheese, citrus fruits, chocolate.
 - Menstruation. e.
- 7. Candidates with any of the following criteria should be graded P8:
 - One episode of migraine in the last two years with any of the following associated a. history:
 - Moderate to severe pain⁶ (score of 5 or more on the WHO step ladder pain (1) scale⁷)

⁵ Diagnostic criteria for migraine (from ICHD-II3)

⁶ Pain intensity is a strongest indicator of disability at work (Steward WF, Lipton RB, Simon D. Work related disability: results from the American Migraine study. Cephalalgia 1996; 16: 231-8. Oslo. ISSN 0933-1024)

⁷ WHO step ladder pain scale: 1 to 10 where 1 = No Pain and 10 = Intense Pain

- (2) Photophobia⁸, phonophobia and/or other neurological features
- b. Two or more episodes of migraine in the last 2 years irrespective of their severity or trigger.
 - c. Use of prophylactic medication for migraine in the last 2 years.

Head Injuries 9,10

8. Candidates with a past history of head injury who show any evidence of persisting intellectual, psychiatric or neurological symptoms or signs should be graded P8. Head injuries may be classified according to the following criteria:

a. Mild.

- (1) Loss of consciousness lasting for less than 30 minutes.
- (2) Amnesia lasting for less than 30 minutes.
- b. **Moderate.** Any of the following:
 - (1) Loss of consciousness lasting for 30 minutes to 24 hours.
 - (2) Amnesia lasting for 30 minutes to 24 hours.
 - (3) An undisplaced skull fracture.
- c. **Severe.** Any of the following:
 - (1) Loss of consciousness for more than 24 hours.
 - (2) Amnesia for more than 24 hours
 - (3) Intracranial haematoma¹¹
 - (4) Depressed skull fracture
 - (5) Brain contusion.
- 9. The risk of seizures following head injury is directly related to the severity of the head injury. Seizures occurring within 7 days of a head injury are considered to be provoked seizures. As a result of the significant risk of continuing seizures following head injury:
 - a. Candidates with a history of mild head injury may be graded P2 as long as they are free of post-concussion symptoms.
 - b. Candidates with a history of moderate head injury may be graded P2 providing 2 years have elapsed since the head injury and during this interval they have been seizure and medication-free and have no long term neuro-behavioural sequelae.
 - c. Candidates with a history of severe head injury will normally be graded P8, however, be graded P2 providing 5 years have elapsed since the head injury and during this interval

-

⁸ Photophobia will limit ability to work in, for example, bright light and possibly whilst driving

Annegers, JF et al; A population-based study of seizures after traumatic brain injuries. N Engl J Med. 1998 Jan 1;338(1):20-4
 Christensen, J et al; Long-term risk of epilepsy after traumatic brain injury in children and young adults: a population-based cohort study. Lancet 2009; 373: 1105-10

¹¹ All intracranial haematomata, including epidural, subdural and subarachnoid.

they have been seizure and medication-free and have no evidence of long term neurobehavioural sequelae

Hydrocephalus

10. Candidates with a history of hydrocephalus or intra-cranial shunt (working or blocked) are normally graded P8. However, candidates with a history of resolved infant hydrocephalus may be graded P2 but are to be referred to single-Service Occupational Physician responsible for the selection of recruits.

Neurosurgery and tumours

- 11. **Neurosurgery**. Candidates with a history of neurosurgery are normally graded P8 because of the risk of post-surgery seizure. Such candidates should be referred to the single-Service Occupational Physician responsible for the selection of recruits for further assessment.
- 12. **Tumours.** Candidates with a history of intracranial tumour are normally graded P8.

Loss of Consciousness/altered awareness

- 13. A full history should be taken including note of any pro-dromal symptoms, length of unconsciousness, degree of amnesia and any confusion on recovery. Candidates with symptoms suggestive of a cardiovascular or neurological aetiology must be fully investigated. The results of any cardiological and neurological investigations must be normal or any underlying abnormalities fully treated before acceptance can be considered.
- 14. **Simple faint**. These have definite provoking factors, are unlikely to occur whilst lying or sitting and are benign in nature. Candidates with non-recurring faints may be graded P2. Candidates with recurring faints are normally graded P8.
- 15. **Unexplained loss of consciousness or altered awareness.** Candidates who have had a single episode with no definite provoking factors, who have normal cardiac and neurological examination and a normal ECG, may be graded P2 providing 12 months have elapsed since the episode and they are considered to be at low risk of recurrence ¹². Candidates with recurring episodes where no underlying cause can be found should normally be graded P8.
- 16. Loss of consciousness/altered awareness where epilepsy is strongly suspected. Factors that may indicate that epilepsy is a likely diagnosis include amnesia for more than 5 minutes, injury, tongue biting, incontinence, having remained conscious but with confused behaviour and post attack headache. Such candidates should only be accepted after 5 years with no recurrence¹³.

Involuntary Movements/Tics

- 17. Candidates with significant involuntary movement disorders, including Tourette's and other similar syndromes, should be graded P8.
- 18. Candidates with slight involuntary movements (including mild tics) may be graded P2 after appropriate functional assessment. Advice should be sought from the single-Service Occupational Physician responsible for the selection of recruits.

¹² Based on DVLA medical standards criteria.

¹³ DVLA requirements for Class 2 licensing. See also Hart et al. National General Practice Study of epilepsy: recurrence after first seizure. Lancet Vol 336 pp 1271-1274

ENDOCRINE PRE-ENTRY

ANNEX H

- 1. Disorders of the endocrine system frequently result in the need for continuous medication, the withdrawal of which may lead to severe or even life-threatening consequences, and the requirement for regular medical review, often at secondary care level. Many such disorders are associated with other medical conditions, themselves necessitating treatment and follow-up. For these reasons, candidates suffering from endocrine disease will normally be graded P8. Specific guidance is given for the following conditions:
- 2. **Diabetes mellitus.** Diabetes mellitus is a heterogeneous condition in which hyperglycaemia is the hallmark. Both the disease and its treatment can lead to disabilities and complications¹ which affect the employability of individuals in the Armed Forces. Candidates with a history of diabetes mellitus or impaired glucose tolerance (including gestational diabetes²) according to WHO criteria are, therefore, graded P8. If glycosuria is found on urinalysis, a normal glucose tolerance test is required before the candidate can be accepted.
- 3. **Pituitary conditions.** Hyper and hypo-secretory conditions of the pituitary gland are likely to result in long -term treatment and follow up, with potentially life-threatening effects resulting from non-compliance with medication. Candidates with an established diagnosis are graded P8.
- 4. Adrenal conditions. Due to the life-threatening nature of failure to comply with therapy, eg when the supply of medication cannot be guaranteed, candidates with an established diagnosis of adrenal conditions requiring treatment are graded P8. Candidates with a previous history who have not required treatment for a year and who have been discharged from follow-up should be referred to the single-Service Occupational Physician responsible for the selection of recruits.

Thyroid conditions

- 5. **Hypo-thyroid disease.** Successfully treated hypothyroidism poses little health risk from short-term failure to take medication³. Its association with a number of health risks in the longer term⁴ and the requirement for continuous medication and regular monitoring would normally result in a grading of P8. However, after consultation with a single-Service consultant occupational physician responsible for the selection of recruits, candidates may be graded P2 if they are euthyroid on a stable dose of medication for at least 1 year and following exclusion of associated autoimmune conditions⁵.
- 6. **Hyperthyroid disease.** Candidates with a hyperactive thyroid may be accepted as P2 following successful definitive treatment with radioactive iodine or surgery, provided at least a year has elapsed⁶ and the candidate is euthyroid without therapy. Candidates who have received treatment with carbimazole or thiouracil are graded P8 because of a high risk of recurrence of hyperthyroidism⁷.

Other Endocrine Conditions

7. Candidates with carcinoid tumours, thymic tumours and multiple adenomata are graded P8 because of the need for continuous monitoring and regular medication.

¹ For example: hypoglycaemia, infections, metabolic disturbance, retinopathy, peripheral vascular disease, coronary heart disease, neuropathy and renal disease.

² Approximately 50% develop DM in 15 years.

³ Functional impairment (including muscular fatigue, cold intolerance and slowing of cognition) would develop over 1-2 months.

⁴ For example: cardiovascular disease, obesity, hypertension, depressive illness, menstrual disorders.

⁵ For example: Addison's disease, coeliac disease, pernicious anaemia and some cases of primary ovarian failure.

⁶ Following RAI, approx 5% of patients per year will become hypothyroid (dose dependent) and require replacement therapy.

⁷ eg, 36% relapse rate 2 years following cessation of an 18-month course of carbimazole: Antithyroid drugs and Graves' disease – prospective randomized assessment of long-term treatment. Clin Endocrinol (Oxf). 1999 Jan;50(1):127-32.



General

- 1. When assessing a candidate's fitness for entry, the potential for military service to either cause or aggravate existing skin disease must be evaluated. Chronic skin disease may require frequent and extensive periods of treatment during which the individual would not be fit for unrestricted service. Skin disease may affect the ability to wear military clothing or the ability to operate military equipment. Further restrictions may be required dependent on the individual's intended Service or Career Employment Group, in which case guidelines are available in single-Service publications¹ or opinion should be sought from the single-Service Occupational Physician responsible for the selection of recruits.
- 2. **Acne.** Candidates with acne that may affect the ability to wear military clothing or to operate military equipment should normally be graded UNFIT, or entry should be deferred until the disease has been successfully treated. Candidates under treatment with isotretinoin may be graded FIT eight weeks after completing successful treatment by which time most adverse effects will have settled. Candidates using topical treatments and/or oral antibiotics may be graded FIT providing the pre-treatment severity of acne would not have affected the ability to wear military clothing or the ability to operate military equipment.

Dermatitis

- 3. Candidates with a history of mild episodes of skin irritation that is not atopic or contact dermatitis, is not affecting the hands or affecting function, and with no history of childhood atopic dermatitis (eczema), may be graded FIT. Candidates with active dermatitis of any type are normally graded UNFIT.
- 4. **Atopic dermatitis (or eczema).** A history of atopic dermatitis is considered to increase the likelihood of irritant contact dermatitis on exposure to irritants (such as oils, greases, detergents). Candidates who have a history of severe atopic dermatitis are normally graded UNFIT. Severe atopic dermatitis (or eczema) is defined as having required or caused ANY of the following:
 - a. Secondary care involvement whether inpatient or outpatient.
 - b. Occlusive dressings.
 - c. Systemic immunomodulatory therapy.
 - d. Phototherapy.
 - e. Intense scratching.
 - f. Insomnia.
 - g. School/work absence.
 - h. Maintenance therapy (other than emollients).

Furthermore, candidates who have a history of atopic dermatitis with any of the following, regardless of severity, are also normally graded UNFIT:

i. Involvement of the hands.

¹ BRd 1750A Handbook of Naval Medical Standards PULHHEEMS Administrative Pamphlet (PAP) AP 1269A Royal Air Force Manual of Medical Fitness.

- j. An episode within the last 1 year.
- k. Prescription-only topical immunomodulatory² treatment in the last 3 years.
- 5. In candidates with atopic dermatitis, who do not have any of the above exclusions, the presence of the following known risks factors should be enquired after:
 - a. Functional impairment such as difficulty with school/work, sleep disturbance, inability to do sport or other social activities or inability to wear certain footwear due to dermatitis.
 - b. Previous episodes of non-atopic dermatitis of the hand(s).

If none of these risk factors are present, the candidate may be graded FIT. If any of the above is present, the candidate should be referred to the single-Service Occupational Physician responsible for the selection of recruits.

- 6. **Contact dermatitis.** All Service Personnel may be called upon to operate in environments where exposure to skin irritants and or sensitisers cannot always be adequately controlled.
 - a. **Irritant contact dermatitis.** Candidates with a confirmed history of irritant contact dermatitis are normally graded UNFIT. However, where a candidate has experienced isolated episodes of irritant contact dermatitis as a result of an defined exposure, unlikely to be encountered during military Service, they should be referred to single-Service Occupational Physician responsible for the selection of recruits.
 - b. **Allergic contact dermatitis.** Candidates with history of allergic contact dermatitis confirmed by patch testing should be referred to the single-Service Occupational Physician responsible for the selection of recruits.
- 7. **Pompholyx.** Candidates with a history of pompholyx type dermatitis (recurrent vesicular eczema affecting hands and / or feet) are normally graded UNFIT.

Psoriasis³

- 8. **Non-cutaneous manifestations.** Candidates with non-cutaneous manifestations are graded UNFIT.
- 9. Active psoriasis.
 - a. Candidates who have active psoriasis with any of the following are normally graded UNFIT:
 - (1) Affecting >5% Body Surface Area (BSA)
 - (2) Have required treatment with phototherapy or systemic agents.
 - b. Candidates with active psoriasis may be graded FIT provided that:
 - (1) The extent of the disease has always been <5% BSA.
 - (2) The disease has not involved hands⁴ and/or feet.
 - (3) The disease would not affect the ability to wear military clothing or the ability to operate military equipment.

-

² Including prescription-only topical steroids and topical calcineurin inhibitors. Emollients are acceptable.

³ See also Fig 1 Psoriasis flow chart.

10. Previous history of psoriasis.

- a. Candidates with a previous history of psoriasis affecting <5% BSA may be graded FIT if it did not involve hands⁴ and/or feet.
- b. Candidates with a previous history of psoriasis affecting >5% BSA may be graded FIT only if:
 - (1) They have remained free from symptoms whilst off treatment for 5 years.
 - (2) They only required topical treatments.
 - (3) The disease has not involved hands⁴ and/or feet.
 - (4) Would not affect the ability to wear military clothing or the ability to operate military equipment.
- 11. In all cases, candidates who meet the criteria for entry but require topical treatment to sustain function and skin integrity should be referred to the single-Service Occupational Physician responsible for the selection of recruits for consideration of the requirement for an E2 medical marker.
- 12. **Submarine service.** Psoriasis, even mild, can be particularly problematic in the enclosed environment of a submarine. If being selected for submarine service, candidates with past or present evidence of psoriasis who are otherwise considered fit for entry are to be referred to the single-Service Occupational Physician responsible for the selection of recruits to the Royal Navy.
- 13. **Guttate psoriasis.** Candidates with a history of a single episode of guttate psoriasis which has fully resolved (irrespective of treatment) may be graded FIT. Candidates with more than one episode of guttate psoriasis should be referred to the single-Service Occupational Physician responsible for the selection of recruits.

Other skin diseases

- 14. **Cysts, scars and keloids.** Candidates are normally graded UNFIT if the size or location of cysts, scars or keloids (from whatever cause) could affect the ability to wear military clothing or the ability to operate military equipment.
- 15. **Birthmarks.** Consideration should be given to the potential that a birthmark may be a cutaneous manifestation of a genodermatosis such as neurofibromatosis, or a neurological condition such as Sturge-Weber. Candidates are normally graded UNFIT if the size or location of pigmented or vascular lesions could affect the ability to wear military clothing or the ability to operate military equipment.
- 16. **Bullous dermatoses.** Candidates with any immuno-bullous disease such as dermatitis herpetiformis or any genetic bullous disease such as epidermolysis bullosa are graded UNFIT.
- 17. **Fungal infections.** Candidates with extensive or recalcitrant fungal disease or disease that could affect the ability to wear military clothing or the ability to operate military equipment are normally graded UNFIT.
- 18. **Viral warts and veruccas.** Candidates with extensive or recalcitrant viral warts and or veruccas that could affect the ability to wear military clothing or the ability to operate military equipment are normally graded UNFIT.

⁴ Mild nail involvement is acceptable.

- 19. **Folliculitis.** Single-Service policy⁵ should be considered when a candidate has had a condition such as folliculitis barbae or pseudofolliculitis which may prevent them from shaving. Candidates with extensive or recalcitrant inflammation of the hair follicles that could affect the ability to wear military clothing or the ability to operate military equipment are normally graded UNFIT.
- 20. **Lichen planus.** Candidates with generalised disease that is not responsive to treatment are normally graded UNFIT.
- 21. **Cutaneous leishmaniasis.** Candidates undergoing treatment are graded UNFIT. Following successful treatment, candidates who have been discharged from follow-up may be graded FIT.
- 22. Hyperhidrosis. Candidates with disease affecting function are normally graded UNFIT.
- 23. **Malignant skin disease.** Candidates with a history of malignant skin disease, which has been successfully treated and who are regarded as cured, may be considered for Service entry provided that they have been discharged from regular follow-up and that no treatment is required. A clinical report is to be obtained in all cases. A decision on medical fitness for entry and the requirement for an E2 medical marker is to be made by the single-Service Occupational Physician responsible for the selection of recruits.
 - a. **Malignant melanoma.** To be considered for Service entry candidates with a history of malignant melanoma must have completed treatment and been discharged from follow-up in accordance with national guidelines⁶. Candidates with a history of more than one malignant melanoma are normally graded UNFIT.
 - b. **Squamous cell carcinoma**. To be considered for Service entry candidates with a history of squamous cell carcinoma must have completed treatment and been discharged from follow-up in accordance with national guidelines⁷. Candidates with a history of more than one squamous cell carcinoma are normally graded UNFIT.
 - c. **Basal cell carcinoma.** Candidates with a history of a single episode of basal cell carcinoma may be graded FIT, but must have completed treatment and been discharged from follow-up. Candidates with a history of more than one basal cell carcinoma may be considered for Service entry following referral to the single-Service Occupational Physician responsible for the selection of recruits.
- 24. **Pre-malignant skin conditions.** Candidates with a history of pre-malignant skin conditions who remain under active dermatological review are normally graded UNFIT.
 - a. Candidates with a history of keratinocyte derived disease such as actinic keratosis, Bowen's disease, vulval or penile intra-epithelial neoplasia who remain under active dermatological review are normally graded UNFIT. Candidates who have completed treatment and have been discharged from follow-up may be graded FIT.
 - b. Candidates with a history of melanocyte derived disease such as atypical mole syndrome or dysplastic naevi who remain under active dermatological review are normally

⁵ Single-Service policy on facial hair is detailed in: RN BR3(1), Part 6, Chapter 38, Army AGAI, Volume 2, Chapter 59 Annex B. RAF AP1358, Chapter 1. Beards are permitted on religious ground. Muslim, Sikh and Rastafarian men are permitted to wear uncut beards in normal circumstances. For occupational or operational reasons, where a hazard clearly exists, individuals have to be prepared to modify or remove their beards, for instance to enable the correct wearing of a respirator or breathing apparatus.

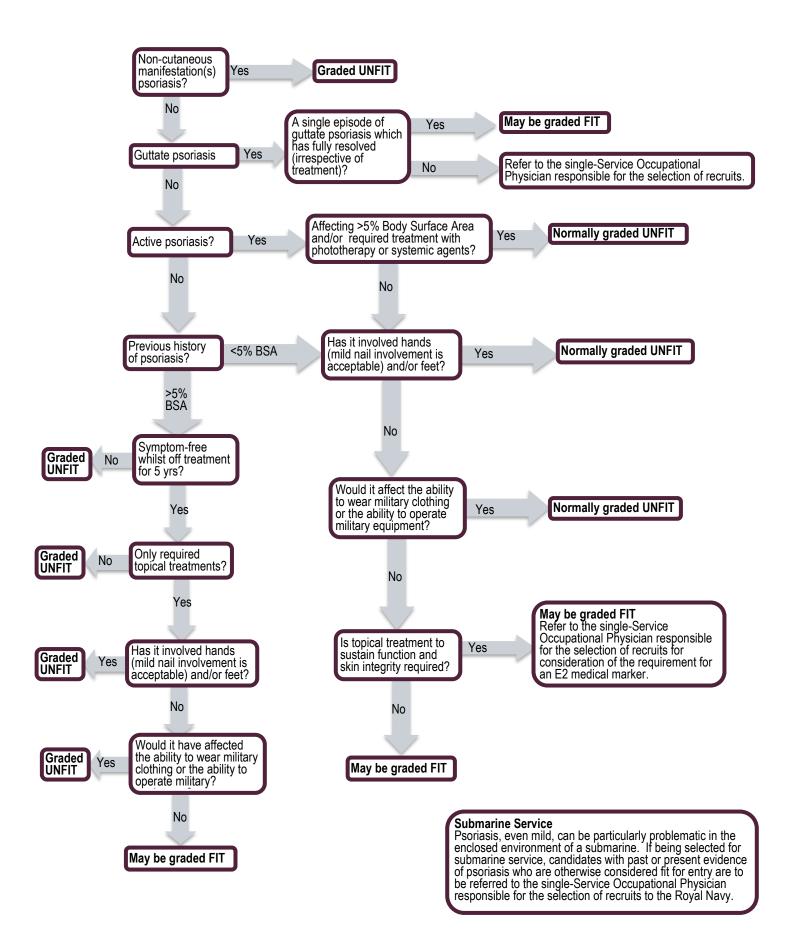
⁶ Royal College of Physicians and British Association of Dermatologists (Sep 07) Number 7 The prevention, diagnosis, referral and management of melanoma of the skin Concise Guidelines http://www.bad.org.uk/shared/get-file.ashx?id=793&itemtype=document (accessed Jan 17). NICE (Jul 15) NG 14 Melanoma: assessment and management https://www.nice.org.uk/guidance/ng14 (accessed Jan 17).

⁷ British Association of Dermatologists (Nov 09) Multi-professional Guidelines for the Management of the Patient with Primary Cutaneous Squamous Cell Carcinoma http://www.bad.org.uk/shared/get-file.ashx?id=59&itemtype=document (accessed Jan 17).

- graded UNFIT. Candidates who have a history of complete excision of dysplastic naevus, who have been discharged from follow-up may be graded FIT.
- 25. **Photosensitivity.** Candidates with any condition sensitive to or aggravated by exposure to sunlight not adequately controlled by sunscreens, are normally graded UNFIT.
- 26. **Vitiligo.** Candidates with vitiligo have a comparable risk profile for photosensitivity and skin cancer as those with Type 1 skin⁸. Candidates with vitiligo not associated with any other autoimmune disorder may be graded FIT.
- 27. Scleroderma. Refer to JSP 950 Part 1 6-7-7 Section 4 Annex K Musculoskeletal.
- 28. Urticaria and angio-oedema.
 - a. **Acute urticaria and angio-oedema.** Refer to JSP 950 Part 1 6-7-7 Section 4 Annex N Other Conditions.
 - b. Chronic spontaneous urticaria. Candidates who have a history of chronic spontaneous urticaria (symptoms > 6 weeks) requiring regular medication are normally graded UNFIT. Candidates with chronic spontaneous urticaria which has fully resolved and free from treatment for 2 years may be graded FIT.
 - c. **Chronic physical urticaria.** Candidates with a history of chronic physical urticaria ie in response to heat, cold, physical exercise or sunlight are graded UNFIT.

⁸ The Fitzpatrick skin type scale type 1 Ivory: pale skin, light or red hair, prone to freckles. Burns very easily and rarely tans.

Fig 1 Psoriasis flow chart



- 1. A careful menstrual, obstetric and gynaecological history must be taken and recorded. In every case the date of the last menstrual period must be recorded. Where a positive history of menstrual or pelvic disorder is elicited, then full details must be sought. It should be noted that:
 - a. Examination of the genitalia, external or internal, **is not** required at the recruit medical examination and should not be performed. There are no indications for such examinations during an occupational health assessment.
 - b. Similarly, breast examination is not required. However, a history should include enquiry with particular reference to chronic mastalgia, cyclical or otherwise. Candidates with this problem should normally be graded P8. Enquiry should be made of ergonomic difficulties encountered or discomfort should gross hypertrophy be apparent. Such difficulties should be considered on a case by case basis, in particular whether she can perform the required duties.

Gynaecological conditions

- 2. **Pelvic Inflammatory Disease (PID)**¹. Candidates with an established diagnosis of chronic PID are normally graded P8. However, a candidate with a single, confirmed episode that has not recurred within 12 months may be graded P22². A past history of pelvic Chlamydial infection should not in itself preclude service. Suggestive but unconfirmed histories of PID should result in more detailed enquiry being made and advice from a single-Service Consultant Occupational Physician responsible for the selection of recruits sought in doubtful cases.
- 3. **Menorrhagia.** Candidates with menorrhagia sufficient to warrant time off school or work are normally graded P8.
- 4. **Amenorrhea.** Amenorrhea can usually be disregarded provided there is no serious cause³ and pregnancy has been excluded⁴.
- 5. **Dysmenorrhoea.** Candidates with dysmenorrhoea sufficient to warrant time off school or work are normally graded P8. Those with mild or moderate dysmenorrhoea manageable with mild analgesia may be graded P2.
- 6. **Endometriosis.** This condition is recurrent, progressive and causes chronic ill health in up to 50% of patients⁵. Therefore, candidates with symptomatic endometriosis confirmed by a Gynaecologist should normally be graded P8. However, candidates with endometrial deposits discovered incidentally at laparoscopy may be graded P2 provided they are symptom-free.
- 7. **Chronic pelvic pain ssyndrome.** Chronic pelvic pain is a common indication for referral to a gynaecologist⁶ and has a multi-factorial aetiology. Candidates with chronic pelvic pain syndrome are difficult to manage and should be graded P8.
- 8. **Uterine and ovarian tumours.** Candidates with symptomatic fibroids, other uterine tumours or ovarian tumours are normally graded P8. However, asymptomatic small fibroids, ovarian cysts

¹ The best means of definitive diagnosis of PID is visualisation of the Fallopian tubes by laparoscopy.

² If clear for 12 months, PID is highly unlikely to become chronic unless there is a fresh infection. ²0% of PID patients get chronic pelvic pain and this will become evident before 12 months. All cases should be carefully assessed by obtaining evidence from the candidate's gynaecologist. (No audited evidence is available but consensus opinion provided from Birmingham Women's Hospital).

³ Including but not limited to anorexia (3.14.24) and PCOS (11).

⁴ Referral back to the candidate's GP is recommended to exclude pregnancy. Pregnancy testing is not to be performed at the recruit medical examination.

⁵ Evidence from Birmingham Women's Hospital.

⁶ Annual incidence of 38 per 1000 between ages 12 –70 years. Evidence from Birmingham Women's Hospital.

and recurrent follicular cysts are common. These are unlikely to affect full operational fitness⁷. Candidates with incidentally discovered asymptomatic⁸ benign tumours in which the uterus is not enlarged or causing encroachment on the uterine cavity may be graded P2.

- 9. Uterine prolapse. Candidates with symptomatic prolapse are normally graded P8. Those who have undergone satisfactory surgical repair may be graded P2.
- Cervical Intraepithelial Neoplasia (CIN). The following guidelines⁹ should be applied:
 - Borderline smears ¹⁰. Women with smears that show borderline changes may not a. have proceeded to histological investigation but should have had colposcopic examination (evidence of which must be obtained). Those with no abnormalities on colposcopy can be returned to routine follow-up after normal smears have been demonstrated at the 6 and 12 month point. Therefore candidates with a normal smear at both these points may be graded P2.
 - CIN 1. It is recommended that women with CIN 1 are returned to the routine b. screening programme once they have had normal follow-up smear results at the 6 and 12 months. Therefore candidates with a normal smears at both these points may be graded P2.
 - CIN 2 and 3. It is recommended that these women undergo annual screening for at C. least ten years because of clear evidence of persisting risk of invasive carcinoma. However, provided there is evidence of a normal follow-up smear result at the 6 and 12 month points, these candidates may also be graded P2.
 - Invasive carcinoma. Candidates with a history of invasive carcinoma are graded P8. d.
 - Other. Those with other cervical abnormalities, including viral changes, may be graded P2 following two consecutive normal smears at least six months apart.
- Polycystic Ovary Syndrome (PCOS)¹¹. PCOS is not an acute problem and often goes completely undiagnosed. The mainstay of treatment for PCOS is weight loss which may be assisted by metformin. Candidates whose symptoms have been adequately controlled (ie regular menses) and whose BMI has been maintained at = 29 for at least 12 months by oral contraceptives or metformin¹² may be graded P2. All other candidates are graded P8.

Obstetric conditions

Candidates who declare pregnancy prior to entry¹³ are unfit for service until at least three months after the end of a pregnancy involving vaginal or Caesarean delivery. Provided that evidence is available of a satisfactory post-natal examination, requiring no subsequent followup, and breast feeding has ceased, candidates may then be graded P2. Those who become pregnant after acceptance 14 should be re-graded P4 in accordance with current single-Service

⁷ Consensus opinion from Birmingham Women's Hospital.

⁸ Pain and bleeding must be excluded – gynaecological evidence is recommended especially to determine the reason for the investigation during which the diagnosis is made.

⁹ Based on Colposcopy and Programme management: Guidelines for the NHS Cervical Screening Programme NHSCSP Publication No.20. (April 2004). http://www.cancerscreening.nhs.uk/cervical/publications/nhscsp20.pdf with confirmed advice from Birmingham Women's Hospital.

¹⁰ The term "dyskaryosis" is no longer used – contemporaneous advice from Birmingham Women's Hospital, whose unit were instrumental in preparing the guidelines at footnote 124.

¹¹ Evidence provided by Birmingham Women's Hospital.

¹² Side effects must be absent. These are commonly gastrointestinal, usually in the form of nausea, and can be ameliorated by taking the medication with food. Stopping treatment with metformin has no sequelae and if BMI = 29 there is no increased incidence of NIDDM.

¹³ Entry as defined by single-Service administrative policies - usually, before a provisional date of entry has been assigned.

¹⁴ Provisional entry date assigned.

policies. The extant policy on pregnant workers is detailed in Section 5 Annex J. Account should be taken of the following:

- a. A woman may be graded P2 and accepted for service four weeks after a spontaneous or induced termination of pregnancy provided there is full recovery.
- b. In candidates with a history of ectopic pregnancy either with or without salpingectomy, a report is to be obtained from the GP giving information on the history and any predisposing factors. Candidates treated by salpingectomy which is not associated with pelvic inflammatory or other disease may be graded P2. Other cases are to be discussed with single-Service Occupational Physicians responsible for the selection of recruits.
- c. Candidates with a history of underlying malignancy (eg gestational trophoblastic disease including hydatidiform mole, invasive mole, choriocarcinoma, placental site trophoblastic tumour) should be graded P8. However, candidates who have been disease-free and treated simply by evacuation of the uterus and whose ßHCG levels have been normal for 2 years may be graded P2¹⁵. Because of adverse effects on other systems, candidates who have required treatment with methotrexate should normally be graded P8 unless the candidate can provide evidence that other system function¹⁶ has returned to normal.

16 Especially bone marrow suppression.

¹⁵ Absence of disease should be confirmed by a consultant in gynaecological oncology. There is no increased risk of recurrence in this group unless pregnancy occurs. The risk of recurrence is increased for 3 months after each pregnancy and with each subsequent pregnancy. (Evidence provided by Birmingham Women's Hospital).

1. This Annex must be used in conjunction with the guidance in Section 3, Section 4 Introduction and any issued by single Services.

Introduction

- 2. Candidates require a robust physical frame to cope with the physical demands of military training and subsequent Service. Musculoskeletal injury remains the greatest single cause of medical discharge from training and service, so it is essential to identify and assess any conditions, inherent or acquired, that might predispose to injury. Conditions are grouped as follows:
 - a. General (including fractures).
 - b. Conditions affecting the function of the upper part of the body (including cervical spine) and conditions affecting lower limb and spine function.
- 3. Enquiry about level of physical activity comparable with military service is especially important in the assessment of these conditions including recovery from previous injury or surgery. See also Section 3 paragraph 3. To determine the impact of any musculoskeletal condition the following aspects are to be assessed:
 - a. **Structure**. The candidate must not have any deformity or anatomical derangements that might interfere with function or the use of standard issue military equipment eg clothing (especially gloves and boots).
 - b. **Function**. The candidate must not have any limitation of range of movement (ROM), dexterity, strength or endurance likely to interfere with military training or Service (formal assessment advised in certain cases, eg weapon handling)¹.
 - c. **Symptoms and signs**. The candidate should be assessed for any pain, or instability, particularly on or exacerbated by activity comparable with military training or Service.
- 4. **Referral for specialist opinion**. Initial referral for advice on employability of candidates with orthopaedic/rheumatological conditions should be to the single-Service Medical Entry staff (SSMES) for occupational medicine (OM) opinion. A clinical assessment may be sought to inform the OM opinion.

General

5. **Amputation**. Candidates with amputations are normally UNFIT. For single-digit amputation see paragraphs 32 and 56.

Arthropathies and connective tissue disorders

6. **Ligamentous laxity (hypermobility)**. Generalised ligamentous laxity (hypermobility) may be responsible for locomotor symptoms or future joint problems. Candidates with a formal diagnosis of hypermobility syndrome made in adulthood are normally UNFIT. Candidates with hyperextension of >10 degrees² in either knee are normally UNFIT³ but if asymptomatic, have good knee control and undertaking exercise comparable with military activity may be referred to SSMES for consideration of referral for specialist assessment.

¹ Care must be taken to assess for a level of compensatory measures.

² Examine the knee and measure hyper-extension with goniometer with patient supine.

³ A candidate with >10 degrees of hypermobility is unlikely to be able to lock their joints to achieve the required level of function.

- 7. **Ehlers-Danlos Syndrome**. If a candidate has a formal diagnosis, they are UNFIT due to the associated medical risks and complications.
- 8. **Septic arthritis**. A fully functional candidate with a history of a brief episode of infection more than 12 months ago which was not complicated by any of the following are FIT.
 - a. Secondary osteo-arthritis.
 - b. Functionally-significant deformity.
 - c. Significant imaging changes that are likely to impact on future service.
- 9. Candidates with a history of septic arthritis complicated by secondary arthritis, functionally significant deformity, decreased ROM or imaging changes are normally UNFIT. Candidates with a history of septic arthritis without these complications must be referred to SSMES for a decision on fitness for entry.

Chronic arthritis

- 10. Arthritis occurring in candidates younger than 30 years of age is a poor prognostic sign. Candidates with an incidental finding of minor age-related osteoarthritis that does not affect function and are asymptomatic are normally FIT.
- 11. **Other arthritidies**. A candidate of any age with a history of rheumatoid arthritis, anklyosing spondylitis or psoriatic arthritis is normally UNFIT.
- 12. **Inflammatory arthritis**. Candidates with a **single** episode of reactive arthropathy, with no symptoms for 2 years or more, not on any treatment, and with no underlying joint damage, may be FIT following referral to the SSMES. Candidates with a family history of inflammatory arthritis and who are known to be HLA B-27 positive are FIT as long as they meet functional requirements.
- 13. **Gout**. Candidates with a history of gout with no symptoms for 2 years or more, not on any treatment, and with no underlying joint damage, are normally FIT.
- 14. **Connective tissue disease and vasculitis causing arthritis**. Candidates with these conditions are UNFIT.
- 15. **Juvenile Chronic Arthritis (JCA)**. JCA can be a systemic disease. Candidates who have been disease and symptom-free for a minimum of 2 years, with no evidence of joint damage or systemic disease, with activity comparable with military training for 3 months, may be suitable for entry subject to referral to SSMES. Candidates with a history of confirmed systemic involvement (eg cardiac/respiratory/neurological/ophthalmological involvement) are UNFIT.
- 16. **Osteomyelitis**. An episode of osteomyelitis from which the candidate has recovered with full asymptomatic function and no deformity may be FIT after referral to SSMES. Candidates with evidence of active disease are UNFIT.
- 17. **Osteochondritis dissecans**. If the defect has been shown to have fully resolved (following medication and/or surgery) with no other lesion and no symptoms the candidate may be FIT following referral to SSMES. Candidates with a residual defect, loose bodies or abnormal imaging are UNFIT.
- 18. **Osteochondral defects**. In weight bearing joints, the location and size of the defect is critical to determine whether this affects the weight bearing surface. Candidates with osteochondral

defects are to be referred to SSMES who may seek a specialist opinion as to the significance of the defect.

- 19. **Connective tissue disorders**. Candidates with a history of systemic lupus erythematosus, scleroderma, polyarteritis nodosa, polymyositis and other connective tissue disorders are normally UNFIT.
- 20. **Myopathy and myositis**. Those with minimal post-traumatic wasting, causing no significant loss of function, are FIT provided functional assessment is normal. All cases of myopathy with muscle wasting are UNFIT.

Fractures

- 21. General guidance about previous fractures of all appendicular skeletal bones is provided below. Specific guidance may also be found under conditions affecting the upper limb and lower limb and back assessment.
- 22. **Previous traumatic fractures without surgical fixation**. For those with normal function and with no deformity, a period of at least 12 months must have elapsed since the fracture before selection. This is due to remodelling following fracture which often takes up to 12 months. In cases of doubt, consult the SSMES. Specific guidance is given below.
 - a. **Long bones**. Candidates with fractures where union is confirmed without a deformity affecting function, who have been asymptomatic for 3 months while undertaking activity comparable with military training and have full function of the joints above and below the injury are FIT. If there is deformity with no symptoms and full function, referral to SSMES should be considered. Candidates with any symptoms or deformity resulting in dysfunction are UNFIT.
 - b. **Flat bones (eg pelvis, scapula)**. Fractures with union confirmed, no deformity, and where the candidate is asymptomatic having undertaken exercise comparable with military training for 3 months are FIT.
 - c. **Patellar fractures**. Whilst technically an intra-articular fracture, candidates who are able to perform activity comparable with military training for 3 months, should be assessed on a case-by-case basis by SSMES.
 - d. Intra-Articular fractures involving the upper and lower limb joints. Early osteoarthritis is the norm. Candidates must have normal function and have demonstrated the ability to undertake exercise comparable with typical military activities. Modern trauma surgery aims to minimise the risk of post-traumatic degenerative changes, but it cannot undo damage at the time of injury.
 - (1) If the candidate has abnormal alignment or remains symptomatic, they are UNFIT.
 - (2) If the candidate has normal alignment and is asymptomatic they may be FIT subject to referral to a SSMES. Fitness will depend on many factors including function, the type of injury, type of fracture, type of fixation and any subsequent complications.
 - (3) Intra-articular fractures of toes, other than the great toe, are normally FIT.
 - (4) Those of the fingers are normally FIT.
 - e. Candidates with the following simple (non-fixed) fractures may be considered fit after 6 months. In cases of doubt consult the SSMES.

- (1) Metacarpal and phalangeal fractures.
- (2) Clavicular shaft fracture, not involving the acromioclavicular or sternoclavicular joints. Where these joints are involved the candidate should be referred to SSMES.
- (3) Extra articular distal radial fracture.
- (4) Un-displaced distal fibular⁴ Weber A fracture.
- 23. All pathological fractures are normally UNFIT.
- 24. **Previous traumatic fracture with surgical fixation**⁵. For those with normal function and with no significant deformity, a period of at least 12 months must have elapsed since the fracture before selection due to remodelling following fracture which often takes up to 12 months. In cases of doubt consult SSMES.
- 25. **Upper limb fractures**. Candidates with upper limb fractures where:
 - a. Union is confirmed.
 - b. There is no deformity.
 - c. There is no tenderness over the area of metalwork / fracture site.
 - d. There are no symptoms with exercise comparable with military training over the last 3 months.
 - e. There is full function of the joints above and below the injury are FIT.
- 26. **Lower limb fractures**. The same conditions apply to candidates with lower limb fractures. If surgery has resulted in restitution of anatomy, candidates are normally FIT provided they are symptom-free with activity comparable with military training for 3 months and should be referred to SSMES. Candidates who have undergone complex surgery involving joints or surgical fixation of major upper and lower limb joints are normally UNFIT as early osteoarthritis is the norm.
- 27. **Stress fractures**. Candidates recovered from uncomplicated, single stress fractures who are symptom free with proven activity comparable with military training for a minimum of 3 months and radiological confirmation of healing are FIT. Candidates with any femoral neck stress fracture or multiple or recurrent stress fractures at any site are normally UNFIT. Previous pre-disposing factors should be considered.
- 28. **Medial tibial stress syndrome (MTSS) and tibial stress injuries**. Acute conditions should be deferred for a period of at least 6 months and reassessed following rehabilitation. Candidates must have full function and be asymptomatic with exercise comparable with military training over the last 3 months in order to be found FIT.
- 29. **Joint replacements**. Candidates who have had joint prostheses (including articular resurfacing) are normally UNFIT.

⁴ Fractures at, around or proximal to the syndesmosis must be referred to the single-Service Occupational Physicians responsible for the selection of recruits.

⁵ In general, asymptomatic metalwork does not need to be removed - M Townend, P Parker. Metalwork Removal in Potential Army Recruits. Evidence Based Changes to Entry Criteria. *J R Army Med Corps* 2005; 151: 2-4)

30. **Osteopenia and osteoporosis**. Candidates with a current diagnosis⁶ of osteopaenia or osteoporosis due to any cause, are normally UNFIT. Candidates with a past history of osteopaenia which has fully resolved with confirmation of normal bone mass using DXA (Dual Energy X-Ray Absorptiometry – whole body, lumbar spine and hip) may be considered FIT following referral to SSMES.

Conditions Affecting the Upper Body and Limb

- 31. Deformities of individual parts of the upper limbs, such as loss of any finger or parts of a finger or other parts of the hand are assessed according to functional capacity. Particular consideration must be given to manual dexterity. To assist examiners, the following guidance is provided.
- 32. **Fingers and hands**. Candidates with loss of any finger of either hand should be assessed according to residual functional capacity and are normally FIT. Those with more extensive loss affecting function are UNFIT. Candidates with loss of an opposable thumb are UNFIT. However, those who have had a finger reconstructed to replace a thumb at an early age should be functionally assessed (including the use of CBRN gloves) and can be found FIT if fully functional. Candidates with any other deformity if symptom-free with full function including firing weapons and compatibility with clothing (especially CBRN gloves) are FIT.
- 33. **Wrist**. Candidates with significant loss of function of wrist movement are UNFIT. Those with non-union of fractures of the carpal bones or a painful wrist with limitation of movement are UNFIT. Candidates with good function are FIT. In cases of doubt candidates can be referred to SSMES for a functional assessment.
- 34. **Elbow**. Candidates with less than 15 degrees loss of extension⁷ and, or flexion (usually following injury) with normal pronation and supination and able to hold a prolonged (more than 20 seconds) press-up position (elbows flexed, in accordance with Section 3) symptom-free are FIT. Those with greater loss are normally UNFIT. Candidates who have lost more than 20 degrees of either pronation or supination are normally UNFIT. Varus or valgus angulation should not preclude entry provided that normal function can be demonstrated.
- 35. **Shoulder**. Candidates with any functional limitation of shoulder movement are UNFIT. The following guidance is provided for candidates who have suffered shoulder dislocation. Subluxation requiring acute medical intervention should be considered as for dislocation. Each shoulder should be reviewed separately. Clinical evaluation should include an assessment looking for full ROM, with resisted assessment of the shoulder in external rotation and abduction. If this causes pain or a feeling of instability (where symptoms improve when the clinician supports the candidate's shoulder by placing a hand on the anterior aspect), then the candidate is UNFIT.
 - a. In all cases, at least 12 months must have elapsed since the dislocation/surgery.
 - b. Candidates with a single episode of dislocation, who have full shoulder function, are asymptomatic, and with negative apprehension test⁸ be FIT subject to referral for further assessment.
 - c. Candidates with two or more dislocations (in the same shoulder), who are symptomatic, have evidence of early arthritic change or have a positive apprehension test are UNFIT.

4-K-5

⁶ Osteopaenia is defined as a T Score of between -1 and -2.5 SD http://www.iofbonehealth.org/diagnosing-osteoporosis (accessed Jun 19).

Some degree of loss of full extension of the elbow (up to 15 degrees) without significant loss of function is not uncommon in the young active general population (DCA Orthopaedics opinion).
 Shoulder apprehension test: candidate's elbow is flexed to 90 degrees and the shoulder is abducted to 90 degrees. The examiner

Shoulder apprehension test: candidate's elbow is flexed to 90 degrees and the shoulder is abducted to 90 degrees. The examiner holds the candidate's wrist and with the other hand applies forward pressure from behind the shoulder. The shoulder is then externally rotated by manoeuvring the wrist. The test is **positive** if the manoeuvre produces pain.

- d. Candidates with multiple dislocations (in the same shoulder), who subsequently undergo a stabilisation procedure and full rehabilitation and who go on to be asymptomatic and fully functional with a negative apprehension test are normally FIT.
- 36. Clavicle fractures and clavicular joint disruptions. The interaction between load carriage equipment and mal-union or un-united fracture of the clavicle often results in pain. At least 12 months must have elapsed since the fracture/dislocation/surgery with the exception of a simple fracture of the clavicular shaft that may be considered for assessment after 6 months. The following guidance is provided for fractures and sprains:
 - a. **Fractured clavicle**. Candidates with a deformity from a fractured clavicle that is asymptomatic⁹, allows full shoulder movement and does not cause symptoms with load carriage during activity comparable with military training for 3 months are FIT. Candidates with deformity that causes symptoms, restriction of movement or interferes with load carriage or the wearing of restraint harnesses are UNFIT.
 - b. **Sternoclavicular and acromioclavicular dislocations**. Candidates with deformity that is asymptomatic, allows full shoulder movement and does not cause symptoms with restraint harnesses or load carriage during activity comparable with military training for 3 months may be FIT¹⁰. Candidates with deformity that causes symptoms, restriction of movement or interferes with load carriage are UNFIT.
 - c. **Acromioclavicular sprain**. Candidates with a Grade I/II sprain who are asymptomatic with normal function are FIT. Candidates with Grade III sprains are to be referred to SSMES. Candidates with Grade IV-VI sprains are normally UNFIT.
- 37. Candidates with a chronic history of pain related to overuse (eg para-tendonitis crepitans), or of upper limb disorders, such as a proven carpal tunnel syndrome, bursitis and epicondylitis, are normally UNFIT. In cases of doubt the advice of the SSMES should be sought.

Conditions affecting the lower limb and spine

38. Service life places great demands upon the lower limbs and spine. Even minor abnormalities and conditions can be exacerbated by and may break down during training. Lower limb injuries (especially knee) are the main cause of medical discharge during training and of early medical discharge from service. Searching enquiry must be made to elicit any history of injury or symptoms. This should include particular reference to physical activity (see paragraph 2), sports undertaken and symptoms arising in association with footwear of any kind. Decisions on FIT or UNFIT should take into account functional capacity and prognosis.

Spinal conditions

- 39. **General**. Normal structure and function of the spine is an essential requirement for military service. The following spinal conditions must be given careful consideration.
- 40. **Abnormality of the spine**¹¹. Candidates with minimal abnormal scoliosis¹², kyphosis or lordosis with no associated back pain with full and free movement of all spinal segments (cervical,

⁹ The effect of any plates must also be considered as they could be a rub point for load carriage.

¹⁰ Function is often restricted and specialist assessment may be required.

¹¹ No symptomatic structural abnormality fares well in military training.

¹² Adams' forward bend test (forward bending at the waist, viewed from anterior, posterior, and lateral aspects) provides a good prospective for identifying thoracic, thoracolumbar, or lumbar paraspinal and thoracic cavity prominences (which result from abnormal vertebral rotation as well as from a combination of abnormal spinal curvature in the coronal and sagittal planes). Bending forward accentuates paraspinal and rib prominences, which is suggestive of scoliosis. This is the hallmark examination finding that leads to a suspicion of scoliosis during screening evaluation. A positive result is observation of an asymmetric paraspinal prominence. The presence of an asymmetric scapular prominence may suggest an upper thoracic curve. A scoliometer is used to quantify right- and left-sided asymmetries (paraspinal prominences) identified on Adams' forward bend test. A positive result is one of >5 degrees at any

thoracic and lumbar) are FIT. Candidates with more than minimal abnormality and normal function should be discussed with SSMES. Candidates with scoliosis or other curvature requiring treatment, that is associated with an on-going disease process/neuromuscular or neurological dysfunction or back pain are UNFIT¹³.

- Radiological abnormalities of the spine. Incidental radiological abnormalities of questionable or no clinical significance should be discussed with the SSMES as they may be compatible with a grading of FIT.
- Scheuermann's disease. This must be a radiological diagnosis. Candidates who have achieved 3 months activity comparable with military training (especially load-carrying ability) without symptoms are to be referred to SSMES. Candidates who are currently symptomatic are UNFIT.
- Spondylolysis and spondylolisthesis. All candidates who have been diagnosed with these conditions (whatever the degree of slip for spondylolisthesis) but are now asymptomatic during activity comparable with military training for a minimum of 3 months are to be referred to SSMES responsible for the selection of recruits; it should be noted that those with a slip of grade II or more are normally UNFIT. Candidates who are currently symptomatic are normally UNFIT.
- 44. Spina bifida occulta. This condition can only be diagnosed with imaging. Candidates with an incidental finding, without history of symptoms and in the absence of other abnormality may be FIT. Candidates with either present or previous symptoms are to be normally UNFIT.
- Spinal fracture. Candidates with resolved spinous and transverse process fractures, or functionally insignificant fractures, are FIT. Any history of other spinal fractures, including wedge fractures of the vertebral body, are normally UNFIT¹⁴.
- Previous spinal surgery. Candidates with a history of any orthopaedic spinal surgery are normally UNFIT. However, candidates who have had a single-level discectomy (eg for sequestered disc) may be FIT subject to referral to SSMES responsible for the selection of recruits providing the candidate is at least 12 months post-operation, is asymptomatic when undertaking activity comparable with military service and has been doing so for at least 3 months and there is no evidence of treatment or injury related secondary effects.
- Cervical spine. Those with insignificant non-bony neck injuries that resolve fully and quickly with minimal clinical input may be assessed FIT once fully functional. Candidates with more significant previous non-bony neck injury (eg whiplash or muscular sporting injury) are FIT provided they have been asymptomatic for at least 6 months including during exercise comparable with military training for 3 months. Those with any ongoing symptoms or chronicity are normally UNFIT.

Back pain

There is strong evidence¹⁵ that a history of back pain is the best predictor of future problems. When assessing candidates with a history of back pain it is important to consider the

paraspinal prominence (thoracic or lumbar). Patients with scoliometer values of 5 degrees or greater correlate with Cobb angle measurements of at least 10 degrees which represents a commonly agreed-upon cut-off point used to direct treatment decisions. http://bestpractice.bmj.com/best-practice/monograph/979/diagnosis/step-by-step.html (accessed Jun 19).

13 Altered biomechanics will affect load-carrying ability.

¹⁴ DCA Orthopaedics: Approximately 30% of individuals with a wedge compression fracture will become symptom free in 2-3 months with no residual disability and no risk of late complications; another 40% will have occasional back pain when the back is stressed but this will not affect function; the remaining 30% will continue with back pain that will restrict any heavy work. However, the prognosis is not entirely proportional to the degree of deformity. The reason for this is not established but a change in the general shape of the spine affects its mechanical performance and such candidates are likely to suffer recurrent episodes of back pain.

¹⁵ a. Occupational Health Guidelines for the Management of Low Back Pain 2000 - Evidence Review and Recommendations. Waddell, G, Burton, K https://pdfs.semanticscholar.org/dff9/5228f2572c83fb7c1c3022e3e83ef38aef15.pdf (accessed Jun 19). b. Acute low back pain: systematic review of its prognosis Pengel LHM, Herbert RD, Maher CG, Refshauge KM. BMJ 2003;327:323-7. c. Predicting who develops chronic low back pain in primary care: a prospective study. Thomas E, Silman AJ, Croft PR, Papageorgiou AC, Jayson MIV, Macfarlane GJ. BMJ 1999;318:1662-7.

nature of the pain, frequency and duration of symptoms, their effect on function and what treatment, if any was needed. What has happened since the episode(s) is more important than the episode itself. There is no evidence to support the determination of fitness for service based on the number of episodes of back pain alone.

- 49. Episodes where a candidate has been unable to work, attend college etc, for a period of time, should be explored in detail. If the episode relates to an acute injury (eg during sports or road traffic collision), then the recovery and subsequent function is more important than the specifics of the initial injury (except where the injury sustained would exclude for other reasons ie spinal fracture).
- 50. Recurrent non-specific mechanical lower back pain (LBP) should be assessed carefully considering current function and requirement for healthcare professional support. There may be many reasons why candidates are now fully functional with no recent episodes. Effective reasons include loss of weight and appropriate conditioning etc. Exercise history can be useful, and the pre-Service Medical Assessment will allow a judgement on conditioning to be made. Referral to SSMES can be made for candidates where the examining clinician requires further advice.
 - a. Those with isolated episodes of LBP, that resolve fully and quickly with minimal clinical input may be assessed FIT once fully functional.
 - b. Candidates with longer isolated episodes of pre-existing LBP, that may have required greater clinical input, are normally FIT provided they have been asymptomatic for at least 6 months (where history includes exercise comparable with military training for 3 months).
 - c. Candidates with any episode of chronic back pain lasting 12 weeks or more are normally UNFIT.
 - d. Candidates with a history of sciatic pain with or without back pain are normally UNFIT.
 - e. Those who have had a successful single-level discectomy should be assessed in accordance with paragraph 46.

Leg length discrepancy

51. Leg length should be measured in accordance with Section 3. Candidates with a discrepancy of <1.5cm may be FIT provided the functional assessment is normal. Those with a discrepancy of 1.5-2.5cm who can achieve activity comparable with military training for a minimum of 3 months are to be referred to the SSMES for further assessment. Those with a discrepancy of >2.5cm, are normally UNFIT. This degree of discrepancy will cause functional decrement.

Feet and toes

- 52. Hallux rigidus. Candidates with Hallux rigidus are normally UNFIT.
- 53. **Hallux valgus**. Candidates who are asymptomatic with no over-riding or callosity of the second toe; or who have had hallux valgus osteotomy, have normal function and are asymptomatic during activity comparable with military training are to be referred to SSMES. At least 12 months must have elapsed since the surgery. Candidates with existing hallux valgus are normally UNFIT.
- 54. **Foot deformities**. Candidates with minor conditions that allow the usage of normal footwear (with orthotics if necessary) and are asymptomatic during activity comparable with military training for 3 months are FIT.
 - a. Candidates who use custom-made footwear are normally UNFIT.

- b. Those who require an orthotic but can use issued boots are normally FIT.
- 55. **Hammer**, **mallet and clawed toes**. Candidates with mild conditions without history of symptoms are FIT. Those with fixed clawing of toes, hammer or mallet toes are normally UNFIT.
- 56. **Loss of toes**. Those with loss of terminal phalanx of great toe with no painful stump may be FIT. Those with total or sub-total loss of other toes are FIT subject to normal outcome on functional testing. Candidates with total loss of either great toe are normally UNFIT.
- 57. **Flat feet**. Candidates with flat feet causing no symptoms are FIT. Those with mobile flat feet causing symptoms or with rigid flat feet are normally UNFIT.
- 58. Claw feet. Candidates with a deformity that has not caused symptoms in the past, where the foot is mobile, without pressure areas or fixed clawing may be FIT if the condition is considered compatible with the demands associated with training and the wearing of boots and if there is no associated neurological disorder (such as peroneal muscular dystrophy, etc). Candidates with a positive past history, or limitation of movements or evidence of pressure areas are normally UNFIT.
- 59. **Club-foot and talipes**. Those with any degree of clubfoot, corrected or otherwise, are normally UNFIT. Those who are confirmed to have positional talipes which has resolved with physiotherapy are normally FIT.

Ankle joint

60. Candidates with previous ankle sprain or fracture may be FIT provided that they have made a full recovery, have no limitation of movement, and are asymptomatic during activity comparable with military training for 3 months. Candidates who have had a ligamentous repair (eg Brostrom-Gould Repair) or ligamentous replacement (eg Evans Tenodesis) are to be referred to SSMES when at least 12 months has elapsed post-surgery, normal function has been restored and there are no symptoms during activity comparable with military training for 3 months. Candidates with an unstable or stiff ankle are normally UNFIT. Candidates with limitation of ankle movement are normally UNFIT.

Knee joint and anterior knee pain/overuse patellofemoral pain syndrome

- 61. Knee problems account for a large proportion of the medical discharges that occur during recruit training. Candidates with chronic symptoms of the knee(s) are normally UNFIT.
 - a. Those with insignificant isolated episodes of knee pain that resolve fully and quickly with minimal clinical input may be assessed FIT once fully functional.
 - b. Candidates with more significant episodes of previous knee pain may be FIT provided they are asymptomatic for at least 6 months and having undertaken exercise comparable with military training for 3 months.
 - c. Candidates with any episode of chronic (at least 12 weeks duration) knee pain are normally UNFIT.
- 62. **Osgood-Schlatter's Disease**. Candidates who have been symptom-free for at least 12 months for Osgood-Schlatter's disease during activity comparable with military training for 3 months may be FIT.
- 63. **Knee injuries**. Candidates with confirmed meniscal tears who are at least 12 months post-injury and are fully functional after conservative management while undertaking exercise comparable with military training for 3 months may be FIT after referral to SSMES. Candidates who are at least 12 months post-surgery for an arthroscopic partial or sub-total meniscectomy and

who are asymptomatic during activity comparable with military training for 3 months are FIT. Those who have had complete or open meniscectomy¹⁶ or meniscal transplantation (including autologous chondrocyte transplantation¹⁷) are normally UNFIT.

64. Knee ligaments.

- a. Candidates with any history of complete anterior cruciate ligament (ACL) or posterior cruciate ligament (PCL) rupture whether managed conservatively or surgically are UNFIT.
- b. Candidates with a history of partial tears of the ACL or PCL are to be referred to the SSMES.
- c. Candidates with a history of partial or complete rupture of any other knee ligaments are to be referred to the SSMES.
- d. Candidates with slight laxity of the ACL or other ligaments without a history of injury and without any loss of function are FIT.

Hip joint

- 65. Any symptomatic hip condition is UNFIT. Candidates with any history of hip disease or fixation, regardless of apparent recovery, are to be referred to the SSMES.
- 66. **Slipped femoral epiphysis**. Candidates with a history of slipped femoral epiphysis where the hip has been remodelled to normality, have a full range of internal and external rotation and are asymptomatic during activity comparable with military training for 3 months may be FIT subject to referral to the SSMES.
- 67. **Congenital dislocation of the hip (CDH)**. CDH predisposes individuals to early degenerative changes. Candidates with CDH are UNFIT unless there is substantial evidence to support a physically active childhood and adolescence and imaging confirms normal anatomy.
- 68. **Dislocation of the hip (other than congenital)** This condition requires careful assessment as in 95% of cases there are also associated injuries (especially if the original reduction took place more than 6 hours post injury). Posterior dislocations are more likely to have poorer outcomes. There must be confirmation of normal anatomy, no evidence of osteoarthritis and no sciatic nerve injury. Candidates who have normal function, have undertaken activity comparable with military training for 3 months, are more than 5 years post injury may be FIT subject to SSMES referral and orthopaedic assessment.
- 69. Candidates with associated ligamentous disruption (except ligamentum teres, which is disrupted in all dislocations), intra-articular fracture, labral tears, chondral defect or osteochondral fragmentation or open surgical reduction are UNFIT. Candidates who have had a perfectly reduced fracture fixed with open reduction and internal fixation, with normal function and no signs of osteo or avascular necrosis at 5 years, may be FIT pending SSMES and military orthopaedic consultant referral.
- 70. **Perthes disease**. The affected hip is almost always abnormal. Candidates with Perthes disease are UNFIT if there is any abnormality on the most recent imaging. If imaging confirms normal anatomy and the candidate is asymptomatic with a full range of hip movement and a satisfactory functional assessment, the candidates is to be referred to the SSMES. Enquiry should

¹⁸ KE Dreinhofer, Bone & Joint J, Vol 76, 1 Jan 94. P Kellam, J Orth Trauma 2016

_

¹⁶ This technique is out-dated and does not leave sufficient "bridging" for the opposing meniscus for military activities.

¹⁷ There is insufficient current evidence on this technique.



¹⁹ Candidates should not be deferred to undertake an exercise programme prior to referral since, as most will not be acceptable as military training and service will accelerate degenerative change in an abnormal hip, there is a risk that the candidate could subsequently argue that the exercise programme resulted in a deterioration of the condition of the affected hip.

ANNEX L

Special Conditions Affecting the M Grading

- 1. The M grading is a clinical quality distinguishing those whose mental capacity makes them suitable for normal training and posting, from those of limited intellectual capacity who necessitate rejection. The recruit selection test procedures will usually provide an objective assessment of mental ability to facilitate grading.
- 2. The M grading is dependent not only on the candidate's innate ability, but also on their capacity to use that ability. No formal clinical assessment is practicable or required during the examination. A history of head injury, indications of learning difficulties and a practical application of knowledge gained should be sought by exploring the candidate's school career, literacy, nature of employment since leaving school, hobbies and interests, etc before grading M2.

Special Condition Affecting Fitness for Service

General

- 3. Examining medical officers should have a good knowledge of mental health matters and in all cases, a critical examination of the candidate's psychiatric history is imperative to determine suitability for military Service. For candidates with a previous mental health diagnosis, identifying vulnerabilities which may contribute to the presentation of a further disorder during Service will be helped by ensuring that:
 - a. the diagnosis of a mental health disorder was correct and made by a suitably qualified professional;
 - b. the aetiology or perceived stressor preceding the onset of the disorder was identified;
 - c. timely evidence-based therapy was provided.
- 4. It is important to differentiate between conditions representing understandable emotional and behavioural responses to significant life events (eg parental divorce, bereavement) and those disorders with a hereditary or complex aetiology (eg depression). Whilst the former may settle within acceptable time frames and with no psychiatric input, the latter are more likely to have a significant effect on function and greater risk of relapse. Candidates with a diagnosis made during adolescence require particular scrutiny. This is to ensure that individuals who have presented at a time of normal and understandable emotional turmoil are not unnecessarily declared UNFIT if they are symptom free and have developed coping strategies adequate for Service life.
- 5. If there is insufficient evidence presented at the pre-employment medical examination (or prior questionnaire screening) to enable a decision, additional clarifying evidence (eg contemporaneous medical records) should be requested from the candidate or the candidate's GP. When specified within this policy or where uncertainty remains, the case should be referred to the single Service occupational physician responsible for Service entry.
- 6. Candidates with current psychiatric disease or dysfunctional behaviour are always UNFIT. In certain circumstances they may become FIT after a prescribed period of time once the condition has resolved.
- 7. The guidance given in this section is based on evidence for prognosis and recurrence rates for most of the mental health conditions listed in the ICD-10 classification of mental and

behavioural disorders¹. Advice is provided for all relevant diagnostic groups and the ICD Code is given for ease of reference. A summary is provided at the end of this section.

Dementias (F00-F03)

8. These are rare in the recruit age group although in theory variant Creutzfeldt – Jakob disease could occur. Candidates are graded UNFIT.

Organic Amnesic Syndrome (F04)

9. Recovery from this condition is extremely rare. Candidates are graded UNFIT.

Delirium (F05)

10. The causes of delirium are numerous though, in the recruit age group, delirium is most likely to have been due to high temperature associated with severe infection. In such cases there should be no bar to recruitment provided the infection was acute and single and has completely remitted. If this was not the case, then the cause should be determined and the case discussed with the sS occupational physician responsible for Service entry.

Other Mental Disorders due to Physiological Conditions (F06-F09)

- 11. This group of conditions are caused by a variety of aetiological factors. Most of the conditions have a serious underlying cause and candidates are normally graded UNFIT. In cases of doubt, the examining physician should seek the opinion of the single Service occupational physician responsible for service entry.
- 12. Candidates with a history of post-concussion syndrome (F07.2) may be graded FIT provided that the candidate has been symptom-free, including from vestibular disturbances and mental health co-morbidities, for 1 year prior to application. (See 6-7-7 Section 4 Annex G 4G.08 for the neurological assessment of head injuries.)

Mental and Behavioural Disorder due to Psychoactive Substances (F10-F19)²

- 13. Illicit Drugs. Discovery of the use of any illicit drugs is not a clinical matter per se. It becomes a clinical matter when illness, most particularly drug dependence, has occurred. Examining medical officers are not obliged to inform recruiting staff if a history of substance abuse not resulting in clinical illness is volunteered during the course of an examination.
- 14. **Drugs**. Candidates with current drug related health problems are UNFIT. Before accepting anyone with a previous history of drug-related health problems, referral to the single Service occupational physician responsible for Service entry is recommended as the risk of relapse must be carefully considered.
 - a. Candidates in whom there is evidence of drug dependence in the 3 years prior to application are normally graded UNFIT. If there is unequivocal evidence from an addiction clinic that the candidate has been clean³ for more than 3 years prior to application then recruitment may be permitted.
 - b. Candidates that have been diagnosed with harmful use of drugs not amounting to drug dependence in the 2 years prior to application are normally graded UNFIT. If there is good evidence in the candidate's medical history that the individual has been clean³ and symptom free

¹ Some categories are not included either because they are only used by mental health researchers or because they are irrelevant for military candidates.

² F10 relates to alcohol. F11 to F19 relates to opioids, cocaine, cannabis and other drugs.

³ Defined as absolutely no drug use.

for more than 2 years prior to application with no ongoing treatment, then recruitment may be permitted.

- c. A history of infrequent recreational use <u>without</u> evidence of damage to health is not a medical bar to entry.
- 15. **Alcohol misuse**. If there is good evidence that prior to application the candidate has been symptom-free and has not been undergoing any treatment, then recruitment may be permitted. It is advised that corroborative evidence is sought and in cases of doubt, the examining physician should seek the opinion of the single Service occupational physician for service entry.
 - a. Candidates with a history of alcohol dependence (F10.2) with or without associated problems (F10.3-F10.7) are UNFIT⁴. Those who have been alcohol dependent have a 70% chance of relapse, with only 30% remaining abstinent or being able to drink in a controlled way.
 - b. Candidates who have been diagnosed with harmful use of alcohol (F10.1) in the 2 years prior to application are normally graded UNFIT. The prognosis of those who have been diagnosed with harmful use of alcohol not amounting to dependence (F10.1) is variable and the risk remains.

Schizophrenic and Delusional Disorders (F20-F29)

16. With the exception of acute and transient psychotic disorders (F23), all candidates with diagnoses in this category are graded UNFIT. These disorders represent a variety of ill-understood conditions whose relationship to schizophrenia and other psychotic disorders is uncertain. Even though such conditions often have many of the qualities of "good prognosis" schizophrenia there is still a significant relapse rate of up to 30%. If there is very clear evidence that the illness was short-lived, ie fully abated (with or without treatment) within 1 month of diagnosis, and due to an obvious cause, the candidate should be discussed with the single Service occupational physician responsible for Service entry. Where an organic cause (such as a toxic reaction to a drug or an acute severe infection⁵) is evident, candidates may be graded FIT but where the cause is found to be functional, ie resulting from a mental health condition, candidates will be UNFIT.

Mood (Affective) Disorders (F30-F39)

- 17. Disorders of mood, especially depression, are not confined to this category as diagnoses may also be classified in the anxiety and stress-related categories (F41 and F43). Disorders in this group range from the profoundly disabling psychotic affective disorders (eg mania) to less distressing, mild and transient lowering of mood secondary to a minor life stressor. In some individuals the genetic predisposition is so strong that the condition may become overt with no triggering stressor. However, in most cases of affective disorder, an episode of illness is precipitated by a stressful life event.
- 18. Candidates with a diagnosis of a single episode of mild or moderate depression (F32.0, 32.1) with a clear precipitating stressor may be graded FIT provided that all treatment, including medication, has been completed and the individual must be free from symptoms and off medication for 1 year.
- 19. A diagnosis of a single episode of severe depression without psychosis (F32.2) suggests a greater impact on functioning, a requirement for more extensive therapy and higher risk of relapse. To be graded FIT, all treatment (including medication) must be completed and the candidate must be free from symptoms and off medication for 2 years. The episode of depression itself and the treatment pathway should not be more than 24 months in total⁶.

-

⁴ Alcohol is a legal drug and lifetime risk of relapse is high.

⁵ ie similar to delirium.

⁶ DCA Advice - the natural recovery of depression is about 2 years and with treatment around 6-9 months with some needing maintenance medication for 6-12 months.

20. A candidate with a history of two of more episodes of depression or a recurring or persistent depressive disorder (F33), severe depression with psychosis, manic disorder (F30) or bipolar affective disorder (F31) will be graded UNFIT. If there is a doubt about the diagnosis the case should be referred to single service occupational physician responsible for Service entry.

Phobic Anxiety Disorder (F40)

21. In these disorders, severe physiological arousal occurs which is markedly disproportionate to the seriousness or danger of the triggering stimulus. Phobias may be classified into 3 major groupings of specific phobia, social phobia and agoraphobia. Specific phobias developing in childhood have a poorer prognosis than those starting in adult life and if untreated, can persist for many years. However, phobias are very amenable to treatment and a candidate may normally be graded FIT provided that all treatment, including medication, has been completed and the individual has been free from symptoms and off medication for 1 year. Candidates presenting with a history of 2 or more episodes will be graded UNFIT.

Other Anxiety Disorders (F41)

22. As discussed in paragraph 3, it is important to differentiate short term anxiety presenting as part of a normal reaction to a clear trigger, such as exams, from a more significant presentation meeting the diagnostic criteria for a condition such as panic disorder or generalised anxiety disorder. Even with a clear diagnosis of an anxiety disorder candidates may present with a history ranging from a single brief stress-related episode to a longstanding condition, seemingly more related to a vulnerable personality than to external stressors. In those cases where it is clear that the condition was brief and triggered by significant life stress then the candidate may be graded FIT as long as they have been symptom and treatment-free for at least 1 year. Candidates with two or more episodes of anxiety or with a longstanding history of panic or generalised anxiety disorder are graded UNFIT.

Adjustment Disorders (F43.2)

- 23. Adjustment disorders are characterised by excessive emotional and behavioural symptoms in response to a perceived stressor, however the presence of symptoms of depression or anxiety often make diagnostic distinction uncertain. The emotional response, any maladaptive coping strategies and reduced functioning would be expected to develop within 3 months of the stressor and settle within 6 months; if the latter is not the case the diagnosis should reflect the enduring symptoms of anxiety and depression. Understanding the aetiology of the disorder is imperative in deciding whether the emotional response was commensurate with the stressor and thus the individual's capacity to withstand further stress.
- 24. Candidates with a diagnosis of adjustment disorder may normally be graded FIT provided that all treatment, including medication, has been completed and the individual has been free from symptoms and off medication for 1 year. Candidates with two or more episodes are graded UNFIT.

Obsessive Compulsive Disorder (OCD) (F42)

Candidates with a history of OCD are graded UNFIT.

Post-Traumatic Stress Disorder (PTSD) (F43.1)

26. A previous history of PTSD, diagnosed by a consultant psychiatrist or clinical psychologist, is a significant risk factor for the development of further PTSD. Because of the likelihood of Service personnel being involved in stressful operational environments, the candidate should normally be graded UNFIT, even if previously treated. In cases where the diagnosis is uncertain or not made by a consultant psychiatrist or clinical psychologist, the examining physician should seek the opinion of the single service occupational physician responsible for Service entry.

Dissociative Disorders (F44)

27. These disorders include dissociative fugue where the sufferer goes into a trance-like state, and conversion disorders, where there is loss of sensation or loss of function of limbs or loss of vision or similar incapacity. All candidates with this diagnosis, whether from an organic or psychological⁷ cause, should normally be graded UNFIT.

Somatoform Disorders (F45)

28. Candidates with a somatisation disorder diagnosed by a consultant psychiatrist or clinical psychologist, including somatisation and hypochondriacal disorder, are normally graded UNFIT.

Eating Disorders (F50)

- 29. Candidates with a confirmed diagnosis of anorexia nervosa (F50.0) or the atypical form of this condition (F50.1) are graded UNFIT. For anorexia nervosa it is not currently possible to reliably distinguish between the 20% of sufferers who make a full recovery and do not relapse in the future, from the remainder who relapse and remit or who remain severely ill.
- 30. Candidates with a diagnosis of bulimia nervosa (F50.2) without co-morbidity such as anorexia, atypical eating disorder patterns or personality disorder, may be graded FIT one year after recovery provided they are fully functioning and symptom-free. Candidates meeting this criteria and candidates for whom the diagnosis is uncertain should be discussed with the single Service occupational physician responsible for Service entry. Candidates with two or more discrete episodes are graded UNFIT.
- 31. Candidates with Other Specified Feeding and Eating Disorders (F50.9) are graded UNFIT.

Mental Disorder Associated with the Puerperium (F53)

- 32. Candidates with a history of puerperal psychosis (F53.1) from which they have fully recovered, should be discussed with a single Service occupational physician responsible for Service entry.
- 33. Candidates with a history of puerperal depression have an increased risk of developing a depressive episode outside of the puerperium. The guidelines to be followed are the same as those for mood (affective) disorders (F30-F39) (Paras 17 20).

Disorders of Personality (F60-F69)

- 34. ICD-10 lists a number of categories under this heading. All of these conditions indicate deeply ingrained and enduring patterns of behaviour, and candidates with a diagnosis in this group must be graded UNFIT. In cases of doubt, the examining physician should seek the opinion of the single Service occupational physician responsible for Service entry.
- 35. Disorders of sexual preference (F65) eg fetishism, exhibitionism, voyeurism, paedophilia and sadomasochism are listed with the personality disorders. Such cases should be discussed with the single Service occupational physician responsible for Service entry.

Gender Identity Disorders (F64)

36. Candidates with Gender Identity Disorders may present untreated, during treatment or having completed all hormonal and surgical treatment. In each case the candidate is required to meet the

-

⁷ Even in cases in which there is clear causative stressor.

same physical and mental entry standards as any other candidate. JSP 889 'Policy for the Recruitment and Management of Transgender personnel in the Armed Forces' gives the overarching MOD policy with the medical aspects of recruiting covered in Annex A.

- 37. Candidates who have completed transition (and, where appropriate, have been stabilised on hormone medication and fully recovered from surgery) may be graded FIT, subject to fulfilling the normal medical standards according to the individual's legal gender, including any time periods required in this Annex to allow for the resolution of psychological problems encountered before or during the transition process. Any ongoing hormone therapy must be compatible with world-wide Service and have been stable for at least 6 months. Refer to JSP 889 Annex D for further guidance.
- 38. **Candidates in transition**. Transition is an extremely stressful period and may involve regular treatment (surgical or hormonal) and follow-up. It is likely that the requirements for treatment and review, as well as the psychological stresses of this period, will normally be graded UNFIT.
 - a. Candidates who are undergoing surgical procedures should normally be considered UNFIT until those procedures are complete and the normal recovery times for surgery laid out in the appropriate Annexes⁹ of this JSP have been achieved and then assessed in line with para 37 above.
 - b. Candidates undergoing hormone treatment must be stable for at least 6 months on a medication regimen and the medication and review requirements must not preclude world-wide service before they can be graded FIT. If the hormone therapy is a prelude to surgical procedures then the candidate should normally be graded UNFIT until that surgery and appropriate recovery is complete.
 - c. Whilst gender identity disorders themselves are not a reason for referral for psychiatric assessment, candidates in transition should be carefully assessed for previous and ongoing psychiatric conditions or distress which should be graded in accordance with the relevant paragraph of this Annex.
 - d. Where any doubt exists about the suitability of a candidate for military service the examining physician should seek the opinion of the single Service occupational physician responsible for Service entry.
 - e. For assessment of the risks of musculoskeletal injury in military training see Leaflet 6-7-4 Section 4 Annex K.
- 39. Candidates currently experiencing gender dysphoria are normally considered UNFIT in line with para 6 of this Annex.

Disorders of Psychological Development (F80-F89)

40. Candidates diagnosed with autism (F84) or similar disorders by a specialist autism service are normally graded UNFIT. Candidates diagnosed with Asperger's syndrome (F84.5) by a specialist autism service may appear unremarkable on examination but should normally be graded UNFIT. If there is doubt about the diagnosis or the condition is mild and does not cause disability, candidates should be referred to the single Service occupational physician responsible for Service entry. In cases of mild, entirely non-disabling Asperger's Syndrome, the single Service occupational physician may advise single Service recruiting staff psychiatric assessment is not required. This because pre-entry tests of suitability for military life (eg selection interviews and tests) are as good a form of assessment as a psychiatric assessment.

.

⁸ JSP 889 'Policy for the Recruitment and Management of Transgender Personnel in the Armed Forces' (amendment Aug 19).

⁹ Annexes E, F and J.

The Hyperkinetic Disorders (F90)

- 41. Attention Deficit Hyperactivity Disorder (ADHD) is the most common diagnosis to present in this category. There is a large spectrum of behaviour in children and adolescents that attracts this diagnosis. Symptoms suggestive of this disorder may also be part of normal adolescent behaviour or be presenting features of anxiety or depressive disorders. For an unambiguous diagnosis there must be an early onset (prior to the age of 7 years¹⁰) with impaired attention and overactivity, both of which occur in all kinds of locations (eg home, school, sports centre, doctor's surgery). This is because the impaired attention and hyperactivity is excessive when compared with other children of the same age and IQ.
- 42. ADHD can be associated with co-morbid common mental disorders (CMD) and substance misuse. In cases where a CMD or substance misuse is present, the prognosis is poor and candidates should be graded UNFIT.
- 43. Candidates with ADHD but without co-morbidities may be graded FIT if the candidate has been stable without evidence of dysfunctional behaviour for one year prior to application¹¹ without medication. Corroborative evidence should be sought to confirm that the individual has been functioning normally (eg maintenance of regular employment, attendance at school or college) and where there is doubt the case should be referred to the single Service occupational physician.
- 44. Candidates with a diagnosis of hyperkinetic conduct disorder with evidence of violent and/or delinquent behaviour should be graded UNFIT as current evidence indicates that these forms of the condition are unlikely to improve with time.

Intentional Self-Harm (X60-X84)

- 45. The spectrum of intent in respect of intentional self-harm ranges from stress relief by cutting, through manipulative behaviour or emotional blackmail of others to serious suicidal intent. It is often difficult to tell from a candidate's recorded history where past episodes lie on this spectrum. Candidates with a history of self-harm may have taken a medication overdose. Superficial cutting, typically of the arms, thighs or abdomen, is also common. Evidence suggests that cutting is often a maladaptive way of relieving stress and is more appropriately termed self-mutilation. It may be linked to acute stressors but might also be indicative of long term personality problems or a history of past childhood abuse.
- 46. Candidates with a single episode of self-harm or self-mutilation occurring more than 2 years before application in response to a stressful event may be graded FIT provided the 2 year interim has been free from all symptoms. If there was no precipitating stressful event then the candidate should normally be considered UNFIT, as this indicates an enduring endogenous risk of further self-harm.
- 47. Candidates with a history of 2 or more episodes, even with clear stressors, should normally be graded UNFIT, as repetition indicates a substantial risk of further repetition and a significant increase in risk of later death by suicide. If multiple episodes occur over a short period of time (weeks rather than months), and can clearly be ascribed to the same single stressful event, then for the purposes of selection these may be regarded as a single episode. Additionally, if 2 or more episodes are attributable to independent stressors but there is robust evidence that the candidate has subsequently developed coping strategies adequate for Service life, the case may be referred to the single Service occupational physician with responsibility for Service entry in line with para 5.

_

¹⁰ Developmental course of ADHD symptomatology during the transition from childhood to adolescence: a review with recommendations. Willoughby MT. Journal of Child Psychology and Psychiatry 44.1 (2003), pp 88-106.

¹¹ This is developed from an overview of all available prognostic evidence.

General

- 1. Candidates with dental diseases or other oral conditions that are treatable by a general dental practitioner, are not normally rejected. Candidates should have:
 - a. An acceptable and functional occlusion of either natural teeth or well-fitting standard prostheses.
 - b. Healthy gums and oral mucosa, with no obvious soft tissue disease or deformity.

Oral neglect and/or dental caries

2. If gross oral neglect is found¹, candidates would not normally be fit to enlist. In cases of doubt, the opinion of the sS Occupational Physician responsible for the selection of recruits is to be obtained. Where doubt regarding dental fitness for Service entry exists, the candidate may be referred to a Service Dental Officer².

Amelogenesis Imperfecta and Dentinogenesis Imperfecta

3. Candidates with a history of hypocalcified Amelogenesis Imperfecta (AI) and Dentinogenesis Imperfecta (DI) will require further assessment by the sS Occupational Physician responsible for the selection of recruits. Whilst the dentition may be treated or remediable³, the possibility of osteogenesis imperfecta must be considered in candidates presenting with DI.

Dental Phobia

4. Candidates who cannot tolerate routine primary care dentistry under local anaesthetic and require conscious sedation or general anaesthesia should normally be graded P8. In cases of doubt, the opinion of the sS Occupational Physician responsible for the selection of recruits is to be obtained⁴.

Cleft lip and/or palate

5. Candidates with uncorrected cleft lip and/or palate are graded P8. Candidates with corrected cleft-lip and/or palate, or any gross abnormalities of the dento-facial complex and associated soft tissues, should be referred to the sS Occupational Physician responsible for the selection of recruits⁵ if the condition is likely to affect wearing protective headgear and/or respirators.

Facial Fracture and Orthognathic Surgery

6. Candidates with a history of facial fractures, including those who have undergone Orthognathic Surgery and who continue to have symptoms should be graded P8 until these are resolved. Candidates with retained metalwork may be graded P2 if asymptomatic, with confirmation of fracture healing and no residual deformity. In cases of doubt, the opinion of the sS Occupational Physician responsible for the selection of recruits is to be obtained⁴.

¹ Gross oral neglect includes multiple open carious cavities. It should be noted by non-dental assessor that anterior incisor and canine teeth are usually the last teeth to be affected and is an indicator of high levels of disease.

² Service Dental Officers asked for opinion, should determine TN (Treatment Need) by visual examination only, radiographs are not to be taken. Utilising the DPHC(Dental)/ARTD Project Molar agreement of 2 hours of dentistry per recruit, if the opinion is that disease cannot be **stabilised** within 2 hours ie >TN4, the candidate is to be graded P8.

³ Further advice/assessment by a Service Restorative specialist may be required.

⁴ Further advice/assessment by the sS Dental/Oral Health SO1 may be required.

⁵ Further advice/assessment by a Service Oro-Maxillo-Facial specialist may be required.

Orthodontic treatment

- 7. Active orthodontic treatment involves the use of both fixed and removable appliances. On completion of active treatment, the use of fixed or removable retention devices is frequently required for enduring stability.
- 8. **Active Orthodontic Treatment.** Candidates who are undergoing active orthodontic treatment will normally be graded P8 until treatment is complete, as confirmed by a report from the treating practitioner. This is because of the difficulties of continuing with orthodontic treatment during initial training.
 - a. **Active Appliances.** The removal of active appliances simply to facilitate Service entry is not to be undertaken or advised. Candidates presenting having had appliances removed simply to facilitate entry shall be graded P8 until the treatment for which the appliance was fitted is complete.
 - b. **Fixed and Removable Retention Devices.** Fixed and removable retention devices required for enduring stability on completion of active treatment, must continue to be worn and will not preclude entry to the service.

Orthodontic Treatment for Army Foundation College Harrogate and Defence Sixth Form College Wellbeck Candidates

9. Entry to these establishments is constrained by age. Recruits to these establishments must be considered on a case-by-case basis by the sS Occupational Physician responsible for the selection of recruits and may be accepted if treatment can be managed within the constraints of the training timetable. Individuals applying to either establishment must make arrangements to continue orthodontic treatment with their civilian orthodontist/dental practitioner for the duration of their studies.

Blood diseases

- 1. Candidates with a known history of chronic blood disease, such as G6PD deficiency, homozygous or double heterozygous sickle cell disease, hereditary spherocytosis, homozygous α or β thalassaemia, haemoglobinopathy, or any haemorrhagic disorder resulting in abnormal coagulation are graded P8 (Below Entry Standards).
- 2. **Sickle cell trait (Hb A/S).** This usually benign condition is associated with normal development and exercise tolerance. All candidates should be asked about sickle cell trait. However, individuals with sickle cell trait have a higher risk of developing acute exertional rhabdomyolysis, which may lead to renal failure and death in severe cases. A history of passing black urine (likened to 'flat cola') after exercise should be sought in all candidates. Its presence is likely to indicate myoglobinuria secondary to rhabdomyolysis, and such candidates should be graded P8. However, in candidates who declare a known personal (not family) history of sickle cell trait, are to be awarded an L2 marker, to be reviewed on completion of Phase 1 (and if retained, Phase 2) training.
- 3. Heterozygous α or β thalassaemia. The heterozygous α or β thalassaemia traits are usually asymptomatic with a hypochromic, microcytic blood picture and little or no anaemia. These and other haemoglobinopathy traits are unlikely to produce significant clinical or haematological abnormalities. Candidates with asymptomatic trait conditions may be graded P2 (Fit for Entry). Double heterozygotes with Hb S/C thalassaemia, Hb S/C or Hb S/D have disease of varying clinical severity. Candidates with a history of these double heterozygous conditions must be carefully assessed and referred to the sS Occupational Physician responsible for the selection of recruits.

Blood Borne Viruses (BBVs)

- 4. Routine pre-employment blood test for screening for BBVs is not required. For those who declare a relevant history:
 - a. **Human Immunodeficiency Virus (HIV).** A candidate known to be HIV seropositive is graded P8, irrespective of their current treatment, viral load and CD4 count.
 - b. **Viral hepatitis.** Candidates known to be chronically infected with hepatitis B or hepatitis C should normally be graded P8. To be graded P2, those who have a past history of hepatitis B or hepatitis C must provide the following:
 - (1). **Hepatitis B.** Evidence that they are hepatitis B surface antigen (HBsAg) negative and Hepatitis B surface antibody (anti-HBs) positive.
 - (2). **Hepatitis C.** Evidence that they have undetectable hepatitis C viral load by polymerase chain reaction (PCR). If antiviral therapy has previously been used to cure Hepatitis C, this PCR must be taken at least 6 months after finishing antiviral therapy.
- 5. **Defence Medical Services (DMS) Healthcare Workers (HCWs) screening and immunisation on entry.** DMS HCWs must have Standard and Additional Health checks during the first week of phase 1 training and graded in accordance with <u>JSP 950 Part 1 Leaflet 6-8-1 Defence Medical Services Uniformed and Civilian Healthcare Workers: Tuberculosis and Blood-Borne Viruses Screening and Management². Candidates with a history of BBV infection or failure</u>

4-N-1

¹ Sickle cell trait occurs in approximately 8% of African Caribbeans, but is also present in those with Mediterranean, Middle Eastern, or Indian ancestry.

² Candidates should be informed **during the pre-Service recruitment process** that they will be required to undergo screening for TB and BBVs in accordance with this policy.

to respond to hepatitis B vaccination should be referred to the single-Service Occupational Physician responsible for the selection of recruits.

Venous thromboembolic disease

6. A past history of Venous Thromboembolism (VTE) is the strongest predictor for a future thrombotic event³. Candidates with a past history of VTE, whether on treatment or not, should normally be graded P8 because of the unavoidable risks associated with service that can predispose personnel to thrombotic events⁴.

Thrombophilia

7. Thrombophilic gene mutations, including but not limited to Factor V Leiden and Prothrombin 20210A, expressed either in heterozygote or homozygote form and present individually or in combination, have previously been thought to be predictive of future thrombotic events. However, current expert opinion³ is that family or personal medical history of a DVT or PE is the strongest predictor for a future thrombotic event and that asymptomatic single heterozygote thrombophilic gene mutations do not have any predictive value. The evidence for the predictive attributes of homozygous or complex heterozygous mutations is less clear. Consequently, candidates with asymptomatic thrombophilic gene mutations, in the absence of an adverse family history may be graded P2. Complex cases (including those where there are difficulties defining the presence of a significant family history) should be referred to the single-Service Occupational Physician responsible for the selection of recruits.

Irradiated blood products

- 8. Personnel who require irradiated blood products⁵ should be graded no higher than P8 as such blood products are not routinely available when deployed. Irradiated blood products are required to prevent potentially fatal transfusion-associated graft versus host disease for the following:
 - a. Patients treated with the following drugs:
 - (1) Fludarabine.
 - (2) Cladribine.
 - (3) Pentostatin.
 - (4) Alemtuzumab.
 - (5) Other novel purine analogues and related agents until evidence of safety emerges.
 - b. Hodgkin's lymphoma (lifelong following diagnosis).
 - c. Aplastic anaemia patients receiving immunosuppressive therapy with anti-thymocyte globulin and/or Alemtuzumab.
 - d. Immunoglobulin A (IgA) deficiency.

³ Baglin T Author, Management of Thrombophilia: Who to Screen? Pathophysiology of Haemostasis and Thrombosis 2003/2004, Vol. 33, No. 5-6.

⁽http://content.karger.com/ProdukteDB/produkte.asp?Aktion=ShowPDF&ProduktNr=224034&Ausgabe=230746&ArtikelNr=83836&filena me=83836.pdf#search=%22baglin%20t%22). (Accessed Sep 16).

⁴ Enforced prolonged immobility (e. military transport), relative dehydration in hot environments.

⁵ Treleaven J et al, Guidelines on the use of irradiated blood components prepared by the British Committee for Standards in Haematology blood transfusion task force 2010 Blackwell Publishing Ltd, British Journal of Haematology, 152. http://www.bts.org.uk/Documents/Publications/Irradiation_BJH_2011.pdf. (Accessed Sep 16).

Chronic fatigue syndrome and associated disorders

9. Candidates diagnosed as suffering from chronic fatigue syndrome or the group of associated disorders eg fibromyalgia (FM), myalgic encephalomyelitis (ME), or post-viral fatigue syndrome (PVFS), are graded P8. Those with a history of this disorder lasting no more than 6 months, who have been certified by their GP or specialist to have had no further symptoms and have been undertaking activities compatible with military training and service for more than two years, should be referred to the single-Service Occupational Physician responsible for the selection of recruits before acceptance⁶.

Congenital, chromosomal and genetic disorders

- 10. There is a wide spectrum of congenital disorders. The following list is not exhaustive and advice should be sought from the single-Service Occupational Physician responsible for the selection of recruits in the case of those with genetic disorders not covered below. Guidance on candidates with specific conditions is detailed below:
 - a. **Huntington's disease.** Candidates known to be carriers of the gene associated with this condition are NORMALLY graded UNFIT⁷. Candidates with a proven, immediate family history of this condition are NORMALLY graded UNFIT unless known not to carry the gene⁷. Genetic testing should not be initiated solely for the purposes of recruitment.
 - b. **Phenylketonuria.** These candidates are graded P8. Although there is no clear evidence which provides overwhelming support for the need for lifelong dietary treatment, regular annual clinical review remains essential. Dietary restrictions are still generally necessary with protein supplements normally required and the military cannot guarantee that specialist diet will be available⁸.
 - c. **Malignant hyperpyrexia.** Candidates known to be carriers of the gene associated with this condition are graded P8 due to the risk of a patient with this condition obstructing the critical pathways associated with casualty treatment and evacuation.
 - d. **Neurofibromatosis Types 1 and 2.** Candidates known to be carriers of either of the genes associated with these conditions are graded P8. There are associated conditions of unpredictable onset, including intra-cerebral tumours (most commonly optic nerve gliomas), renal artery stenosis and thyroid carcinoma. The risk of seizures is approximately 20 x higher than that of the general population⁹.
 - e. **Familial Adenomatous Polyposis (FAP).** Candidates with a family history of FAP are at risk of developing this condition and its associated consequences. Individual assessment is required on employability and an opinion should be sought from the single-Service Occupational Physician responsible for the selection of recruits¹⁰.

⁶ Professor Simon Wessely's observations on CFS: 'Those who have fully recovered and been symptom free for 6 months to a year - in other words regard this as something that they have had, recovered from and put behind them, tend to do well. This may be due to simple passage of time, or receiving treatment such as cognitive behaviour therapy or antidepressants. Of more concern are those who are still symptomatic and/or consider themselves still to be particularly vulnerable to the effects of viral infections/stress or other precipitants. The key, therefore, should be first whether or not they have recovered, and second, whether or not they consider themselves still vulnerable to relapse' – personal communication 11 Dec 06. Also see Cairns R, Hotopf. M. (2005): "A systematic review describing the prognosis of chronic fatigue syndrome." *Occupational Medicine*; 55: p2 0-31.

⁷ The genetics of Huntington's disease are complex and the likelihood of a candidate developing Huntington's and the likely age of presentation are dependent on the number of gene repeats. In some cases it is possible to predict these with a high degree of certainty, based either on genetic testing of immediate relatives or of the candidate themselves. If there is clear evidence that a candidate is unlikely to develop Huntington's disease during a Service career, then they may, on a case by case basis, be considered FIT. Supporting evidence must be endorsed by an appropriately qualified and experienced specialist. Any successful candidate will require an appropriate medical marker.

⁸ From National Society for PKU 'Management of PKU' Feb 2004.

⁹ Adams & Victor: Principles of Neurology.

¹⁰ Practice parameters for the treatment of patients with dominantly inherited colorectal cancer (Familial Adenomatous Polyposis and Hereditary Non-polyposis Colorectal cancer). *Diseases of the Colon & Rectum 2003*,46 (8): pp1001-1012. Also see http://www.acpgbi.org.uk/. (Accessed Sep 16).

f. **Suxamethonium sensitivity.** Candidates who carry the atypical cholinesterase gene and who have been identified as requiring special anaesthetic precautions are to be graded P8 due to the risk of those with this condition obstructing the critical pathways associated with casualty treatment and evacuation.

Malignant disease

- 11. Candidates with a history of malignant disease are normally graded P8. In cases which have been successfully treated and are regarded as cured, candidates may be graded P2 provided that they have been discharged from regular follow-up and that no treatment is required¹¹. A clinical report is to be obtained giving risks of recurrence over time, risks of present or future complications from treatment given, and is to be forwarded to the single-Service Occupational Physician responsible for the selection of recruits for consideration. However, some drugs, particularly the anthracyclines¹² and bleomycin, and trans-thoracic radiotherapy are associated with cardiac and lung side effects respectively. All such candidates require appropriate cardiological or respiratory assessment. The following also apply:
 - a. **Acute Lymphatic Leukaemia (ALL).** Candidates with ALL may be graded P2 if they have remained free of recurrence for a period of 5 years from the completion of treatment.
 - b. **Acute Myeloid Leukaemia (AML).** AML has a high rate of relapse within a 5-year period. Candidates who remain disease-free for 5 years may be graded P2 following referral to the single-Service Occupational Physician responsible for the selection of recruits.

Conditions affected by climate

- 12. **Heat illness.** Candidates who have suffered an episode of heat illness (with or without physical exertion) are graded P8 unless they have been shown to thermoregulate normally during an exercise-in-heat stress test¹³. Candidates who suffer from any of the disorders associated with malignant hyperthermia, including an isolated abnormal ryanodine test, are graded P8.
- 13. **Disorders of sweating.** Candidates with hypohydrosis or anhydrosis affecting more than 5% of the body surface area should be graded P8 unless they are shown to thermoregulate normally during an exercise-in-heat stress test.
- 14. **Cold injury.** Candidates who have previously been discharged from Service due to non-freezing cold injury should be graded P8. Those who suffered an episode of freezing or non-freezing cold injury in the past but were not discharged due to this episode and who are now asymptomatic are to be referred for assessment at the Cold Injuries Clinic at the Institute of Naval Medicine. Following assessment, a decision on suitability for recruitment will be made by the single-Service Occupational Physician responsible for the selection of recruits.
- 15. **Raynaud's disease or phenomenon.** Candidates diagnosed with Raynaud's disease or phenomenon are to be graded P8 (also refer to Section 4 Annex C Cardiovascular).

Tropical disease

16. Candidates with a history of tropical disease who have made a full recovery and are considered cured may be graded P2. Enquiry should be made about previous foreign travel and residence and those with an equivocal history of tropical disease should be referred to the single-Service Occupational Physician responsible for the selection of recruits.

_

¹¹ Candidates who are being followed-up for the purposes of clinical trials, long-term studies into treatment or disease effects or for long-term holistic or psycho-social issues (where no active treatment or investigations are undertaken) may be considered to meet this criterion.

¹² Particularly used in leukaemias, malignant lymphomata and other myeloproliferative disorders.

¹³ Such as those available at the Institute of Naval Medicine.

Splenectomy

17. Candidates who have had a splenectomy, or have reduced splenic function, are more susceptible to a number of potentially life-threatening infections ie haemophilus influenzae, neisseria meningitidis, malaria, capnocytophaga canimorsus and babesiosis. Therefore, candidates who have had a splenectomy for any reason are graded P8. Candidates with reduced splenic function (eg partial splenectomy or splenunculus) who require regular prophylactic antibiotics or specific immunisations are also graded P8.

Transplantation of organs

18. Candidates with transplanted organs are graded P8. Candidates who have donated a kidney and are otherwise well may be graded P2 MFD not earlier than 6 months post-surgery, providing they meet the requirements of Section 4 Annex F Renal and Urological paragraph 9.

Immune system disorders

- 19. **Anaphylaxis and allergy.** Anaphylaxis is an increasingly common diagnosis and refers to a severe allergic reaction in which prominent dermal and systemic signs and symptoms manifest. These may include urticaria, angioedema, hypotension and bronchospasm. A past history of Type 1 (immediate IgE mediated reaction), regardless of trigger, is graded P8. This includes anaphylaxis to triggers including but not limited to fruits, nuts, seafood, eggs, food additives, natural rubber latex, vaccinations, venoms and stinging insects. The following points are to be considered in all cases:
 - a. Although it is not entirely possible to predict the severity of subsequent reactions based on previous history¹⁴, assessment must include clinical history, speed of onset, severity of response, frequency and the need for and level of treatment received.
 - b. IgE levels should be interpreted with caution as they are not independent predictors of symptom severity. There are no tests with adequate sensitivity and specificity to indicate who might be at risk of a fatal reaction.
 - c. Cross-reactivity often exists within groups of allergens (eg ground nuts and tree nuts).
 - d. The nature of Military Service is such that it is not possible to guarantee an individual's ability to self-police an allergy to the triggers above through labelling or identification of trigger constituents.
 - e. In cases of doubt over the history of allergy or where self-administered adrenaline injection has been prescribed but there is doubt over its necessity candidates may wish to ask their general practitioner to refer them to an allergist for opinion. Referral should be made to the Lead Consultant at one of the clinics shown in Table 1, which are approved by the British Society for Allergy and Clinical Immunology¹⁵. In the case of food allergy, allergic response could be assessed by serum or skin tests followed by a sequential challenge test (eg eating up to 10 peanuts). No reaction to the tests would equate to the same risk as an individual without a history of food allergy. Wasp and bee sting desensitisation may be undertaken although future anaphylaxis cannot be ruled out; however, those who had previously reacted to stings, but then went on to have further stings without problem could be considered to have no greater risk than the general population if they then sustain multiple stings¹⁶.

¹⁴ Pumphrey: Anaphylaxis: can we tell who is at risk of a fatal reaction?; *Curr Opin Allergy Clin Immunol* **4**: pP2 85-290.

¹⁵ http://www.bsaci.org/index.htm. (Accessed Sep 16).

¹⁶ Professor Frew, Joint Committee on Immunology and Allergy, presentation to MES WG Mar 11.

- f. Candidates with a history of allergy to drugs should have a careful history taken, including whether the allergy has been formally confirmed. Candidates with an allergy to morphine, drugs used in prophylaxis or treatment in a CBRN environment or anaesthetic agents likely to be used on operations should be referred to the single-Service Occupational Physician responsible for the selection of recruits and are likely to be graded P8.
- 20. Candidates with other immune system conditions that makes the candidate more vulnerable to developing infections are graded P8 due to the risks of worldwide deployed service.
- 21. Advice in all cases of doubt should be sought from the single-Service Occupational Physician responsible for the selection of recruits.

Table 1 – Recommended allergy and immunology clinics for military referrals.

Region	Hospital Clinic/Service
Bath	Consultant Paediatrician, Zone B11, Department; Paediatrics, Royal United Hospitals, Bath Foundation Trust, Combe Park, Bath BA1 3NG
Belfast	Consultant Immunologist, Immunology Day Centre, The Royal Hospitals, Grovenor Road, Belfast, Northern Ireland BT12 6BN
Birmingham	Senior Lecturer and Consultant Immunologist, University Hospital Birmingham, Mindelsohn Way, Edgbaston, Birmingham B15 2GW
Birmingham	Consultant Immunologist, City Hospital NHS Trust, Dudley Road, Birmingham, B18 7QH
Birmingham	Allergy & Clinical Immunlogy Consultant, Birmingham Heartlands Hospital, Bordesely Green, East Birmingham B9 5SS
Cambridge	Allergy & Asthma Consultant, The Allergy Clinic, Addenbrookes Hospital, Hills Road, Cambridge CB2 0QQ
Cardiff	Consultant Clinical Immunologist, Department of immunology, University Hospital Wales, Heath Park, Cardiff CF14 4XW
Edinburgh	<u>Dermatology Clinical Director, Department of Dermatology Lauriston Place Edinburgh</u> <u>EH3 9HA</u>
Essex	Respiratory Consultant, Department of Respiratory Medicine and Allergy, Broomfield Hospital, Mid Essex Hospital Services NHS Trust, Court Road Chelmsford CM1 7ET
Glasgow	Consultant Clinical Professor, West of Scotland Anaphylaxis, West Glasgow ACH, Dalnair St, Glasgow G3 8SJ
Hereford	Respiratory Consultant, Wye Valley NHS Trust, County Hospital, Union Walk, Hereford, Herefordshire HR1 2ER
Leeds	Consultant Clinical Immunologist, St James' University Hospital, Beckett Street, Leeds LS9 7TF
Leicester	Respiratory Consultant, Institute of Lung Health, Dept of Respiratory Medicine, Glenfield Hospital, Groby Road, Leicester LE3 9QP
London	Paediatric Allergy Consultant, Paediatrics, Kings College Hospital, 3rd Floor, Cheyne Wing, London SE5 9RS
London	Consultant Allergist, The Allergy Clinic, Guys Hospital, Great Maze Pond, London, SE1 9RT
London	Allergy & Respiratory Consultant, Department of Upper Respiratory Medicine, Imperial College NHLI, Guy Scadding Building, Royal Brompton Campus, Dovehouse Street, London SW3 6LY
London	Paediatric Allergy Consultant, St Marys Hospital, Imperial Colleage NHS Trust, Praed Street, London W2 1NY
Manchester	Consultant Allergist, The Allergy Centre, Wythenshawe Hospital, CRC NIHR Building, University Hospital, South Manchester NHS Foundation Trust, Manchester M23 9LT
Manchester	Consultant Immunologist, Manchester Royal Infirmary, Immunology Department, Oxford Road, Manchester, M13 9WL
Oxford	Consultant Immunlogist, The John Radcliffe Hospital, Level 4, Academic Street, Headley Way, Headington, Oxford OX3 9DU
Plymouth	Consultant Immunologist, Derriford Combined Laboratory, Level 7, Derriford Hospital, Plymouth, PL6 8DH

Sheffield	Consultant Paediatrician, Sheffield Children's Hospital, Western Bank, Sheffield. S10 2TH
Sheffield	Consultant in Immunology & Allergy, Clinical Immunology and Allergy Unit, Northern General Hospital, Herries Road, Sheffield S5 7AU
Southampton	Allergy & Imunology Consultant, Room CG89, Mailpoint 52, Level G, West Wing, Southampton General Hospital, Tremona Road, Southampton SO16 6YD
Staffordshire	Consultant Immunologist, University Hospital of North Staffordshire, Hilton Road, Stoke-On-Trent ST4 6QG
Surrey	Consultant Paediatrician, Paediatric Department, St Peter's Hospital, Guildford Road, Chertsey, Surrey KT16 0PZ

Sleep disorders

- 22. **Insomnia.** Candidates with a current or past history of insomnia should be assessed for possible underlying causes of the insomnia with a full physical and mental health assessment to exclude cardiovascular, respiratory, neurological, pain, medication, depressive or anxiety related causes. Any underlying cause identified should be considered elsewhere in Section 4. Candidates with any history of insomnia within the last 2 years, having no discernible underlying cause, causing significant dysfunction or requiring prescribed hypnotic medication¹⁷ must be referred to the single-Service Occupational Physician responsible for the selection of recruits and are likely to be graded P8.
- 23. **Hypersomnolence disorders.** As for insomnia, candidates with a current or past history of other hypersomnolence disorders should be assessed for possible underlying causes with a full physical and mental health assessment to exclude cardiovascular, respiratory, neurological, pain, medication, depressive or anxiety related causes. Any underlying cause identified should be considered elsewhere in Section 4. Candidates with a history of hypersomnolence with no underlying cause are graded P8
- 24. **Parasomnias.** Parasomnias are episodic disorders of arousal, partial arousal or sleep-stage transition that may be initiated or worsened by sleep. Candidates suffering Common parasomnias include:
 - a. **Non-Rapid Eye Movement (REM) sleep arousal disorders.** This includes sleep walking and night terrors¹⁸. Candidates with any non-REM sleep arousal disorder who are dependent on strict sleep hygiene measures or hypnotic medication to remain symptom-free are graded P8.
 - (1) **Sleep walking.** Candidates with a history of sleep walking experienced after the age of 13 are graded P8. A childhood history of sleep walking (up to age 13) should be referred to the single-Service Occupational Physician responsible for selection of recruits¹⁹ and those candidates who have not required specialist medical assessment or intervention may be graded P2.
 - (2) **Night terrors.** Candidates with a history of night terrors experienced after the age of 13 are graded P8. A childhood history of night terrors (up to age 13) should be referred to the single-Service Occupational Physician responsible for selection of

4-N-7

¹⁷ Pre-existing significant insomnia is a significant risk factor for development of PTSD or Depression post-Deployment. Insomnia varies from "normal" experience of sleeplessness from time-to-time to that requiring significant hypnotic treatment. Upto 14 days hypnotic treatment can be considered not significant treatment, thereafter it is. A one off or infrequent requirement for treatment (upto 14 days hypnotic treatment in any 3 month period) can also be regarded as not achieving the significance threshold for barring entry. However, in all cases, irrespective of the type or degree of treatment, careful consideration must be given to the effect on function in the military setting of sedating side-effects of hypnotic medication. Reference for increased risk of mental disorder in those with insomnia: Gehrman P; Seelig AD; Jacobson IG; Boyko EJ; Hooper TI; Gackstetter GD; Ulmer CS; Smith TC; for the Millennium Cohort Study Team. Predeployment sleep duration and insomnia symptoms as risk factors for new-onset mental health disorders following military deployment. SLEEP 2013;36(7):1009-1018.

¹⁸ Epidemiological evidence shows that these arousal disorders are common in childhood: 25% in under 5 year olds; but prevalence drops with age: up-to 6.5% in 13 and under; 2.3 – 2.6% in age group 15 – 64. Reference: International Classification of Sleep Disorders. 3rd Edition. American Academy of Sleep Disorders 2014; pp 233-239

¹⁹ To check for presence of any current sleep or other mental health symptoms, or history of hereditary factors, and consideration of employment group suitability with respect to functional requirements

recruits¹⁹ and those candidates who have not required specialist medical assessment or intervention may be graded P2.

- b. **REM sleep behaviour disorder.** REM Sleep Behaviour Disorder is characterised by the intermittent loss of [the usual] REM sleep electromyographic (EMG) atonia and by the appearance of elaborate motor activity associated with dream mentation. Candidates with a history of REM sleep behaviour disorder are graded P8.
- c. **Nightmare disorder.** Nightmares are frightening dreams that usually awaken the sleeper from REM sleep (Night Terrors are Non-REM sleep events and do not involve awakening). Candidates with a current history of nightmares causing significant dysfunction in daily activities are graded P8. Candidates with a past history of such nightmares should have no underlying psychiatric cause affecting fitness elsewhere in this policy, and should be symptom free for a period of two years before being accepted as fit for entry.
- 25. **Circadian rhythm sleep-wake disorders.** Candidates with a sleep specialist confirmed history of circadian rhythm sleep-wake disorder are graded P8.
- 26. **Narcolepsy.** Candidates with a sleep specialist confirmed history of Narcolepsy, current or past, are graded P8²⁰.
- 27. **Breathing related sleep disorders.** Candidates with obstructive sleep apnoea/hypopnoea syndrome are graded P8. Candidates with a past history should be referred to single-Service Occupational Physician responsible for selection of recruits.
- 28. **Restless leg syndrome.** This condition is common (general population prevalence is 15%), and in majority of cases is mild and causes little dysfunction. Candidates with a history of restless legs syndrome causing any disability should be referred to single-Service Occupational Physician responsible for selection of recruits. Underlying causes, including anaemia, chronic neck or spine pathology should be excluded.

-

²⁰ Narcolepsy is a life-long condition; it can be managed but not cured. Reference: Narcolepsy Fact Sheet. National Institute of Neurological Disorders and Stroke. http://www.ninds.nih.gov/disorders/narcolepsy/detail_narcolepsy.htm (Accessed Sep 16)

SECTION FIVE: THE INFLUENCE OF PARTICULAR CONDITIONS ON PULHHEEMS ASSESSMENT DURING SERVICE

GENERAL

- 1. Personnel in the Armed Forces are subject to both intensive training and physically arduous, mentally taxing, operational tours. Stringent entry standards are required; however for serving personnel the physical requirements placed on them may change as they progress through their career. Personnel must undergo appropriate medical review to ensure that their functional capacity is sufficient to meet the demands of their employment and that this employment will not have a deleterious effect on the health of the individual.
- 2. This Section gives guidance on appropriate medical grading during service. Adherence to this guidance will both ensure standardisation and a dynamic and responsive assessment of personnel with regard to their best employment within the Services, thus facilitating the most efficient use of manpower by management. Variance from these standards can only be sanctioned by a Service Consultant Occupational Physician either working independently or as part of a Service Medical Board or single-Service Medical Authority.
- 3. When there is a change to an individual's P grade and/or joint medical employment standard (JMES) their line manager must be notified and the employing authority informed including whether the change is permanent or temporary. Initial grading would normally be carried out by the Unit Medical Officer with advice from or referral to secondary care and/or occupational medicine if appropriate. Those with protracted or serious conditions that are likely to lead to a permanent change in P grade and JMES or requiring invaliding from the Service should be reviewed by a Service² occupational medicine consultant. Review by an appropriate secondary care specialist may be sought for advice on diagnosis, prognosis and treatment³.
- 4. Account should be taken of the following points and any areas of concern discussed with a Service Occupational Physician:
 - a. Individuals with conditions requiring periodic medical care, review or medication and those in whom deterioration might occur, may not be fully deployable, but may be suited for limited deployment or other employment.
 - b. In assessing overall employability it is not sufficient simply to consider an individual's fitness for their current defined post. It is important to consider the:
 - (1) General Service duties that may be required of all Service personnel.
 - (2) Specific branch/trade duties.
 - (3) Potential branch/trade duties required on deployed operations.
- 5. Certain categories of employment (eg Special Forces, Submariners, Parachutists, Divers and, Aircrew) require more stringent standards, which are promulgated separately.

Medical board procedures

Temporary downgrading

6. The majority of disorders will be managed in the first instance within primary healthcare. For those conditions likely to last more than 28 days (Army 56 days), alterations to the P grade and JMES are to be initiated by the unit medical officer. Referral to secondary care should be

.

 $^{^{\}rm 1}$ In accordance with JSP 950 Leaflets 6-7-1, 2 and 3 and single Service policy.

² 'Service' is defined as being employed by the single Services or DPHC.

³ 3 See Paragraph 13.

made on clinical need. Advice on employability can be sought from a Service Occupational Physician.

7. Individuals who are **temporarily incapable of any employment** and are under medical supervision or treatment either in hospital or the community are to be designated P0 as required by single-Service policy.

Permanent downgrading and medical discharge

- Any personnel developing a permanent condition that degrades their functional capacity for the foreseeable future⁴ may need to be permanently re-graded or invalided. Permanent grading will be undertaken in accordance with single-Service medical boarding procedures. The aim of the Medical Board is to determine the functional capacity of individuals and their fitness for work. Advice and recommendations are to be given to the employer, stating what limitations to employment are necessary as a result of an individual's medical fitness status.
- 9. Conditions compatible with limited employment within the Services will normally attract a change in P grade and JMES. To enable a judgement to be reached on the individual's medical grade there is a requirement to access all available information on an individual's employment, career, welfare, and medical detail. The 'wants and desires' of individuals, their medical officer and employing unit should not form the basis for a recommendation of a medical grade.
- 10. The decision on employment in a grade will be made by the employing authority, taking into account the ability of the Service to accommodate the employment restrictions. To achieve coordination of this process appropriate to single-Service requirements, employment boards (which may include representatives drawn from the manning authority, personnel management, employing unit and medical service) will take decisions on future employment based on medical board recommendations.
- 11. Medical discharge boards should be conducted in accordance with Section 6. A recommendation for discharge should only be made for those individuals who are assessed by a Medical Board as being MND.

Role of clinical consultants in the determination of employability

- 12. Occupational physicians and unit medical staff are responsible for the medical grading of personnel under their care. To support this, other consultants will provide opinions relating to restrictions to activities or functional capabilities
- 13. Defence clinical consultants, when asked, are to:
 - a. Provide a diagnosis and an occupationally orientated prognosis, together with as much generic advice as possible on medical restrictions affecting functional capability in the Service environment.
 - b. Provide supplementary information at the request of unit medical staff and Service Occupational Physicians or provide written reports to service Medical Boards.
 - c. In exceptional circumstances, make themselves available in person to assist Medical Boards/Boards of Survey at the request of the Board President.

5-2

⁴ Foreseeable future – The maximum period of validity of a Temporary P grade is normally 12 months for the RN and Army and 18 months for the RAF.

Principles of occupational medicine practice

- In order to assess fitness for work effectively, medical staff need to be aware of the employment requirements and working conditions of their patients. This awareness is best achieved through regular involvement in visiting and assessing workplaces, liaison with management, and through enhancement of knowledge of activities outside the immediate unit environment (eg Branch and Trade requirements or the requirements of specific courses that must be completed). Medical staff should gain experience of the wider Service and Joint environments through activities such as visits to other units, unit exercises and operational deployments. Essential to this undertaking is an understanding of the basic tenets of occupational medicine practice. Readers are directed to guidance from Faculty of Occupational Medicine (FOM) publications⁵.
- In the Services, the PULHHEEMS system describes individual functional capacity for work (See Section 1). In turn, this allows a 'fitness for work' grading to be conveyed to the employer using the JMES system (see Section 2), whilst at the same time maintaining the individual's medical confidentiality, protecting their health and facilitating their most appropriate employment within the organisation.
- All Medical Officers are to familiarise themselves with MOD Health and Safety (H&S) practices for reporting of Prescribed Diseases or Diseases reportable under RIDDOR⁶, as detailed This publication gives direction on the implementation of UK H&S regulations within the MOD for line managers to discharge their H&S responsibilities, and is important to medical officers who provide advice to patients and their line-management. In addition, medical officers should be aware of JSP 4428, and single-Service accident reporting systems, which should be initiated by line managers to report any condition (disease or injury) or dangerous occurrence developing in association with work.
- Whilst not having any direct responsibility for implementing H&S legislation (unless they also have direct line management responsibility), all healthcare workers who are employed with a remit to provide care in an occupational setting should be aware of the following basic tenets of good H&S practice:
 - All placements within the workplace should take account of any risk(s) to the individual following a risk assessment, and risks the individual brings to that workplace and co-workers and any special requirements of the work being undertaken (eg safety critical tasks).
 - Prevention is the key to minimising the risk of development of any occupational disorders.
 - Control measures should include the hierarchy of elimination, substitution, engineering controls, good working practice and the use of personal protective equipment (PPE).

⁵ http://www.fom.ac.uk/#

⁶ Reporting of Diseases Injuries and Dangerous Occurrences Regulations.

⁷ JSP375 MOD Health and Safety Handbook Volume 2 Leaflet 14.

⁸ JSP 442 Accident Reporting System.

EYES IN-SERVICE ANNEX A

1. Diseases of the eye and orbit are assessed and recorded under P. The entries under EE are records of visual acuity only. The uncorrected refractive limits are generally acceptable (with the exception of those undergoing refractive error surgical correction). Outside this range, eyes are rarely structurally normal, and unless all other visual parameters are normal, should lead to medical downgrading as indicated above. Consideration must be given to whether a lesion is progressive and likely to lead to future incapacity. Where doubt exists referral should be made to a consultant ophthalmologist. The following should be noted:

- a. The discovery or first development of any significant functional loss in visual acuity, or field defects, ocular mobility, or conditions or diseases affecting either intra-ocular (uveal tract, lens defects etc) or extra-ocular structures (ie lids, lachrymal system) in either or both eyes, will normally necessitate specialist opinion from an ophthalmologist, together with appropriate grading based on their advice.
- b. The combined impact on overall visual function of visual acuity, visual field, contrast sensitivity, colour perception, ocular mobility, and structural integrity of one or both eyes, will be reflected in the medical category. Primarily this will be determined by the limitation of functional capacity in one or both eyes, and its likely effects on the individual's employability. For example:
- (1) Individuals with right sided monocular¹ loss of vision and whose main military employment is largely dependent on binocular or uni-ocular vision (eg infantryman, pilots, air traffic control, vocational drivers etc). In these cases the visual function alone will not be the only determinant of their suitability for continued Service (See Section 5 paragraphs 7-10).
- (2) Those suffering from night blindness, which if affecting employment and ability to function in a military environment, would need to be regraded no higher than P3.
- c. **Special work problems and restrictions.** Those with significant defective vision are at increased risk of accidents, particularly in hazardous situations. Restrictions should apply to any individual with defective vision, restricted visual fields, or imbalance of the eyes with diplopia. Careful consideration needs to be given for those employed to work in the following circumstances:
 - (1) Work at heights, eg on ladders, gantries, or scaffolding, where they might overstep the boundaries and fall.
 - (2) Work in the vicinity of moving machinery.
 - (3) Driving of vehicles, both on public highways and heavy plant operation at construction, industrial, and other sites.
 - (4) Operation of cranes, hoists, and fork lift trucks².
- d. **Colour perception (CP).** Normal CP has greater importance in those single Services, and trade groups, which place a reliance on colour coding for safety and technical reasons. CP requirements are detailed in the respective single Service publications on employment standards.

¹ Uniocular. When one eye is normal and the other eye is either absent or is blind.

Blind Eye. An eye possessing a best attainable corrected Snellen visual acuity (VA) of 6/60 or worse.

Monocular. When an individual has two seeing eyes, one eye with normal vision but the other eye possessing a best corrected VA between 6/60 and 6/24.

² <u>JSP 950 Leaflet 6-6-2 'Medical standards for mechanical handling equipment operators'</u>. Safe use of lifting equipment. Lifting Operations and Lifting Equipment Regulations 1998. Approved Code of Practice and Guidance L113 HSE Books 1998 ISBN 0 7176 1628 2

Corneal Refractive Surgery

- 2. Corneal Refractive Surgery (CRS) for aviation and diving must be specifically approved by the single Service employing authorities before being considered. Guidance for aircrew is in AP1269A.
- 3. The following methods of surgical correction of myopia or hypermetropia may be considered suitable for serving personnel on an individual, case by case basis:
 - a. Photorefractive keratectomy (PRK)/ Laser epithelial keratomileusis (LASEK).
 - b. Laser in-situ keratomileusis (LASIK)
 - c. Intrastromal corneal rings (ICRs), otherwise known as intrastromal corneal segments (ICSs).
- 4. Radial keratotomy (RK), or astigmatic keratotomy (AK) and other form of intrusive refractive surgery, not listed above, are not acceptable. Serving personnel identified as having previously undergone these surgical operations should be brought before a Medical Board with an opinion from a service ophthalmologist.
- 5. In order to be considered for a grading of P2 all personnel who have undergone refractive surgery must fulfil the following criteria and provide supporting documentary evidence when required:
 - a. The pre-operatively refractive error was not more than +6.00 or –6.00 dioptre [Equivalent Spherical Error (ESE)] in either eye. To calculate the refractive error see Sect 4 Annex A Appendix 1.
 - b. The best spectacle corrected visual acuity meets the appropriate single-Service standard.
 - c. To protect against the development of issues such as UV light related haze on operations, at least 6 months to have elapsed since the date of the last surgery. In exceptional circumstances, on the advice of single Service CAs Ophth, this may be reduced to 3 months.
 - d. There have been no significant visual side effects secondary to the surgery affecting daily activities.
 - e. Refraction is stable, as defined by two refractions performed at least 1 month apart with no more than 0.50 dioptre difference in ESE in each eye.
- 6. It should be emphasised to personnel contemplating these procedures that they may not be rendered spectacle independent, and that there is a low risk of permanent side effects. They must be told that failure to meet the required standards as given above may result in them being regraded no higher than P3 and it is possible that significant deterioration in vision may require a grade of P7 or P8. This advice should be recorded in their medical record.
- 7. Personnel having refractive surgery are obliged to disclose it to their medical officer. The individual must be referred to a Service consultant ophthalmologist who will make assessment of the visual function and Service suitability. Personnel who do not meet the required criteria for P2 must be referred to the appropriate Medical Board.
- 8. These procedures are not available from public funding, unless authorised by the single Services in the following circumstances:

- a. As a requirement for individuals to meet operational imperatives (ie where correction by spectacles or contact lenses is not practicable for occupational reasons).
- b. Where correction by spectacles or contact lenses is not practicable for clinical reasons, on the recommendation of a Service consultant ophthalmologist.
- 9. A single revision of CRS is acceptable, subject to the same criteria above being met.

EAR, NOSE AND THROAT IN-SERVICE

ANNEX B

- 1. Diseases of the ear are assessed and recorded under P. The entries under HH are records of hearing acuity only as determined by audiometry. The discovery of any functional loss in hearing acuity (with or without tinnitus), balance problems (with or without nystagmus), or any of the conditions as detailed in Annex B should be reflected in the P quality. This will be determined primarily by the limitation of functional capacity in one or both ears. The effects on employability are reflected in JMES. The following should be noted:
 - a. There is a requirement for compliance with single Service Hearing Conservation Programmes (HCP), and current Health and Safety legislation.
 - b. Generally, perfect hearing is not essential, however, there may be circumstances when for safety and/or technical reasons, satisfactory hearing is deemed an absolute requirement of specific employment groups, eg aircrew, divers, sonar operators etc, and where there is a need to hear verbal signals and instructions. Speech pattern recognition (identifying any low frequency decrement) is a better indicator of hearing function than reliance on H grades, which do not discriminate between high and low frequency hearing loss.
 - c. Further guidance on interpretation of audiograms and deployability can be found in JSP 950 6-4-2.
- 2. **Balance.** Persistent or frequently recurring balance problems, no matter what the aetiology, should be reflected in the P quality.
- 3. **Tinnitus.** Tinnitus may occur alone or in combination with loss of hearing acuity. Any effect on function should be reflected in the P quality.
- 4. **Sleep Apnoea.** Service personnel who develop sleep apnoea should be graded according to their degree of disability and their treatment needs. Evidence of compliance with treatment should be sought to inform the grading decision.

- 1. When advising on employability and deployability a full assessment of cardiovascular risk should be undertaken. Particular consideration should be given to the risk of sudden or subtle incapacitation.
- 2. **Special work problems and restrictions.** In established cardiovascular disease, the following should be considered:
 - a. **Driving.** Fitness to return to driving after a cardiac event normally follows Driver Vehicle Licensing Authority (DVLA) guidance¹. Additionally an individual risk assessment for Service specific driving tasks must be undertaken.
 - b. Pacemakers and implantable cardiac defibrillators (ICDs)². Depending on the manufacturer and type of the pacemaker or ICD fitted, electromagnetic fields (EMF) from a wide variety of electrical devices may have the potential to produce induction currents, which can adversely affect the pacemaker causing dysrhythmias or cause the ICD to deliver a shock. Those with pacemakers/ICDs should be warned of this possibility, and employment may need to be restricted to avoid exposure to strong EMF.
 - c. **Environmental.** Ability to work in hot and cold climates, confined spaces or at altitude requires an individual risk assessment.
 - d. **Diving.** Vocational divers are covered by <u>BRd1750A</u> which prohibits those with an organic heart condition from diving. <u>BRd1750A</u> applies to military vocational divers and all sports diving under military auspices. If in doubt advice should be sought from Senior Medical Officer (SMO) Diving Medicine at the Institute of Naval Medicine.
 - e. **Flying.** Fitness to fly as a passenger on transport aircraft after a cardiac event normally follows British Cardiac Society (BCS) Guidance³. Guidance for aircrew is contained within <u>AP1269A</u>.

Hypertension

3. Hypertension is defined and measured in accordance with current National Institute for Health and Care Excellence. (NICE) guidelines⁴. Those with treated mild hypertension and an acceptable cardiovascular risk profile whose functional capacity is otherwise unaffected may remain at P2 with an L2 medical marker. All others must be appropriately re-graded.

Peripheral vascular disorders

- 4. Account should be taken of the following:
 - a. **Peripheral vascular disease.** Peripheral vascular disease is likely to affect functional capacity and personnel should be assessed and graded accordingly.
 - b. **Varicose veins.** The functional limitations imposed on those with minor varicosities will determine the grade. Following surgery with satisfactory outcome, individuals may be graded P2 MFD. Less than satisfactory treatment may necessitate the individual being

¹ For further information on this you are referred to the Driver Vehicle Licensing Authority (DVLA) website and the publication For medical practitioners - At a glance guide to the current medical standards of fitness to drive November 2014 https://www.gov.uk/government/uploads/system/uploads/system/uploads/attachment_data/file/418165/aagv1.pdf. (Accessed Apr 15).

² Details of the device must be established from the patient's cardiologist or surgeon and device manufacturer.

³ http://www.bcs.com/documents/BCS_FITNESS_TO_FLY_REPORT.pdf

⁴ NICE (2011) Hypertension Clinical management of primary hypertension in adults, NICE Guidelines CG 127, http://www.nice.org.uk/guidance/CG127 (Accessed Apr 15).

graded P3 MLD or P7, depending on the severity. In addition, the effect of varicose veins on the locomotor system is assessed under L of PULHHEEMS.

Cardiomyopathies

5. In dilated, hypertrophic and restrictive cardiomyopathy there is a risk of progressive haemodynamic deterioration, emboli and sudden death, even in patients who have previously been asymptomatic. All personnel are to be assessed by a cardiologist and a service occupational physician to assess their risks and functional limitations. The highest achievable grading will be P3 MLD.

Arrythmogenic Syndromes

6. A variety of syndromes leading to an enhanced risk of arrhythmia exist. These include Wolf-Parkinson White and other accessory pathways, Brugada Syndrome, and arrythmogenic right ventricular cardiomyopathy as well as isolated atrial fibrillation. Following assessment and treatment by a cardiologist and assessment by a service occupational physician grading should be based on the risk of arrhythmia, likely severity of the symptoms, need to restrict physical activities and the need for ongoing medication and review. Treatment may include implantation of a pacemaker or ICD (see 2.b above). Unless treatment fully resolves the symptoms and the risk of future episodes the highest achievable grade will be P3 MLD. Grading changes of those with asymptomatic incidental findings should be based on the advice on future risks of the treating a cardiologist and include discussion with a single-Service occupational physician as necessary.

RESPIRATORY IN-SERVICE

ANNEX D

- 1. Service Personnel developing respiratory conditions such as wheezing diatheses (inclusive of asthma), severe hay fever, spontaneous pneumothorax, chronic bronchitis, emphysema and/or bronchiectasis are normally graded no higher than MLD if any of the following apply:
 - a. Degradation in functional capacity and/or performance.
 - b. Failure to respond satisfactorily to treatment.
 - c. Dependent on treatment.

Special Work Problems and Restrictions

2. Certain work environments or safety critical areas require higher standards of respiratory fitness eg aircrew, divers, submariners and career employment groups utilising breathing apparatus or respiratory protective equipment, work in hyper/hypo-baric atmospheres, or in confined spaces¹.

Asthma

- 3. A proportion of Service Personnel will develop asthma in Service. It is essential that a high index of suspicion is maintained to differentiate occupational asthma from non-occupational causes. The following points should be noted:
 - a. Any work involving potential respiratory sensitisers is to be subject to a risk assessment, together with appropriate health surveillance for the Service Person.
 - b. The most frequently reported causative agents include isocyanates, flour and grain dust, colophony and fluxes, latex, animals, aldehydes and wood dust.
 - c. Certain employment groups are at increased risk of developing occupational asthma. These include individuals directly or indirectly exposed to hazards arising from the following activities/occupations: paint spraying, baking, chemical workers, animal handling, welding, plastics and rubber workers, metal working, electrical and electronic production workers, painting, dental professionals, printers, soldering, safety equipment fitters, healthcare workers, and laboratory workers.
 - d. A diagnosis of occupational asthma should only be made following appropriate investigation by a Consultant Respiratory Physician in liaison with a Service Consultant Occupational Physician. The aim of management is to identify the cause and minimise or remove the individual from further exposure. Complete avoidance of exposure may or may not improve symptoms and bronchial hyper-responsiveness.
 - e. Personnel with pre-existing non-occupational asthma may be permitted to work with respiratory sensitisers, providing that they follow the standard requirements for exposure control and health surveillance.
- 4. Irrespective of causation, Service Personnel should be graded appropriate to their:
 - a. Employment.

⁻

¹ Further details contained in BRd 1750A Handbook of Naval Medical Standards, AP 1269A Royal Air Force Manual of Medical Fitness

- b. Residual function.
- Requirement for supportive therapy.
- d. Control of symptoms.
- 5. Service Personnel with a diagnosis of asthma who are taking treatment up to and including the "initial add-on therapy" step of the British Thoracic Society 2016 Guideline² will normally be graded no higher than MLD. If asthma is well controlled (no exacerbations, less than 3 doses per week of reliever therapy and an ACT score³ greater than 23 on two occasions at least 6 weeks apart) for 6 months, Service Personnel may potentially be graded MFD following review by a Service Consultant Occupational Physician.
- 6. **Poor symptom control or continuous or frequent use of oral steroids.** Service Personnel unable to achieve complete control⁴ or continuous or frequent use of oral steroids are normally graded MND.
- 7. **Exercise induced asthma.** For most patients, exercise induced asthma is an expression of poorly-controlled asthma and regular treatment including inhaled corticosteroids should be reviewed. Service Personnel should be graded as above.

Tuberculosis

8. Service Personnel infected with respiratory tuberculosis should be initially graded MND pending Consultant Respiratory Physician and Service Consultant Occupational Physician review.

Sleep apnoea

9. Service Personnel who develop sleep apnoea should be graded according to their degree of disability and treatment needs. Objective evidence of adequate control⁵ should be sought to inform the grading decision. The opinion of a Consultant Respiratory Physician is to be sought. Service Personnel with a confirmed specialist diagnosis of sleep apnoea are normally graded no higher than MLD.

² British Thoracic Society – British Guidelines on the Management of Asthma (2016) Page 70 https://www.brit-thoracic.org.uk/quality-improvement/guidelines/asthma (accessed Aug 19).

³https://www.asthma.com/content/dam/NA_Pharma/Country/US/Unbranded/Consumer/Common/Images/MPY/documents/80108R0_Ast hmaControlTest_ICAD.pdf (accessed Dec 16).

⁴ Complete control is defined in British Thoracic Society – British Guidelines on the Management of Asthma (2016) Page 62 https://www.brit-thoracic.org.uk/quality-improvement/guidelines/asthma (accessed Aug 19).

⁵ Apnoea Hypoapnoea Index (AHI) within the normal range, greater than 90% usage data of CPAP machine and Epworth Sleepiness Score <7.

General

1. Alimentary system problems are common and can result in chronic ill health and/or invaliding. The presence of continuing signs and symptoms should be managed in accordance with current clinical guidelines. Individuals may require to be permanently graded to P3 or P7, or recommended for medical discharge (P8). Each case should be dealt with on merit.

Special work problems and restrictions

2. Non-infective conditions generally require no specific work limitations although the avoidance of stressful environments, shift work, and remote locations may be advisable in those with ongoing symptoms. Those with infective disease must be excluded from work involving food handling until medically certified as free from disease and fit to work. Similarly, healthcare workers will require restriction of duties dependent on the relative risk of the infective agent, and their speciality.

Dyspeptic Disease

3. Following a diagnosis of presumptive peptic ulcer disease, individuals are graded P7 MND for three months. After completion of a course of ulcer healing therapy and/or Helicobacter pylori eradication treatment, those who remain symptom-free at the end of the 3 month period may be graded P2 MFD. In cases complicated by perforation or significant haemorrhage, individuals are to be made P7 MND for one year before considering a return to P2 MFD, subject to satisfactory endoscopic review.

Irritable Bowel Syndrome (IBS)

4. The response of IBS to treatment is very variable. Grading will be dependant upon the influence of symptoms on the ability to conduct activities of daily living as well as work roles. Of particular importance is the ability to avoid dietary triggers when deployed away from home. Only those with mild symptoms not requiring medication and who have triggers that are easily avoidable if deployed may be P2 MFD.

Coeliac disease and gluten sensitivity

- 5. Care should be taken in grading patients with Coeliac disease as there is evidence that poor dietary control is associated with a wide range of potential GI and non-GI complications, including malignancy. The MOD is responsible for ensuring service personnel have access to a gluten free diet as far as is reasonably practicable; however, gluten-free ration packs are not available. The potential inability to provide a continuous gluten-free diet means that service personnel with Coeliac disease must have a risk assessment performed by a single-Service occupational medicine consultant prior to deployment. The assessment must include defining whether a reliable supply of gluten-free produce is available and whether appropriate catering facilities exist to produce gluten-free food in the proposed deployed location
- 6. Where sSs are able reliably to provide a gluten free diet and appropriate preparation facilities, or where appointments or postings are to units in countries¹ where a gluten-free diet is achievable then a grading of no higher than P3 MLD (ALME L3) may be awarded by a consultant occupational physician led Medical Board. Appropriate Med Lim Codes or restrictions may need to be applied to ensure that the service person is not moved away from that assessed catering facility and supply chain. Where any of these requirements are not achievable a grading no higher than P7 MND is to be applied.

.

¹ Including BFG, Cyprus and Gibraltar, appointments to embassies in developed countries, exchange posts in developed countries and other appointments where pre-boarding assessment indicates that the service-person can achieve an unbroken gluten-free diet.

Inflammatory bowel disease

7. Medical grading of patients with inflammatory bowel disease relates to the level of ongoing symptoms, number and frequency of recurrences, known triggers (and the ability to avoid them) and the requirement for medication, surgery and follow-up. They are to be graded no higher than P3 MLD.

Liver Disease

- 8. Abnormal liver function (2 tests 1 month apart) should be graded dependant upon the underlying cause. Chronic viral hepatitis, particularly in HCW, is graded in accordance with current BBV policy. Other conditions, including hepatosplenomegaly, are likely to achieve P3 MLD as the highest grade, dependant upon response to treatment and the requirement for medication and regular follow up. Those with Gilbert's Syndrome may remain P2 MFD with an L2 risk marker unless episodes are sufficiently frequent to affect daily living or ability to work.
- 9. The discovery of evidence of oesophageal varices on endoscopy will lead to a grading no higher than P7 MND.

Pancreatitis

10. Patients with a single episode of pancreatitis may be graded P2 MFD at least 6 months post full recovery as long as any underlying or triggering cause has been treated. Those with recurrent episodes should be graded no higher than P3 MLD.

Food allergy and intolerance

11. Those developing food allergy or intolerance in service should be graded on a case by case basis. Grading should be based on the effects of symptoms, the severity of the response and the ability to avoid triggers in the deployed environment. The advice of a specialist physician in allergy or immunology should be sought. Those formally diagnosed with a significant allergic response sufficient to require them to carry a self-administered adrenaline autoinjector (Epipen or similar) are to be graded no higher than P3 MLD in accordance with single Service policies. See also Leaflet 6-7-5 Annex N – Miscellaneous Conditions.

Bariatric surgery

- 12. NICE advises that bariatric surgery is appropriate for patients with a BMI < 50 or < 40 if additional complications are present. Because of the potential for post-operative complications, including mal-absorption, dumping syndrome and problems with anastomoses and gastric bands, all personnel contemplating gastric surgery should be carefully counselled about the occupational implications. Due to a very high rate of post-operative mal-absorption requiring nutrient supplementation, Roux en Y surgery should be avoided. Those undergoing surgery are to be graded P7 MND for a minimum of 2 years.
- 13. The highest long-term medical category likely to be achievable post bariatric surgery is P3 L3 MLD. This assumes successful surgery at least 2 years before, with a stable weight and entirely free from complications.

RENAL AND UROLOGICAL IN-SERVICE

ANNEX F

Urinary disorders

- 1. A persistent abnormality of urinalysis (defined as haematuria of any degree and proteinuria above "trace" on dipstick testing on each of three occasions), with or without raised blood pressure, may indicate a nephrological pathology. Any persistent abnormality should be investigated, with referral to a nephrologist, as appropriate.
 - a. **Nephro-urological conditions.** Permanent medical grading of P3 or P7 should be considered for any personnel developing nephro-urological conditions (eg nephritis (acute glomerulonephritis, pyelonephritis), urinary incontinence, recurrent urolithiasis or malignant disease), which either degrades the functional capacity and/or fails to respond satisfactorily to treatment (whether there is persisting abnormality of urinalysis, blood pressure, and glomerular filtration rate/creatinine clearance rate, or not).
 - b. **Special work problems and restrictions.** Personnel with renal or urinary tract disease should be subject to appropriate risk assessment prior to any deployment or posting. (See Leaflet 6-7-5)

Impaired renal function

2. Individuals requiring haemodialysis, peritoneal dialysis or renal transplantation need regular specialist follow-up and are likely to have limited functional capacity. They will normally be unfit for operational deployment and will have major employment limitations.

Nephrectomy

- 3. PULHHEEMS assessment post-nephrectomy will depend on the underlying pathology and the surgical outcome.
 - a. If the nephrectomy was for disease or trauma and specialist opinion confirms that the remaining kidney is fully functional, with no likelihood of recurrence or progression of the condition, a grading of P2 can be considered.
 - b. Those who have donated a kidney should be graded P7 for a minimum period of 6 months after which, if fully fit, they may be re-graded P2.

Peripheral neuropathy

1. Peripheral neuropathies require consideration of impact on function and any underlying condition. This is further considered under the respective sections dealing with upper and lower limb function at Section 5 Annex K.

Seizures and epilepsy

- 2. Those who suffer a single seizure after entry are to be referred for a neurological opinion. are to be graded P7 MND for a period of 18 months with appropriate risk assessment and restrictions on employment. Certain occupations may be incompatible with a history of even a solitary seizure¹ and specific employment guidance should be sought.
 - a. **Single seizures.** Individuals in whom no abnormalities are detected, including a normal MRI brain and EEG, may be graded P2 following a period of 18 months without anticonvulsant treatment dependent upon consultant neurologist advice on the risk of recurrence.
 - b. **Recurrent seizures.** Whilst under investigation individuals are to be graded no higher than P7 MND. Those who are well controlled on medication are to be permanently graded P7, or exceptionally P3 after assessment by a Service consultant occupational physician. All others are to be permanently graded no higher than P7 or P8 as appropriate.

Head injury^{2,3}

- 3. Head injuries may be classified according to the following criteria:
 - a. Mild.
 - (1) Loss of consciousness lasting for less than 30 minutes.
 - (2) Amnesia lasting for less than 30 minutes.
 - b. **Moderate.** Any of the following
 - (1) Loss of consciousness lasting for 30 minutes to 24 hours.
 - (2) Amnesia lasting for 30 minutes to 24 hours.
 - (3) An undisplaced skull fracture.
 - c. Severe. Any of the following:
 - (1) Loss of consciousness for more than 24 hours.
 - (2) Amnesia for more than 24 hours.

¹ Aircrew, divers and holders of DVLA Group 2 licence.

Annegers, JF et al; A population-based study of seizures after traumatic brain injuries. N Engl J Med. 1998 Jan 1;338(1):20-4.
 Christensen, J et al; Long-term risk of epilepsy after traumatic brain injury in children and young adults: a population-based cohort

study. Lancet 2009; 373: 1105-10.

- (3) Intracranial haematoma⁴.
- (4) Depressed skull fracture.
- (5) Brain contusion.
- 4. Personnel with a history of head injury, particularly those with a history compatible with a severe or moderate injury or with evidence of persisting intellectual, psychiatric or neurological disability require neurological and psychometric assessment. Where there is considered to be a significant risk of post-traumatic epilepsy, grading should be in accordance with that outlined at paragraphs 2 above.

Loss of consciousness/altered awareness

- 5. A full history should be taken including any pro-dromal symptoms, length of time unconscious, degree of amnesia and any confusion on recovery. A witness account should be recorded if available. Neurological and/or cardiac investigation should be carried out as appropriate. Temporary re-grading (P7) and restriction of duties will be necessary to protect the individual whilst the episode is investigated. Personnel should be considered unfit to handle live weapons during this period. Grading thereafter will depend on the immediate or likely longer term effect on functional capacity.
- 6. **Simple faint.** Unless the diagnosis is uncertain non-recurrent cases may be graded P2. For those with recurrent faints, an assessment of the effect on functional capacity and risk of recurrence should be made and an appropriate medical grade given.
- 7. Unexplained loss of consciousness or altered awareness. Candidates who have had a single episode with no definite provoking factors, who have normal cardiac and neurological examination and a normal ECG, may be graded P2 providing 6 months have elapsed since the episode and they are considered to be at low risk of recurrence. Those whose job requires DVLA Gp 2 licensing will require a downgrading for a minimum of 12 months. Candidates with recurring episodes where no underlying cause can be found should be graded according to effect on functional capacity in role, but they should remain downgraded for at least 12 months after the last episode.
- 8. Loss of consciousness/altered awareness where epilepsy is strongly suspected. Factors that may indicate that epilepsy is a likely diagnosis include amnesia for more than 5 minutes, injury, tongue biting, incontinence, having remained conscious but with confused behaviour and post attack headache. Such individuals should be managed in accordance with para 2 above.

Narcolepsy

9. Personnel suffering from narcolepsy should normally be graded no higher than P7. A higher grade may be considered provided satisfactory control of symptoms has been achieved on medication. Individuals may be graded P2 once off medication and asymptomatic for one year.

CVA (including TIAs)

10. Personnel who have had a CVA should be graded initially according to their functional ability, risk of recurrence and neurological deficit. Personnel who have been fully investigated and made a full recovery remain at increased risk of a further event. They should normally be graded no higher than P3.

⁴ All intracranial haematomata, including epidural, subdural and subarachnoid.

Headaches and migraine

11. Personnel suffering from recurrent headaches should be graded according the frequency of the headaches, requirement for medication, degree of functional impairment and the requirement to avoid trigger factors.

Demyelinating disorders

12. Personnel diagnosed with demyelinating disorders would normally be graded no higher than P7 as it is not always possible to predict a deterioration in their symptoms. However, the natural history may encompass a very benign disease course and following neurological advice and input from a consultant occupational physician a grade of P3 may be awarded. Disease modifying medications have further implications for grading and in most situations individuals will normally be graded no higher than P7 and specialist advice sought should any immunisations be required.

Neurological tumours

13. Personnel undergoing treatment for neurological tumours would normally be graded no higher than P7. Grading will otherwise depend on effect on function, requirement for treatment, specialist review and likelihood of sudden and/or subtle incapacitation.

Diabetes Mellitus

- 1. Clear differentiation should be made between those personnel suffering from insulin dependent or non-insulin dependent diabetes mellitus, and the respective risk levels with military service. For this reason all cases should be graded P7 MND when first diagnosed while their disorder is assessed. Following assessment, they are graded as follows:
 - a. **Type 2 Diabetes Mellitus (Type 2 DM).** Those suffering from Type 2 DM (ie asymptomatic glycosuria), controlled by diet or medications without a significant risk of hypoglycaemia¹, with no other signs or risk factors present (e.g. a personal/family history of heart disease, stroke, other endocrine dysfunction, smoker, obesity, hyperlipidaemia, eye or renal disease etc), and whose functional capacity is otherwise unaffected, may exceptionally be graded P2 MFD L2² by a formal medical board or Regional Occupational Health Consultant. **Normally those in this category with anything other than asymptomatic glycosuria should be graded P3 MLD or P7 MLD/ MND.** This includes individuals on sulphonylurea and other medications which carry a risk of hypoglycaemia including those requiring insulin therapy.
 - b. **Type 1 Diabetes Mellitus (Type 1 DM).** Those with well controlled Type 1 DM, **with no other signs or risk factors present** (see paragraph 1.a above), and whose functional capacity is otherwise unaffected, may be graded P3 MLD³; all others should be graded no higher than P7.
 - c. **Special work problems and restrictions.** There remain a number of restrictions that need to be considered for patients with DM:
 - (1) Fitness for aircrew, diving, seafaring duties, adventurous training etc.
 - (2) Vocational Group 2 drivers are subject to individual assessment by DVLA.
 - (3) Shift work and lone working can be problematic; however, if sensible working practices are adopted, it is not absolutely contra-indicated.
 - (4) All require appropriate access to both nutritional and medical supportive facilities.
 - (5) Personnel who undertake safety-critical tasks or who are lone workers should have a risk assessment of their risk of hypoglycaemia and incapacitation before returning to those duties.

Other Endocrine Conditions

2. Those with a history of other endocrine disorders (ie thyroid, parathyroid, adrenal or pituitary dysfunction), which either degrades the functional capacity and/or fails to respond satisfactorily to treatment or replacement therapy, may need to be graded P3 or P7, or P8, as appropriate. A risk assessment including the treatment requirements, the need for follow-up, and the potential for sudden onset of symptoms must be undertaken as part of the grading decision.

³ This is subject to individual circumstances and single Service requirements.

_

¹ Biguanides, Thiazolidinediones and Alpha Glucosidase inhibitors.

² Specific occupational groups require further assessment in accordance with single-Service Regulations, BR1750A and AP1269A.

DERMATOLOGICAL IN-SERVICE

ANNEX I

General

1. Extensive skin disease is not compatible with operational military service (ie on ships, in front line units, or aircrew); limited skin disease may be acceptable. Acute self-limiting conditions do not affect permanent grading, unless they recur frequently. The types of chronic skin conditions, which may cause concern, were previously detailed in the Section on entry standards (eg acne, eczema/dermatitis, psoriasis, hyperhidrosis, vitiligo, chronic urticaria and angio-oedema, photosensitivity or photo-aggravated dermatoses, cold-related dermatoses, viral warts, malignant melanoma, and keloid or scarring etc). It is important with serving personnel that differentiation is made between dermatoses of non-occupational and occupational aetiology and recorded in the F Med 4; however, it is not always easy to make this distinction. Those with a history of any significant skin disorder as detailed above, which either degrades the functional capacity and, or fails to respond satisfactorily to treatment, may require to be graded P3 or P7, or medically invalided (P8), as appropriate, see JSP 950 leaflet 6-7-5 paragraphs 7-10.

Special work problems and restrictions

- 2. Some or all of these diseases may be subject to significant exacerbation with exposure to extremes of climate (ie humidity, cold, heat, and sunlight), stress, or specific employment groups (catering, vehicle mechanics/automotive repairs, healthcare work, etc), which may degrade the individual's performance.
 - a. **Public health risks.** Certain skin disorders can be at significantly increased risk of developing bacterial colonisation, which makes working in the catering trade, and also certain areas of health care, both impractical and contraindicated for potential public health reasons.
 - b. **Employment considerations.** Whatever the aetiology, some dermatoses may not be amenable to treatment, and/or it may not be reasonably practicable for the individual to avoid the exacerbating hazard in that employment. Therefore those individuals who develop skin conditions require an individual assessment. In these cases it may be necessary to consider change to the employment. An individual may therefore be unfit to continue in a specific branch, although remaining fit for general service employment. If a branch transfer is unable to be arranged, medical invaliding may then be necessary.

Occupational skin disorders

3. Certain employment groups (eg caterers, healthcare and laboratory workers, painters, printers and vehicle mechanics) are at increased risk of developing occupational dermatitis. This is an industrial prescribed disease and as such may be eligible for compensation. It is important therefore that the diagnosis should only be made following extensive and appropriate investigation by a consultant dermatologist in liaison with a Service consultant occupational physician. Prevention is the key to minimising the risk of developing of occupational disorders; see Section 5 paragraphs 14-17.

Females general

1. With the development of breast, menstrual or pelvic disorders a menstrual, obstetric and gynaecological history should be taken and recorded. The effect on functional capacity at work should be evaluated. Examination of the breasts or genitalia is not required at routine PULHHEEMS examination and should not be performed unless there is a clinical need, and a systematic enquiry indicates doing so. Any condition which either degrades the functional capacity and, or, fails to respond satisfactorily to treatment, may lead to permanent regrading P3 or P7, or medical discharge (P8), as appropriate; see JSP 950 leaflet 6-7-5 paragraphs 7-10.

Gynaecological conditions

- 2. Further details on those conditions which commonly arise are given below:
 - a. **Amenorrhoea.** Pregnancy should always be excluded. Amenorrhea is not usually problematic and may be related to dietary factors and/or exercise. Specialist opinion may be necessary to confirm the absence of serious pathology. JSP 950 Leaflet 6-7-5 Annex L refers to those cases associated with Anorexia Nervosa.
 - b. **Dysmenorrhoea.** Those with mild or moderate dysmenorrhoea, manageable with mild analgesia, may be graded P2.
 - c. **Endometriosis.** This can be recurrent and progressive in up to 50% of patients. Medical grading will be dependent on the severity and degradation in functional capacity.
 - d. **Uterine and ovarian tumours.** Those with significant fibroids, and other uterine or ovarian tumours who have benefited from successful treatment of benign lesions, may after six months, be re-graded P2. Small fibroids and ovarian cysts, particularly recurrent follicular cysts, are common and, more often than not, benign. If there is no effect on functional capacity, individuals may be graded P2.
 - e. **Uterine prolapse.** Those undergoing surgical repair should be graded P7R or P0 as appropriate, but with successful outcome they may be re-graded P2 after 6 months. Women with residual deficiencies (eg symptomatic prolapse), affecting their functional capacity will be graded P3, P7, or P8, if their condition renders them unfit for any form of military service.
 - f. **Cervical dysplasia.** Those with abnormalities previously found at cervical cytology are graded as follows:
 - (1) **CIN 1 or 2.** May remain P2, but require continuing review at six monthly intervals, or as determined by clinical best practice.
 - (2) **CIN 3.** On diagnosis, re-grading to P7R should be undertaken. Following satisfactory surgical treatment (with concomitant temporary downgrading), and following two consecutive normal smears, at least six months apart, they may be regraded P2.
 - (3) Invasive carcinoma and other cervical abnormalities. A history of invasive carcinoma and those with other cervical abnormalities, including viral changes, should be treated on individual merit and graded accordingly.
 - g. **Polycystic Ovary.** A history of polycystic ovary, which has never given rise to acute symptoms, need not affect the grading; all others who develop symptoms should be graded appropriate to any degradation in function.

Infertility

3. Infertility affects 1 in 7 couples in the UK. It may not produce physical symptoms but the emotional stresses can be considerable. The mental and physical stresses, on both men and women, of the necessary investigations and treatments may affect functional capacity and deployability and the individual should be graded appropriately.

Obstetric conditions

- 4. Personnel who declare pregnancies are graded P4 until at least three months after vaginal or caesarean delivery. Provided that evidence is available of satisfactory post-natal examination, requiring no subsequent follow up, they may then be graded P2, if their functional capacity meets the Standards. Extant policy on pregnant workers is detailed in Appendix 1. The latter details the obligations on Serving personnel when first aware of pregnancy, and on the employer with regard to a risk assessment of the workplace where servicewomen are, or may be employed, under the Management of Health and Safety at Work Regulations 1999.
- 5. After pregnancy, consideration should be given for a rehabilitation or remedial exercise programme to enable them to attain the necessary fitness and functional capacity, and this may preclude regrading to P2 for a further 3 to 6 months; with any caveat in accordance with current single-Service policies. The employment policy concerning maternity arrangements for servicewomen is published elsewhere.
- a. **Spontaneous or induced termination of pregnancy.** If not already graded P4, personnel should be temporarily graded P3R or P7R as appropriate, for at least four weeks after a spontaneous or induced termination of pregnancy.
- b. **Ectopic pregnancy.** Those suffering an ectopic pregnancy should be graded P7R. If treatment has been successful and without complication, they are usually fit to be considered for upgrade to P2 approximately 6 months following surgery; this decision should be made on individual functional capacity.

INSTRUCTIONS FOR THE GUIDANCE OF MEDICAL OFFICERS: MEDICAL ASPECTS OF LEGISLATION ON PREGNANT WORKERS

References

- A. Management of Health and Safety at Work Regulations 1999.
- B. JSP 375 Vol 2 Ch 36
- C. JSP 950 Part 6 Section 7. PULHHEEMS: A Joint Service System of Medical Classification.
- D. New and Expectant Mothers at Work; a guide for employers (HS(G)122)HSE, 1994¹.
- E. Workplace (Health Safety and Welfare) Regulations 1992.
- F. D/AMD/521/3/1 dated 6 January 1995

Introduction

- 1. UK legislation to implement the European Directive on Pregnant Workers was introduced with effect from 1 December 1994. The legislation has been formulated under regulations which apply to three groups of workers:
 - a. Those who are pregnant.
 - b. Those who have recently given birth
 - Those who are breast feeding.
- 2. The regulations require employers to:
 - a. Assess the risks to the health and safety of each of these groups of workers.
 - b. Ensure that these workers are not exposed to risks identified by the risk assessment, which would present a danger to their health and safety.
 - c. Change the worker's hours and, or conditions of work to avoid any risk that remains after taking whatever preventative action is reasonable; or offer alternative work; or if neither is possible, give paid leave from work for as long as is necessary to protect the health and safety of the worker, her unborn child or breast-fed infant.
- 3. The Management of Health and Safety at Work Regulations (MHSWR) 1999 (at Reference A) requires employers to assess risks to all workers and in respect to MOD is further described in Reference B. Although the specific provisions of Reference A apply only after the pregnant worker has informed her employer of her pregnancy, it is prudent that assessments of workplaces, where Service women are, or may be, employed, should include anticipatory consideration of the three groups described in paragraph 1, above.

Definitions

4. The phrase "new or expectant mother" means a service woman who is pregnant, who has given birth within the previous six months or who is breast-feeding. "Given birth" is defined in the regulations as "delivered a living child or, after 24 weeks of pregnancy, a stillborn child".

Broad employment policy

5. It is for line managers to conduct the assessments and to define the physical demands of particular jobs, seeking advice from specialists, including medical officers, as required. The appropriate employment of Service women is a command responsibility but medical officers might contribute advice to assist in this process. Medical officers will be expected to provide opinion on the employability of individual pregnant Service women in specified jobs according to their particular medical circumstances. A medical officer will, in practice, assist managers in

conducting risk assessments in relation to individual pregnant Service women and their abilities to perform the tasks entailed without undue risk to their health and safety, or that of the unborn babies.

Employment category

- 6. **On diagnosis of pregnancy.** A pregnant Service woman is to be regarded P4 qualified by the appropriate single-service caveat, i.e.:
 - a. RN "No Sea Service"
 - b. Army "RE(PP)".
 - c. RAF "Base Areas Only".
- 7. She will remain in this category until regraded, when and as appropriate, after the birth of the child or following miscarriage. This PES is intended to protect both mother and child from the more environmentally extreme exposures of military service. It is unnecessary for pregnant women serving abroad to be returned to UK provided that adequate primary and obstetric care is available, or unless they elect to do so. However, judgements about specific employability, within this restricted PES, are likely still to be required.
- 8. **On return to work.** Employment grading on return to duty post-confinement should address both the requirements of Reference A and any residual physical limitations on the ability of the Service woman to resume military duties. Medical re-grading will take account of any specialist post-natal review but will in any case be determined on an individual basis. The P4 category may require to be extended beyond return to duty. (Authority for regrading Any medical officer with responsibility for primary or relevant specialist care of a Service woman may regrade her on diagnosis of pregnancy and on return to duty post-confinement¹).

Specific Service considerations

- 9. Service women covered by Reference A should not be required to undertake training or testing in relation to otherwise compulsory military fitness standards. They might, however, be encouraged to participate in suitably graded low impact recreational aerobic exercise as advised by medical officers while avoiding contact sports and games.
- 10. Reference D makes explicit mention of both night work and shift work, which are common components of military employment. The principles described at paragraph 5 will inform decisions on the appropriateness of such work for Service women considered under the provisions of Reference A. These Service women may be excused such work at the discretion of medical officers
- 11. Any authorised medical officer (see paragraph 10) may, of course, further downgrade the PULHHEEMS or adjust the medical employment standard as the individual conditions and circumstances of pregnant Service women require.

Specific hazards

12. Tables 1 and 2 below, adapted from Reference D, list the agents, processes and working conditions included in the initiating European Directive and directs attention to other relevant legislation; additionally, however, Reference E requires employers to provide rest facilities for pregnant women and nursing mothers and should be private and include or be close to sanitary

_

¹ Subject to single-Service procedures on medical grading.

facilities. This should be used as a checklist (not exhaustive), and due account must be taken of the factors considered during risk assessment. Reference A requires that women to whom the regulations apply should not be exposed to these identified hazards at work if assessment reveals risk which exceeds that which might be encountered outside the workplace.

13. In addition to Table 1, the annotated bibliography at Reference F should provide additional and more Service-specific assistance to medical officers who will also have access to specialised advice through usual Service channels.

Tables:

- 1. Agents, Processes and Working Conditions Giving Rise to Risk in Pregnancy and Breastfeeding.
- 2. The Employability of Pregnant Service Women Guidelines for Medical Officers (Revised) January 1995.
- A. Occupational Hazards To Pregnant Servicewomen- Physical Agents
- B. Occupational Hazards To Pregnant Servicewomen- Biological Agents
- C. Occupational Hazards To Pregnant Servicewomen Chemical Agents

Table Agents, processes and working conditions giving rise to risk in pregnancy and breastfeeding²

Physical	Risk	How to avoid risk	Other
Agents			legislation
Shocks, vibration or movement	Regular exposure may increase risk of miscarriage. May be increased risk of prematurity or low birth weight. Breastfeeding mothers at no greater risk than other workers.	Avoid work likely to involve uncomfortable whole body vibration or where abdomen is exposed to shocks or jolts.	None specific.
Manual handling of loads where there is a risk of injury	Pregnant workers especially at risk; hormonal changes can affect ligaments; postural problems may increase as pregnancy progresses. Risks for those who have recently given birth, eg limitations on lifting and handling capability after caesarean section. Breastfeeding mothers at no greater risk than other workers.	Varies according to circumstances: alter task to reduce risks for all employees, or address specific needs of the individual, or provide aids to reduce risk.	Manual Handling Operations Regulations 1992.
Noise	No specific risk, but prolonged exposure may lead to increased blood pressure and tiredness.	Requirements of Noise at Work Regulations 1989 should be sufficient.	Noise at Work Regulations 1989
Ionizing Radiation	Significant exposure can harm the foetus. If a nursing mother works with radioactive liquids or dusts the child can be exposed, particularly through contamination of the mother's skin. Possible risk to foetus from significant amounts of radioactive contamination breathed in or ingested by the mother.	Design worker procedures to keep exposure of the pregnant woman as low as reasonably practicable and certainly below the statutory dose limit for pregnant women. Nursing mothers should not be employed where the risk of radioactive contamination is high. Working conditions should be such as to make it unlikely that a pregnant woman might receive high accidental exposure.	Ionising Radiations Regulations 1999 and supporting Approved Codes of Practice.
Non-iodising electro- magnetic radiation	Optical Radiation: pregnant or breastfeeding mothers at no greater risk than other workers. Electromagnetic fields and waves: exposure within current recommendations is not known to cause harm, but extreme overexposure to radio- frequency could cause harm by raising body temperature.	Exposure to electric and magnetic fields should not exceed restrictions on human exposure published by National Radiological Protection Board.	None specific.
Extremes of cold or heat	When pregnant, women tolerate heat less well and may more readily faint or be liable to heat stress. Breastfeeding may be impaired by heat dehydration. No specific problems from working in extreme cold.	Take great care when exposed to prolonged heat. Rest facilities access to refreshments would help.	None specific.
Movements and postures, travelling, mental and physical fatigue and other physical burdens	Fatigue is associated with miscarriage, premature birth and low birth weight. Excessive physical or mental pressure may cause stress, anxiety and raised blood pressure. Pregnant employees may experience problems in working at heights or in tightly fitting workplaces.	Ensure that hours, volume and pacing of work are not excessive and that, where possible employees have some control over how their work is organized. Ensure that seating is available where appropriate. Give longer or more frequent rest breaks. Adjust workstations or work procedures.	None specific

² This list is not exhaustive.

Physical Agents	Risk	How to avoid risk	Other legislation
Work in hyperbaric atmosphere	Compressed air risk of bends. Not clear whether pregnant women are more at risk but foetus could be seriously harmed. Small increase in risk for those who have recently given birth. No physiological reason why breastfeeding mothers should not work in compressed air, but practical difficulties. Diving: possible effects on foetus. No evidence that breastfeeding and diving are incompatible.	Pregnant employees should not work in compressed air. Pregnant employees should not dive at all during pregnancy.	Work in Compressed Air Regulations 1996.
Biological Agents	Risk	How to avoid risk	Other legislation
Any biological agent of hazard groups 2, 3 and 4	Many of these agents can affect the unborn child if the mother is infected during pregnancy. Examples are hepatitis B, HIV, TB, syphilis, chickenpox and typhoid. For most workers the risk of infection is not higher at work than from living in the community, but exposure to infection is more likely in certain occupations such as laboratory workers, health care and looking after animals.	Depends on the risk assessment. Control measures may include physical containment, hygiene measures or use of vaccines. If there is a known high risk of exposure to a highly infectious agent, a pregnant employee should avoid exposure altogether.	Control of Substances Hazardous to Health Regulations 1999. Approved Code of Practice on the control of biological agents; approved list of biological agents.
Biological agent known to cause abortion of the foetus or physical and neurological damage (included in hazard groups 2, 3 and 4	Rubella (German measles), Toxoplasma and some other biological agents can harm the foetus. Risk of infection is generally no higher for workers than others, except in exposed occupations (see above).	See above.	See above.
			211
Chemical Agents	Risk	How to avoid risk	Other legislation
Substances Labelled R40, R45, R46 and R47	R40: possible risk of irreversible effects R45: may cause cancer R46: may cause heritable genetic damage R47: may cause birth defects - due to be replaced by the risk phrases: R61: may cause harm to the unborn child R63: possible risk of harm to the unborn child R64: may cause harm to breastfed babies. Actual risk can only be determined following a risk assessment of a particular substance at the place of work.	With the exception of lead (see below) and asbestos these substances all fall within the scope of the Control of Substances Hazardous to Health Regulations. Employers are required to assess health risks and where appropriate prevent or control them, having regard for women who are pregnant or have recently given birth.	Control of Substances Hazardous to Health Regulations 1999. Chemicals (Hazard Information and Packaging) Regulations 1994.

Chemical Agents	Risk	How to avoid risk	Other legislation
Chemicals agents and industrial processes in Annex 1 to EC Directive 90/394/EEC on the Control of Carcinogenic Substances	Includes manufacture of auramine; exposure to aromatic polycyclic hydrocarbons present in coal soots, tar, pitch, fumes or dust; exposure to dusts, fumes and sprays produced during the roasting and electro-refining of cupro-nickel matters; and strong acid process in the manufacture of isopropyl alcohol.	Covered by the Control of Substances Hazardous to Health Regulations (see above).	Control of Substances Hazardous to Health Regulations 1999
Mercury and mercury derivatives	Exposure to organic mercury compounds during pregnancy can slow the growth of the unborn baby, disrupt the nervous system and cause the mother to be poisoned. No clear evidence of adverse effects on developing foetus of exposure to mercury and inorganic mercury compounds. No indication that mothers are more likely to suffer greater adverse effects from mercury and its compounds after birth of the baby. Potential for health effects in children from exposure of mother to mercury and its compounds is uncertain.	Covered by requirements of the Control of Substances Hazardous to Health Regulations. HSE Guidance Notes EH17: Mercury - health and safety precautions and MS 12: Mercury - medical surveillance give practical guidance on risks of working with mercury and how to control them.	Control of Substances Hazardous to Health Regulations 1999
Antimitotic (cytotoxic) drugs	In the long term, damage to genetic information in sperm and egg. Some can cause cancer.	No known threshold limit; exposure must be reduced to as low a level as is reasonably practical. Assessment of risk should look particularly at preparation of the drug for use (pharmacists, nurses), administration of the drug, and disposal of waste (chemical and human). Those who are trying to conceive or are pregnant or breastfeeding should be fully informed of the reproductive hazard HSE Guidance Note MS21 Precautions for the sofa handling of cytotoxic drugs gives guidance on hazards and avoidance/reduction of risk.	Control of Substances Hazardous to Health Regulations 1999.
Chemical agents of known and dangerous skin absorption (includes some pesticides)	HSE Guidance Note EH40: Occupational exposure limits contains tables of inhalation exposure limits for certain hazardous substances. Risks will depend on the way the substance is being used as well as on its hazardous properties.	Take special precautions to prevent skin contact. Where possible use engineering methods to control exposure in preference to personal protective equipment. The Control of Pesticides Regulations 1986 set out general restrictions on the way that pesticides can be used.	Control of Substances Hazardous to Health Regulations 1999. Control of Pesticides Regulations 1997 (Amended).
Carbon monoxide	Carbon monoxide crossing the placenta can result in the foetus being starved of oxygen. Level and duration of maternal exposure are important factors in the effect on the foetus. No indication that breastfed babies suffer adverse effects from the mother's exposure, to carbon monoxide, nor that the mother is significantly more sensitive to carbon monoxide after giving birth.	HSE Guidance Note EH43: Carbon monoxide gives guidance on risks and how to control them.	None specific, except for general requirements of Control of Substances Hazardous to Health Regulations

Chemical Agents	Risk	How to avoid risk	Other legislation
Lead and lead derivatives, in so far as they are capable of being absorbed by the human organism	Occupational exposure to lead in the early 1900s, when exposure was poorly controlled, was associated with spontaneous abortion, stillbirth and infertility. More recent studies associate low-level lead exposure form environmental sources before the baby is born with mild decreases in intellectual performance in childhood. Effects on breastfed babies of their mothers' lead exposure have not been studied, but lead can enter breast mild and it is thought that the nervous system of young children is particularly sensitive to the toxic effects of lead.	The Approved Code of Practice Control of lead at work sets out exposure limits for lead and maximum permissible blood lead levels for workers who are exposed to lead to such a degree that they are subject to medical surveillance. Once pregnancy is confirmed, women who are subject to medical surveillance under the lead regulations will normally be suspended from work which exposes them significantly to lead.	Control of Lead at Work Regulations 1998.
Work with display screen equipment (VDUs)	Although there has been widespread anxiety about radiation emissions from display screen equipment and possible effects on pregnant women, there is substantial evidence that these concerns are unfounded.	Pregnant women do not need to stop working with VDUs, but to avoid problems caused by stress and anxiety those who are worried about the effects should be given the opportunity to discuss their concerns with someone adequately informed of current authoritative scientific information and advice.	Health and Safety (Display Screen Equipment) Regulations 1992

Table 2 The employability of pregnant Servicewomen - guidelines for Medical Officers

a. Occupational Hazards To Pregnant Servicewomen- Physical Agents

Agents	Human Reproductive Hazard	Scientific Evidence	Recommendation for MO
Ionising Radiation	With high maternal exposures only: congenital malformations, especially of central nervous system (including microcephaly and mental retardation). With lower maternal exposures: increased incidence of childhood cancers, particularly leukaemias.	Numerous studies	Pregnant radiologists and radiographers are at a theoretical risk. However, the nationally-recommended exposure levels for pregnant women are generally one-tenth of the upper limits recommended for non-pregnant workers. This should constitute sufficient protection for the foetus. There is not therefore any requirement for an MO to impose additional restrictions.
Non- lonising Radiation - Short- Wave Equipment	Congenital malformations, perinatal deaths.	There exists one import study3 of physiotherapists who had used short-wave therapeutic equipment whilst pregnant, with adverse effects on their pregnancies. There are no known studies on the reproductive hazards of high-frequency radio sets (which operate on short wavelengths), but a sensible precaution would be to avoid them in pregnancy.	MO should restrict pregnant physiotherapists from all duties involving short-wave therapeutic equipment. Pregnant servicewomen complaining of soft tissue or skeletal injuries should not be referred by MO for any treatment involving short-wave therapeutic equipment. MO should restrict pregnant servicewomen from all duties with Clansman HF or VHF sets, or any other high-frequency radio sets. The restriction should apply to both transmitters and receivers.
Non- lonising Radiation - Visual Display Units (VDUs)	??Spontaneous abortion. ??Congenital malformations.	In fact the electromagnetic radiation emitted from VDUs is rarely if ever above natural background levels, except at the extremely low frequency end of the range1. The epidemiological evidence to date does not support the suggestion that there is a casual relationship between adverse pregnancy outcome and VDU use.	Where advice is sought from a pregnant VDU user, MO should offer reassurance that there is no substantiated risk. If the individual remains unconvinced or anxious, the MO should agree to restrict work with VDUs.
Tracked Vehicle Noise	?Spontaneous abortion. ?Foetal growth retardation. ??Impaired hearing in offspring.	Some studies have shown that prolonged exposure to industrial noise jeopardises the outcome of pregnancy, particularly when combined with shift work. However, the majority of studies have not demonstrated such effects.	As a sensible precaution, MO should restrict pregnant servicewomen from any travel in tracked vehicles. The same exclusion should apply to any travel (unless of only a few minutes' duration) in rotary wing aircraft, ie helicopters.
Gunfire Noise	??Impaired hearing in offspring.	There are no known studies demonstrating a casual relationship between impulse noise and damage to the foetal auditory apparatus. It would be difficult, however, to defend a legal action against MOD alleging childhood deafness as a consequence of exposure to gunfire noise <i>in utero</i> .	As a sensible precaution, MO should restrict pregnant servicewomen from all exposure to gunfire noise. Therefore: Pregnant servicewomen should not be armed. They should not take part in any range duties, nor any military exercise where they are likely to be exposed at close range to small arms noise, heavy weapons noise, or pyrotechnics noise.

Agents	Human Reproductive Hazard	Scientific Evidence	Recommendation for MO
Vibration - Whole- Body	?Preterm labour. ?Low birth weight.	Some studies12 have shown whole-body vibration to be a hazard in pregnancy. Moreover the European Physical Agents (Vibration) Directive (2002/44/EC) seeks to impose extremely conservative upper limits for the daily vibration exposure of employees (even where not pregnant).	As sensible precaution, MO should impose the following restrictions on the employability of pregnant servicewomen: No off-road travel in military vehicles. No usage of fork lift trucks only limited travel (no more than a few minutes duration) in rotary wing aircraft, ie helicopters.
Vibration - Hand- Transmitted	??Preterm labour. ??Low birth weight.	Although formal studies are few, the effects on pregnancy of prolonged hand- transmitted vibration are likely to be similar to those for whole-body vibration.	Based on a detailed work history, MO should restrict prolonged usage in pregnancy of: Pneumatic or electric power tools (eg drilling machines, power saws, grinders, chipping hammers). Vibrating work pieces (eg mobile generators, compressors, pumps).
Heavy Lifting	?Adverse outcome of pregnancy	Some studies have shown heavy lifting in pregnancy to constitute a hazard to the foetus.	MO should restrict all duties involving heavy lifting (eg movement of stores, erection of tentage, casualty handling). This is likely to be a hazard in many trades.
Long/ Irregular Hours of Work	??Preterm labour. ??Low birth weight.	Some studies have suggested that long/irregular hours of work are a hazard in pregnancy. However, there are also conflicting studies of no effect with this parameter.	MO should consider restricting work where there is a likelihood of a pregnant servicewoman having to undertake particularly long and irregular hours of work.
Night Work	??Adverse outcome of pregnancy	Animal studies have shown that the foetus is adversely affected by inversion of the normal light/dark cycle of the mother. There are no known human studies demonstrating a casual relationship between night work and damage to the foetus.	As a sensible precaution, MO should restrict all night duties where the pregnant servicewoman complains of excessive fatigue resulting from night work.
Physical Exercise	??Adverse outcome of pregnancy, if excessive.	In fact, maternal exercise is well-tolerated by the foetus at least up to 70% of maximal exercise. The exercise should be in regular short bursts rather than arduous one-off efforts. A maximum maternal heart rate of 140 beats/min is recommended. Exercise should be avoided only if there are any adverse obstetric history or risk factors, or a previous history of inactivity.	MO should not restrict normal PT or adventurous training in a pregnant servicewoman, unless there are clear contraindications to physical exercise. These contraindications include: acute infectious disease, multiple pregnancy, incompetent cervix, intrauterine growth retardation, hypertension, uterine bleeding, ruptured membranes. Pregnant servicewomen should not undertake BFT or CFT.

Agents	Human Reproductive Hazard	Scientific Evidence	Recommendation for MO
Trauma	?Spontaneous abortion	In fact the foetus is well-protected within the pelvis and later by the layers of the abdominal wall and uterus with the amniotic fluid. However, largely for medico legal reasons, most sporting bodies bar pregnant women from participating beyond the second trimester.	MO should restrict all sports in all pregnant servicewomen after the first trimester. Military parachuting must not be undertaken at any stage of pregnancy. MO should advise pregnant service women who work in equine divisions (eg RAVC and RMP personnel) to avoid all contact with horses on account of possible trauma. If this is impossible, the MO should consider imposing a formal restriction.
Extremes Of Heat	?Neural tube defects	Animal studies and retrospective data in women have shown maternal hypothermia to be a risk factor. The prolonged fever (>39 ^c for 3 days) cited in these reports, however, does not equate with the mild temperature changes experienced during most occupational activities.	MO should advise pregnant servicewomen to exercise during the cool part of the day, and to ensure adequate hydration at all times. Pregnant servicewomen must not undertake CBRN training, other than in CBRN Dress Category Zero or CBRN Dress Category 1.
Extremes Of Cold	?Adverse outcome of pregnancy	Some studies have shown cold to be a hazard in pregnancy. However, there are also conflicting studies of no effect with this parameter.	MO should advise pregnant servicewomen of the theoretical risk. They should not undertake any adventurous training which might entail prolonged exposure to extreme cold. During exceptionally cold weather (eg in Germany, Norway) pregnant servicewomen should be excused guard duty.
Electrical Contact	?Adverse outcome of pregnancy	There is anecdotal evidence in the obstetrical literature of low voltage (110 -220 volts) electrical shock to a pregnant woman having the potential for harm to the foetus, including death.	MO must assess the risk realistically. In most military employments, and with most electrical equipments, there is likely to be no danger at all to the pregnant servicewoman. If a known danger of electrical hazard from old or unreliable military equipment (as eg from some armoured vehicle power packs) exists, the MO should restrict pregnant servicewomen from all contact with such equipment.

b. Occupational Hazards To Pregnant Servicewomen- Biological Agents.

Agents	Human Reproductive Hazard	Scientific Evidence	Recommendation for MO
Cyto- Megalo- Virus (CMV)	CMV infection in pregnancy is associated with foetal hepatosplenomegaly, microcephaly, microphthalmia, mental retardation.	Numerous studies	MO should advise hospital personnel who are pregnant to avoid contact with known CMV shedders
Toxoplasma gondii	Toxoplasma gondii is an intracellular coccidian protozoan of cats, and the cause of toxoplasmosis. This is a common infection which is frequently asymptomatic or else presents as an infectious disease resembling infectious mononucleosis. A primary infection during early pregnancy, however, may lead to foetal infection with death of the foetus or choreoretinitis, brain damage with intracerebral calcification, hydrocephaly, microcephaly, fever, jaundice, rash, hepatosplenomegaly and convulsions evident at birth or shortly thereafter.	Numerous studies	MOs should be aware of the risk to: Pregnant RAVC personnel who work in veterinary hospitals which operate on cats. Pregnant RAVC or RMP personnel who work in equine divisions (where barn cats are an essential part of the establishment). They should advise such personnel accordingly, and if necessary impose a formal restriction on any contact with cats.

c. Occupational Hazards To Pregnant Servicewomen- Chemical Agents.

Agents	Human Reproductive Hazard	Scientific Evidence	Recommendation for MO
Lead	Reduced fertility, spontaneous abortion, prematurity, stillbirth, neonatal death, congenital malformations, abnormal central nervous system development, behavioural abnormalities.	Numerous studies.	MO should restrict pregnant servicewomen from all duties within indoor firing ranges.
Benzene	Vaginal bleeding, haemorrhagic complications of pregnancy, spontaneous abortion.	Numerous studies. It should be noted that petrol by law may contain up to 5% benzene. Diesel fuel, on the other hand, may contain a variable amount of benzene. Currently, the levels are not regulated by law.	MO should restrict pregnant servicewomen from any direct contact with benzene or with benzene vapour, even when wearing protective equipment. Pregnant women should not be permitted to refuel military vehicles at any time. This applies also to military drivers, who must not refuel their own vehicle if pregnant.
Carbon Monoxide	Congenital malformations	Carbon monoxide readily crosses the placenta and is likely to cause reduced foetal haemoglobin concentration. The potential for this hazard has been demonstrated in numerous studies. It should be noted that vehicle exhausts contain carbon monoxide as well as oxides of nitrogen (which are also believed to have an adverse effects on pregnancy).	MO should restrict pregnant servicewomen from all duties in vehicle parks, other than brief visits.
Anaesthetic Gases	Spontaneous abortion (one and a half to three fold increases). ? Foetal grown retardation, congenital malformation, low birth weight, stillbirth.	Numerous retrospective studies.	MO should restrict DMS servicewomen who are pregnant from any exposure to anaesthetic gases. This applies to surgeons, anaesthetists, operating theatre nurses, operating theatre technicians, etc.
Antimitotic (Cytotoxic) Drugs	Pregnant doctors and nurses administering antimitotic agents (even when doing so with extreme care) have shown a significant increase in foetal loss and/or congenital malformations	Numerous studies.	MO should restrict pregnant DMS servicewomen (including doctors, nurses, pharmacists and pharmacy technicians) from handling antimitotic drugs in any form.
Antimalarial Chemoprop hylaxis - Mefloquine	?Congenital malformations	Mefloquine is teratogenic when administered to rats and mice in early gestation. Its prophylactic use during human pregnancy should therefore be avoided as a matter of principle. Pregnancy should also be avoided for 3 months after completing a course of mefloquine, on account of its long half- life.	MO should not prescribe mefloquine to any servicewoman travelling to a malarious area, unless there is no risk at all of pregnancy (eg following a hysterectomy or sterilisation).

Agents	Human Reproductive Hazard	Scientific Evidence	Recommendation for MO
Pesticides	? Spontaneous abortion.?? Congenital malformations.	Various studies	Although the majority of service- approved pesticides are likely to pose no threat at all in pregnancy, MO should nevertheless restrict pregnant servicewomen from all duties involving the use of pesticides.
CS Gas	?? Adverse outcome of pregnancy	No known studies	As a sensible precaution, MO should restrict pregnant servicewomen from any exposure to CS gas, eg during CBRN training.

General

1. Musculoskeletal (MSK) disease and injury are the most common conditions seen in Primary Care. All individuals with MSK conditions whether acute or chronic are to be graded according to their functionality as well as bearing in mind the prognosis and the requirement for any ongoing medical treatment. Any surgical intervention should result in a grading of P7 MND until such time as the long term degree of functional impairment can be assessed. An Orthopaedic or Rheumatology and Rehabilitation Consultant clinical opinion may be sought to inform the occupational assessment.

Overuse injuries

- 2. These injuries are generally attributable to one of more of overuse or repetitive actions, rapid changes to load and/or frequency of the action. Medical grading should reflect the functional decrement and the need to afford protection.
- 3. Appropriate modification to working practices should be implemented. The line management/employer should be involved in performing a risk assessment¹ to consider necessary changes in working practices to minimise exposure to, or exclude entirely the hazard/risk.

Arthropathies and collagen disorders

- 4. A small minority of those with MSK conditions have inflammatory joint or collagen disorders (including connective tissue and vascular diseases) and these usually require referral to a Consultant Rheumatologist. The severity of these conditions range from mild and self-limiting to the immediately life threatening, and many have functional limitations. Evidence strongly suggests that early treatment to suppress inflammation or correct deformity retards disease progression and can therefore improve functional capacity, quality of life and life expectancy. Medical grade should be based upon treatment requirements, impact of medical treatment² and functional restrictions.
- 5. Patients on Disease Modifying Anti-Rheumatic Drugs (DMARDs) will initially be graded P7 MND and once established on treatment may be considered for upgrading to MLD by a single Service (single-Service) Consultant Occupational Physician. Patients on Methotrexate, Anti-TNF or other novel agents with a similar side effect and/or hazard profile will usually remain P7 MND³.

Amputations

- 6. Whilst grading is primarily based on function when wearing a prosthesis, consideration must be given to the safety of the individual and others when the prosthesis is not being worn. Grading must also safeguard the wellbeing of the individual by avoiding further functional loss and by minimising degradation of the prosthesis and its points of attachment. Minor amputations with no functional sequellae may be graded P2 MFD; amputations normally requiring prosthetics will be graded no higher than P7 MLD.
- 7. Generally individuals with lower limb amputations should not be considered for operational deployment but this should be judged on an individual basis in terms of the deployed role, their functional ability and the operational environment.

¹JSP 375 Management of Health and Safety in Defence' Part 2 Volume 1 Chapter 8 Risk Assessment. Health and Safety Risk Assessment.

Assessment.

²This includes supply and storage of medication, potential side effects, requirement for monitoring and potential to place a burden on the deployed medical capability.

³Due to the complexities of drug supply, storage and administration, monitoring requirements and recurrence of the condition or occurrence of treatment complications in a deployed environment with the consequent load on deployed medical services.

Fractures

- 8. Fractures are normally graded P7 MND whilst under treatment. Re-grading should be based upon functional capacity and the requirement for any ongoing treatment and rehabilitation. Dependent on individual functional recovery a graduated return to specific activity may be appropriate. Following completion of medical treatment and a period of rehabilitation, if function is still impaired the individual should be referred back to their treating Consultant or if available locally a Service Consultant.
- 9. Individuals with asymptomatic metalwork in place can be graded P2 MFD. Removal of asymptomatic metalwork has a significant complication rate⁴ and should not normally be considered for specific occupational reasons⁵.
- 10. Stress fractures are generally caused by a sustained increased level of physical activity, including weight-bearing, which is greater than the pace of bone remodelling. Individuals should initially be graded P7 MND. For subsequent re-grading, consideration should be given to:
 - a. Evidence of a sustained return to appropriate activity.
 - b. Site of the fracture.
 - c. Risk of recurrence.

Patients with recurrent stress fractures, particularly those affecting the femoral neck should be reviewed by a Service Orthopaedic Consultant

Joint replacements

- 11. For individuals with a joint prosthesis, functional capacity and the job demands (in terms of excessive stress on the prosthesis) must be considered when grading.
 - a. Upper limbs. Grading is on an individual basis.
 - b. Lower limbs.
 - (1) Successful hip replacement graded P3 MLD.
 - (2) Hip resurfacing graded P2 MFD.
 - (3) Uni-compartment knee replacement and total knee replacement should not normally be graded higher than P3 MLD and must have a risk assessment conducted by a single-Service Consultant Occupational Physician prior to operational deployment.

Conditions affecting upper limb function

12. Deformities of the upper limbs including loss of part or all of a digit must be judged against the residual functionality and the employment of the individual. The dominance of the affected hand must be borne in mind, as must the ability to fire a weapon, drive and use tools as appropriate to the individual job. Those with osteoarthritis must be graded, on an individual basis, to minimise any adverse effects of their work on their condition.

⁴Sanderson PL, Ryan W, Turner PG. Complications of metalwork removal. Injury 1992;23(1):29-30.

⁵Certain specific single-Service roles my require consideration of whether the metalwork can remain eg clearance divers.

Fingers and hands

13. Loss of part or all of any finger of either hand will be graded according to residual function. The ability to wear protective gloves, including Chemical Biological Radiation and Nuclear Personal Protection Equipment, and operate a weapon system is important as well as dexterity in relation to their Career Employment Group (CEG). Individuals may be graded P2 MFD providing they can maintain full function, good grip strength, and have adequate sensation to maintain safety. Partial loss of the thumb should be graded according to function although complete loss is normally graded P7 MND.

Wrist

14. Significant loss of wrist function should be graded no higher than P3 MLD. A scaphoid fracture should remain graded P7 MND until healing is confirmed and sustained functional recovery demonstrated.

Elbow

- 15. Any residual instability or loss of functional capacity is graded no higher than MLD except:
 - a. Where the loss is of the last 5° 10° of full extension which may be graded P2 MFD.
 - b. individuals with a loss of greater than 20° of pronation or supination should be graded no higher than MLD.
 - c. Those with a varus or valgus deformity can be graded P2 MFD provided a functional assessment against role related and military tasks is satisfactory.

Shoulder

- 16. **Recent dislocation or symptomatic instability.** Individuals with a recent dislocation or symptomatic instability of the shoulder should initially be graded P7 MND. Those requiring surgical intervention should remain P7 MND pending stabilisation and rehabilitation. If despite rehabilitation they have a further dislocation or functional instability, they should be P7 MND until surgery and rehabilitation but could be upgraded at 6 months post-surgery to P2 MFD if fully recovered.
- 17. **First dislocation.** The individual may be graded P2 MFD at 6 months provided that:
 - a. Completed adequate rehabilitation.
 - b. No further symptoms.
 - c. Negative apprehension test.
 - d. Does not require surgery.

Clavicle

- 18. **Healed clavicular fractures.** Individuals may be graded P2 MFD after 3-6 months provided that:
 - a. Full weight-bearing is possible.
 - b. The pressure from load bearing and equipment such as webbing gives no pain.
- 19. **Chronic non-union or painful mal-union.** Individuals should be graded no higher than MLD.

20. **Excision of the lateral end of the clavicle.** Individuals following excision of the lateral end of the clavicle leaving the coracoid and trapezoid parts of the coraco-clavicular ligament intact may be graded P2 MFD after review by a Consultant Orthopaedic Surgeon to confirm full function.

Sterno-clavicular or acromio-clavicular dislocations

21. Sterno-clavicular or acromio-clavicular dislocation should initially be graded no higher than P3 MLD. Subsequent re-grading to P2 MFD may be considered depending on functional capacity and risk of recurrence.

Other Conditions

22. Other conditions, including those of the cervical and/or thoracic spine, causing restriction of function or pain are graded according to treatment requirements, functional capacity and the demands of employment.

Conditions affecting locomotion

Low Back Pain (LBP)

- 23. Individuals should normally be graded no higher than MLD with the following conditions:
 - a. Persistent or recurrent LBP.
 - b. Sciatica.
 - c. Connective tissue disorders.
 - d. Arthropathies of the lumbo-sacral spine.
- 24. LBP requiring surgical or invasive pain management intervention should be graded P7 MND. Subsequent re-grading must consider the risk exacerbation or recurrence on return to military activities and should be based upon:
 - a. Functional capacity.
 - b. The requirement for any ongoing treatment.
 - c. The requirement for any ongoing rehabilitation.
 - d. The impact of medication.
- 25. LBP may be associated with shock loading and whole body vibration and where this is suspected, appropriate modification to working practices should be implemented. The line manager/employer should be involved in performing risk assessment to consider necessary changes to working practices¹.

Hallux valgus, hallux rigidus, hammer toes and clawed feet

- 26. The symptomatic development of these conditions will result in re-grading depending upon:
 - a. The severity of symptoms.
 - b. Ability to wear Service or protective footwear.
 - c. Ability to undertake CEG tasks.

Medical grading following treatment is dependent on the functional outcome.

Loss of toes

- 27. Loss of the terminal phalanx of the great toe with no residual pain and full functionality can be graded P2 MFD. Those with total or complete loss of other toes may be P2 MFD subject to the outcome of:
 - a. Ability to wear Service or protective footwear.
 - Ability to undertake CEG tasks.

Flat Feet

28. Flat feet do not require re-grading unless there is a history of discomfort whilst walking, standing or running. Those with mobile flat feet, ie those who can form an arch standing on tip-toes, only require re-grading if they are symptomatic.

Ankle joint

- 29. Those with limitation of movement are initially graded no higher than MLD in accordance with their remaining function. Consideration should be given to the risk of exacerbation or recurrence on return to military activities and subsequent re-grading should be based upon:
 - a. Functional capacity.
 - b. The requirement for any ongoing treatment/rehabilitation.
 - c. The impact of medication.

Individuals who have had surgical treatment may be graded P2 MFD post rehabilitation if:

- a. There is a good level of function.
- b. No residual pain.
- c. No need for protection from future re-injury or complications.

Knee Joint

- 30. Knee conditions requiring surgical or invasive pain management intervention should normally be graded P7 MND. Consideration should be given to the risk of exacerbation, re-injury or recurrence on return to military activities and subsequent re-grading should be based upon:
 - a. Functional capacity.
 - b. The requirement for any ongoing treatment/rehabilitation.
 - c. The impact of medication.
- 31. **Cruciate and collateral ligaments.** Personnel who have symptomatic instability of their cruciate or collateral ligaments of the knee joint should normally be graded no higher than P3 MLD.
 - a. **Anterior cruciate ligament reconstruction.** If the anterior cruciate ligament reconstruction has been successful and there is no evidence of additional intra-articular damage, then personnel who have returned to full function may be considered for re-grading to P2 MFD, following discussion with single-Service Occupation Physician.

- b. **Anterior cruciate ligament repair.** Those individuals who have had a successful anterior cruciate ligament repair should normally be graded no higher than P3 MLD.
- c. **Deficient anterior cruciate ligament.** Those individuals who have deficient anterior cruciate ligament but who have a clinically stable knee joint confirmed by a Service specialist in orthopaedics may be considered for a re-grading to P2 MFD.

Asymptomatic incidental findings

32. Asymptomatic spina bifida occulta, failure of fusion, spondylosis and spondylolisthesis which is detected incidentally only on imaging does not require re-grading.

ANNEX L

Special conditions affecting mental capacity

1. Mental capacity is dependent not only on the innate mental ability of a Service Person, but also on their capacity to use that ability. During most medical examinations, no formal clinical assessment of mental capacity is practicable or required. Where this area is being reviewed following completion of basic training, such as after physical illness or injury, full psychometric testing by a clinical psychologist should be undertaken. Any changes in JMES should only be conducted following the above and on advice from a consultant neurologist, consultant psychiatrist, clinical psychologist or other recognised subject matter expert in the field.

Special conditions affecting psychological stability

- 2. Requirements to be considered for Medically Fully Deployable (MFD) status¹. Service life places great psychological demands on individuals. Individuals with underlying psychiatric conditions may be at increased risk of exacerbating their condition during military service. Therefore, it is important to consider the following factors when grading individuals as MFD:
 - a. Must be fit to deploy at short notice to any location world-wide, and serve as directed by Command.
 - b. There must be a high degree of certainty that they will be able to cope with heightened levels of stress, and maintain sufficient psychological stability to remain functional and effective.
 - c. They must be able to deploy away from their support network for prolonged periods, in a largely self-reliant capacity, without becoming an administrative burden or operational risk due to psychological instability.
 - d. They must be able to safely operate weapon systems on operations and in training.
 - e. They must be able to deploy without additional special support requirements (ie JMES E1 or E2).
 - f. Relapse of symptoms must not pose a risk of high risk behaviours that may present significant problems in theatre, eg serious self-harm, violence or unpredictable behaviour that may endanger others.
- 3. **General considerations for awarding a JMES**. In deciding on the JMES for a psychological condition the clinician should consider the following factors:
 - a. The level of hardship individuals are likely to encounter (temperature, noise, nutrition, hydration, arduous physical activities, sleep disturbance, loss of social support etc).
 - b. The level of medical support required (immediacy, availability, skill mix, resources).
 - c. The duties to be performed (likelihood of exposure to traumatic events, burden of working hours, likelihood of new/novel tasking requiring adaptation, leadership role etc) and the person's previous experience of, or training for, these duties.
 - d. The current welfare of individuals and their personal support networks (current relationship difficulties, financial difficulties and legal problems etc) and the ability to communicate with that network.

.

¹ Further details on definition and award in JSP 950 Leaflet 6-7-7 Section 2 Annex A and sS policy.

- e. The degree to which the current and anticipated symptoms affect function; particularly how symptoms affect concentration, sleep, judgement, impulsivity, attitude, morale and motivation.
- f. The risk and speed of relapse, potential for incapacitation by a relapse and the responsiveness of the condition to treatment.
- g. The Service Person's degree of insight about their condition and its effect on the team around them and the operational tasks.
- h. Clear consideration should be given to the need for performing safety critical tasks, eg in aviation-related roles, that may confer a lower tolerance of risk and require higher assurances of stability.
- 4. **Care pathways**. In mental health, care pathways can be very lengthy and in deciding a permanent JMES the length of the care pathway is a secondary consideration, and it may be appropriate to set a permanent JMES before completion of treatment. Grading decisions will take into account whether the patient has received an appropriate evidence-based level of care, requires further treatment, prognosis and the likelihood of recovery to an employable status. Treatment provided should be at least equivalent to the prevailing standard in the National Health Service. Single Service authorities dictate assessment points in this regard and final grading is the remit of Single Service Medical Boards.
- 5. In specialist groups such as aircrew, divers, submariners and Special Forces, this policy does not take precedence over the specific occupational policies that govern these specialist areas.

Common mental disorders (including adjustment disorders, mood and anxiety disorders, phobias, post-traumatic stress disorder (PTSD), and eating disorders)

- 6. Common Mental Disorders (CMD) form the bulk of the clinical activity within the Defence Mental Health Services.
- 7. **Stepped care**. Patients requiring psychological therapy are stepped through levels of care according to need.
 - a. **Initial interventions**. Self-help material and resources with no formal psychotherapeutic intervention by the clinician, other than to provide the material and signpost the patient to the appropriate resources, including formal referral to mental health services. This is commonly the step conducted in non-specialist mental health settings like Primary Care.
 - b. **Low intensity therapy**. Guided self-help where a patient is assisted by a clinician, usually on a weekly basis, to complete a psychotherapy programme. Low intensity therapy is often standardised, of shorter duration, less intensive and aimed at mild to moderate presentations.
 - c. **High intensity therapy**. Individualised therapy, usually by a qualified therapist in the modality, using an individual approach and more intensive treatment. High intensity therapy is generally aimed at moderate to severe presentations or where no standardised low intensity therapy exists for the condition (eg PTSD).
 - d. Complex case management and specialist psychotherapy. Severe and complex conditions that require long-term care from multiple professionals. Patients requiring this level of care are likely to be significantly functionally limited and should normally be considered unfit for military service.

- 8. In setting this policy "<u>NICE guidance CG123: Common mental health problems: identification and pathways to care</u>" May 2011 (reviewed August 2018)" introduces the stepped care model for CMD. This is mirrored in the guidelines for individual disorders, and these are delivered within the tenets of providing lower level, least intrusive interventions first, then escalating as required through the steps. The specific guidelines also specify a number of sessions of intervention at each level of care, which differs slightly between conditions but are broadly comparable:
 - a. Initial interventions. Session limit does not apply.
 - b. Low intensity therapy. 6-10 sessions.
 - c. High intensity therapy. 12-30 sessions.
 - d. **Complex case management and specialist psychotherapy**. On-going, long-term care.
- 9. **Temporary grading for CMD**. Patients undergoing stepped care for CMD should normally be graded MND to allow them to access treatment with appropriate occupational restrictions to manage access to treatment, address risks (to self and others), accommodate psychotropic medication and enable the care pathway as required. However, patients undergoing initial intervention in Primary Care may not need to be graded MND and pragmatism and an individual occupational assessment should guide clinicians, including consideration of any psychotropic medication the patient may be taking. For patient undergoing low intensity interventions and above, there may also be rare, individual cases where MND grading may not be appropriate, but in such cases a grading discussion with an occupational health physician or Service² consultant psychiatrist represents best practice. On successful completion of treatment and a period of stability of not less than one month, Service Persons may be upgraded (please see stability requirements for other specific conditions below).
- 10. **Permanent grading for CMD**. Permanent grading is the sole remit of Single Service Medical Boards, taking account of recommendations by specialist clinicians as required. As a general rule, patients should be awarded a permanent grading if:
 - a. Required by sS policy.
 - b. The stepped care pathway has been completed. See Para 3 for considerations to be reviewed in defining a permanent grade.
 - c. Patients requiring long-term treatment with psychotropic medications should be graded no higher than MLD with appropriate restrictions.
 - d. Service Personnel should be graded permanently MND if, after treatment, one or more of the following criteria are met:
 - (1) They have had the maximum of 12-30 high intensity sessions (if appropriate) of an acceptable quality and continuity (which may or may not have been preceded by 6-10 sessions of low intensity therapy) and the condition remains unresolved.
 - (2) They have had adequate trials of 2 psychotropic medications appropriate to their condition (providing the patient opted for this treatment), and has not demonstrated an adequate therapeutic response. This is a significant marker of treatment-resistance.
 - (3) Their condition and social environment is so unstable that it prohibits meaningful progress or engagement with psychotherapy after 6 months of attempts at stabilisation, regardless of the stage they have reached in the stepped care process.

_

² This term encompasses all consultant psychiatrists working for the MOD, uniformed or civilian.

(4) If, in the opinion of a service consultant psychiatrist, the risk of relapse on exposure to the operational environment is unacceptably elevated.

Conditions normally incompatible with military service

- 11. **Psychosis**. Service Persons with psychotic illness, whether recurrent or not, are normally graded permanently MND. The only clear exception is a single, brief psychotic episode of less than 7 days' duration where there is a clear, definable organic aetiology (eg delirium, drug side effect etc). In these exceptional cases the patient should remain symptom free for 6 months off all psychotropic medications before being considered for a deployable medical category.
- 12. **Bipolar affective disorder**. Service Persons with bipolar affective disorder (Types I and II) are normally are normally graded permanently MND.
- 13. **Personality disorders**. Service Persons with these disorders are normally are normally graded permanently MND.
- 14. **Recurrent CMD**. Patients who re-present with a CMD within 3 years of completing a stepped care pathway would are normally graded permanently MND if they fail to respond to maintenance medication and/or 6 booster sessions of high intensity therapy. Exceptions in these circumstances are individuals that can be offered sufficient occupational protection to minimise recurrence risks, whilst still being able to fulfil an employable and/or deployable function for their Service.
- 15. **Lithium therapy**. Service Persons on lithium therapy should normally be graded MND due to the risks associated with this medication and the conditions it is used for. However, at the discretion of the Single Service Medical Board, retention may be considered in a MLD category.
- 16. **Recurrent and/or persistent self-harm**. A single episode of self-harm³ in response to a stressful event does not in itself render an individual unfit for military service. However, Service persons with a history of 2 or more episodes, even with clear stressors, should normally be considered unfit for military service, as repetition indicates a substantial risk of further repetition and, of more concern, a significant increase in risk of later death by suicide. However, there are exceptional cases where Service persons with a second episode of self-harm may be fit for further military Service, for example an individual with a long period of stability in between episodes. In such cases, retention can be considered but this should normally be supported by a comprehensive risk assessment from a MOD Consultant Psychiatrist, including an assessment for any underlying pre-disposing conditions. If multiple attempts occur over a short period of time (weeks rather than months), and can clearly be ascribed to the same single stressful event or occur whilst the patient is still undergoing treatment or waiting for therapeutic intervention to commence, then for the purposes of this policy, these may be regarded as a single episode.
- 17. **Repeated or prolonged inpatient care**. Due to the likelihood of relapse and long-term illness, Service Persons requiring repeated (3 or more) or a single prolonged (longer than 56 days) inpatient admission to a mental health ward are normally graded permanently MND.
- 18 **Substance misuse disorders requiring detoxification**. Service Persons requiring more than 2 episodes of inpatient detoxification or more than 4 detoxifications overall (inpatient and community) for dependent use of any substance are normally graded permanently MND. The Executive management of substance misuse is covered under the relevant single Service policies.

_

³ Self-harm refers to an intentional act of self-poisoning or self-injury, irrespective of the motivation or apparent purpose of the act and is an expression of emotional distress.

Substance misuse disorders⁴

- 19. Most Service Persons considered as part of this policy will misuse alcohol, but it can be applied to all psycho-active substance misuse⁵. Service Persons who present with substance misuse disorders should be graded MND and offered 6-10 sessions of low intensity therapy and/or a maximum of 12-30 sessions of high intensity therapy (if appropriate) of an evidenced-based therapeutic modality depending on severity and need. Treatment is independent of any required disciplinary processes which may run concurrently.
- 20. If treatment is completed and the Service Person continues to misuse the substance but is not dependent on the substance, then it is a Chain of Command responsibility to manage them through the normal administrative routes. Grading is dependent upon functional ability to perform all duties⁶.
- 21. If the Service Person has a recognised dependence syndrome, they should normally be graded MND.
- 22. Clinicians may need to disclose illicit substance misuse to Command if the public interest test or the requirement to protect others is met, and this is incumbent on clinicians to do in cases of risk that needs to be mitigated by command. This same approach holds true for these risks that are encountered in any condition in this policy. If the clinician considers this necessary the clinician should seek consent to disclose, take account of GMC guidance on confidentiality and seek senior guidance as required. Disclosure without consent may be necessary.

Adult Attention Deficit Hyperactivity Disorder (ADHD)

- 23. ADHD has a high association with co-morbid CMD and substance misuse, and in cases where a CMD or substance misuse is present, the occupational management should follow that of the CMD or substance misuse disorder as detailed above.
- 24. Service Persons with ADHD, in the absence of a CMD or substance misuse disorder, are fit for deployable service. Service Persons with ADHD tend not to be adversely affected by a rapidly changing, high-tempo and challenging working pattern or environment, such as operations. They usually remain on stimulant medication long-term as normally it improves functioning (from a lower but functional threshold); long-acting preparations are preferable in the deployed setting. However, a disruption in stimulant medication is unlikely to have an operational impact in individuals with a functional pre-medication threshold, and there is no withdrawal syndrome. If a decision is made to continue the medication during a deployment, which is reasonable to do, it is best practice to test functioning without stimulant medication on an appropriate UK-based exercise to simulate the disruption of stimulant supply on operations to confirm functionality. Service Persons who have been stable on stimulant medication for 6 months can be graded MLD.

Transgender personnel⁷

- 25. The grading of all transgender Service Persons requires consideration of their mental health, surgical/medical treatment and follow-up requirements.
- 26. Medical grading of Service Persons who do not wish to undergo hormonal or surgical gender confirmation. Service Persons may remain MFD unless, as a result of physical or mental health issues that affect deployability, a Service psychiatrist, psychologist or occupational physician advises otherwise.

⁴ Substance misuse is an over-arching term that includes both harmful use of a substance(s) and dependence on it.

⁵ https://w<u>ww.gov.uk/government/collections/defence-mental-health-statistics-index</u>

⁶ Reference should be made to single Service substance misuse policies.

⁷ Further information can be found in <u>JSP 889 'Policy for the Recruitment and Management of Transgender Personnel in the Armed Forces'.</u>

27. Medical grading of serving personnel wishing to undergo hormonal or surgical gender confirmation. Initially, Service Persons are to be graded MND. MLD and MFD may be considered once their condition is stable, taking into account their on-going medical support needs and compatibility with military environments.

Psychiatric Reports for Medical Boards

28. There is no absolute requirement for a grading recommendation or report from a Service consultant psychiatrist when awarding a permanent JMES. However, it is best practice for such reports to be prepared in order for the determining clinician to have the best possible information to inform the JMES. Psychiatric reports submitted for Medical Boards must follow the format detailed at Appendix 1. A psychiatric report must be provided to a Medical Board if requested.

STANDARD PSYCHIATRIC REPORT FOR MEDICAL BOARDS

	SERVICE CONSULTANT PSYCHIATRIST REPORT FOR THE MEDICAL BOARD			
Patient name:	Rank:		Service Number:	
Principal psychiatric condition(s) affecting fitness for service				
Brief summary of the salient features of the case				
Does the patient have a condition that is normally incompatible with employment in the military as per JSP 950, Annex L to Lft 6-7-7(5)?	Yes	No		Comment:
If appropriate, did the patient have access to 6-10 sessions of low intensity therapy if they did not go directly to high intensity therapy?	Yes	No	N/A	Comment:
If appropriate, did the patient have access to 12-30 high intensity therapy sessions if appropriate?	Yes	No	N/A	Comment:
If appropriate, did the patient have access to at least 2 adequate trials of psychotropic medications appropriate to their condition?	Yes	No	N/A	Comment:
Were the patient's condition and/or social environment so unstable that they were unable to adequately engage in treatment over 6 months or longer? If yes please comment.	Yes	No	N/A	Comment:
In your opinion, did the patient engage adequately with treatment offered? If no, please comment.	Yes	No		Comment:
In your opinion, will the patient reach deployable fitness in the next 6 months? Please comment on prognosis either way.	Yes	No		Comment:
In your opinion, will the patient reach deployable fitness again in the foreseeable future? Please comment on prognosis and timeframe. What are your	Yes	No		Comment:
recommendation for the				

permanent occupational	
limitations that should apply	
to this patient? It is the role	
of the board to consider	
how these translate into a	
permanent JMES.	
Name of service	
psychiatrist completing	
report:	
Date of report	
•	

General

- Dental Fitness is categorised using the NATO Dental Fitness Classification system¹ (DF Cat). Further policy direction on the United Kingdom Armed Forces interpretation of NATO DF Cats is available at JSP 950 2-23-1 Attachment B NATO Dental Fitness. NATO DF Cat reports on the dental health of the force, quantifies dental risk and aids the allocation of dental resources. There are circumstances when managing dental disease or other oral pathology is not possible within the deployed primary care environment and would adversely affect operational effectiveness.
- The JMES grading should be reviewed if the Service Person's oral health status adversely 2. affects their employability or overall health if deployed, or their oral care needs would be difficult to deliver in the deployed environment². This will allow the Service Person to access appropriate care in a timely manner, be returned to optimal health and not be placed at risk of avoidable strategic medical evacuation. The Service Person is to be graded according the frequency of the symptoms, requirement for medication and medical support, and degree of functional impairment.

JMES Review

Defence Primary Healthcare (DPHC) Medical Officers (MO) are able to change the JMES of Service Personnel based on advice and referral from a Dental Officer (DO). Communication of Occupational Dental and Oro-Maxillofacial JMES grading advice to the MO by a DO or Oral and Maxillofacial Surgery (OMFS) Consultant should be undertaken by a formal FMed 7 referral letter. The advice should include the nature of the condition and how it can impact on deployability and employability as defined in Section 2 The Joint Medical Employment Standard. Primary Care Medical Practitioners can seek advice from DMS Dental Officers via the DPHC Directory or, if appropriate via military OMFS Consultants listed in Table 1.

Dental treatment need

- In the majority of cases of dental disease or oral pathology military personnel will be classified as NATO Cat 3 and will be so for short periods only, until they receive the appropriate dental treatment. In these circumstances medical downgrading is not necessary. For individuals likely to be held at NATO Cat 3 for extended periods³ or Service Personnel held at a high state of readiness⁴, consideration must be given to changing JMES to MLD or MND. Assessment of JMES must consider the advice of a suitably qualified dental practitioner with regard to treatment need and duration.
- 5. The treating dentist is to consider referral for review of JMES in the following circumstances:
 - Complex surgical intervention. Cases referred to secondary care are likely to require JMES MND.
 - Dental phobia⁵. Service Personnel who become reliant on conscious sedation or have a phobic disorder that will not allow treatment within primary dental care should be graded no higher than MLD. In consultation with JSP 950 Part 1 Lft 6-7-7 Section 5 Annex L Psychiatry Service Personnel with an anxiety disorder should be referred to Department of Community Mental Health.

AMedP-4.4 STANAG 2466

² Examples include 1: Access to care 2. Treatment tolerance 3. Complexity of treatment beyond GDP 4. Management of treatment morbidity.

³ Beyond single Service restricted duties timeframes.

⁴ R1 to R5.

⁵ Dental phobia is a complex anxiety disorder, with the dental setting acting as an identifiable stressor. For the majority of Service Personnel desensitisation, behavioural strategies and pain control can facilitate effective treatment within primary dental care. Conscious sedation should be considered when behavioural strategies are contra-indicated due to surgical complexity or have failed.

- c. **Needle phobia.** Service Personnel with an established history of needle phobia should be managed in accordance with JSP 950 Part 1 Lft 6-7-7 Section 5 Annex L Psychiatry.
- d. **Recurring pericoronitis.** Service Personnel with an established history of recurring pericoronitis who are awaiting surgical removal of third molars are to be graded according the frequency of the symptoms, requirement for medication and degree of functional impairment. MOD policy on <u>JSP 950 Lft 2-23-1 Annex H Managing Third Molars</u> should be consulted.
- e. **Suspected malignancy**. Service Personnel with an oral lesion with any suspicion of malignancy⁶ are to be graded MND until the nature of the lesion is established.
- f. **Orofacial pain**. Service Personnel suffering from:
 - (1) Orofacial pain that does not improve or resolve within one month of provision of treatment must be reviewed by a specialist clinician. Grading should be checked to ensure that it allows attendance at this specialist review.
 - (2) Diagnosed recurrent orofacial pain⁷ should be graded according the frequency of the symptoms, requirement for medication, degree of functional impairment and the nature of trigger factors.
- 6. **Specialist Employment Groups.** Service Personnel in specialist employment groups (eg aviation, diving, parachutists, and submarines) and air passengers can be exposed to the risks of barotrauma and barodontalgia⁸. Special consideration should be given to these groups of Service Personnel when diagnosing and treating dental pathology. In the majority of cases this will be via a short term restriction of duties.
- 7. **Oro-antral communication.** The healing and repair of oro-antral communications is significantly hampered by barotrauma. Service Personnel with suspected or confirmed oro-antral communication are to be protected from activities which expose them to the risk of barotrauma until the condition has resolved. In the majority of cases this will be via a short term restriction of duties and will not need a JMES change. A formal communication (Oro-Antral Fistula) will require grading no higher than MLD whilst awaiting repair.
- 8. **Medication.** Guidance on medication and award of JMES for Aircrew, Military Divers and Operations Support personnel (Air Battlespace Managers and Air Traffic Controllers) can be found at
 - a. Chapter 12 Standards for diving and hyperbaric exposure medication and drugs: BRd 1750A Handbook of Naval Medical Standards
 - b. Leaflet 5-19 Drugs and aircrew: AP1269A RAF Manual of Assessment of Medical Fitness
- 9. **Local Anaesthetic.** Local anaesthetic has the potential to mask post-operative dental pain, therefore Aircrew, Military Divers and Operations Support personnel (Air Battlespace Managers and Air Traffic Controllers) are not to control aircraft or dive, within 12 hours (see above) of receiving local anaesthetic⁹. If post-operative pain continues Service Personnel are to extend the 'no-fly/dive' period and present to a Dental/Medical Officer for further evaluation.

_

⁶ https://www.nice.org.uk/guidance/NG12/chapter/1-Recommendations-organised-by-site-of-cancer (accessed Jan 17).

⁷ Examples: TMJDS, Atypical Facial Pain, Trigeminal Neuralgia.

⁸ Toothache caused by changes in atmospheric pressure. Contained apical pathology can cause significant barodontalgia during ascent when the gas of putrefaction leads to distraction of the tooth.

⁹ Except when directed by a Military Aviation/Diving Medicine Examiner.

10. **Analgesia.** Moderate or severe pain is usually associated with a limitation of physical function, psychological distress or cognitive distraction. For these reasons, moderate or severe pain is incompatible with flying / controlling, diving and other safety critical duties. Medical and Dental Officers should apply guidance at Paragraph 7 on paracetamol, NSAID and Opioid use.

Facial fractures

- 11. Service Personnel with facial fractures are normally graded MND whilst under treatment.
 - a. **Internal fixation.** Service Personnel with no symptoms or signs from their *in situ* internal fixation can be graded MFD. Removal of pathology free internal fixation is unnecessary and should not normally be considered unless for specific occupational reasons¹⁰.
 - b. **Facial fractures and sport**. Service Personnel who have sustained a facial fracture should be placed on limited physical duties for 6 weeks¹¹. All contact sports, eg boxing and rugby football, must be avoided for 3 months and appropriate JMES and MedLim awarded.

Orthodontic Treatment

12. Service Personnel undergoing orthodontic treatment will not normally require a JMES change. Orthodontic treatment within the Services may be suspended, by making the appliance passive, to facilitate a change in the Service Person's employment /deployment.

Orthognathic surgery

- 13. Service Personnel who are undergoing orthognathic surgery need a prolonged period of presurgical orthodontics¹². Whilst orthodontic treatment does not normally require changing of their JMES, the pre-surgical orthodontic component of orthognathic treatment requires Consultant level support normally delivered in the UK. Extended overseas employment can challenge treatment progression and therefore the Service Person should be graded MLD to allow a MRA to be conducted. A minimum of L3 E3 MES codes and Medical Limitation "5501 to be made available for regular medical reviews", should be applied. This highlights to single-Service manning authorities that consideration should be given prior to overseas assignments and deployments.
- 14. Once the surgical plan and timings are confirmed, the Service Person is to be graded MND until no less than 3 months after confirmation of fracture healing.

Head and neck tumours

15. Service Personnel undergoing treatment for head and neck tumours are to be graded MND. Service Personnel with a history of head and neck malignancy require regular review for a period of up to 5 years and are to be graded MND until the recall period is annual or less frequently.

Table 1 - Service OMFS Consultants

Hospital	Consultant	Email
DMG South East	DMG SE Consultant Max Fac	DMGSE-ConsultantMaxFac@mod.uk
DMG South	DMG South Consultant	DMGS-HQ-MCD@mod.uk

-

¹⁰ Certain specific single-Service roles may require consideration of whether the metalwork can remain eg clearance divers.

¹¹ Current practice of British Oral and Maxillofacial Surgeons: advice regarding length of time to refrain from contact sports after treatment of zygomatic fractures S Mahmood, DJW Keith, GE Lello British Journal of Oral and Maxillofacial Surgery 2002 Dec; Vol. 40, Issue 6: p488–490.

¹² This may last up to two years.

Blood disorders

1. The identification of blood disorders should prompt re-grading to MND Temp. Permanent grading is dependant on the outcome of investigations.

Blood Borne Viruses (BBVs)

2. The following disorders require re-grading in line with clinical condition, viral loads and treatment requirements. Service Personnel (SP) in specialist employment groups (eg aviation, diving, and submarines) should refer to the extant regulations for those groups¹. Healthcare Workers must have standard and additional health checks and be graded in accordance with JSP 950 Part 1 Leaflet 6-8-1 Defence Medical Services Uniformed and Civilian Healthcare Workers: Tuberculosis and Blood-Borne Viruses Screening and Management. Prior to acceptance, current SP wishing to undertake an internal transfer to the Defence Medical Services (DMS) should be screened in accordance with JSP 950 6-7-4 Annex N Other Conditions Pre-Entry.

3. Human Immunodeficiency Virus (HIV) infection

- a. SP found to be infected with HIV should be initially graded MND for investigation and initiation of treatment. A period of up to 12 months may be required to assess the response to treatment and the stability of CD4 count and viral load on treatment.
- b. SP on Highly Active Antiretroviral Therapy (HAART) who achieve a satisfactory CD4 count² and a viral load which is maintained consistently below 50 copies per ml for 6 months are to be graded by a uniformed Occupational Medicine (OM) Consultant led medical board taking advice from the Military Advisor in Sexual Health and HIV Medicine (MASHH)³. SP are to be graded no higher than MLD. In all cases MedLims stipulating the following must be awarded:
 - (1) The requirement for a medical review before commencing Individual Pre-Deployment Training (IPDT) / Deployment.
 - (2) The requirement for approval by a uniformed OM Consultant and MASHH before commencing IPDT / Deployment.
 - (3) The requirement to comply with medication and for 6-monthly blood tests for viral load and 6-monthly reviews by MASHH.
- c. SP who do not adhere to medication or follow-up requirements, have abnormal CD4 counts, viral loads over 50 copies per ml (repeated tests 4 weeks apart) or any signs of HIV related illnesses or recurrent infections are to be graded no higher than MND E3 Perm. Their employability is to be determined by a uniformed OM Consultant led Medical Board.

4. Hepatitis B, Hepatitis C and other Hepatitis Viral Infections

a. Hepatitis B

(1) SP found to be infected with hepatitis B should be initially graded MND for investigation and assessment for treatment. SP who are inactive carriers or who are treated for medical reasons and successfully maintained on long-term HBV antiviral therapy with a hepatitis B DNA <1000 copies/ml may be upgraded to no higher than MLD.

¹ BRd 1750A Handbook of Naval Medical Standards AP 1269A Royal Air Force Manual of Medical Fitness.

² The normal range can vary according to which laboratory is reporting. CD4 counts also show physiological variability. There has also been some confusion when patients have had their gradings change because they did not achieve a 'normal CD4 count' when they have actually had perfectly safe and expected CD4 counts but have shown probable diurnal variability which is indeed normal for all.

³ MASHH On-call email: mod.sh@nhs.net On-call phone: 0121 371 2000 (and request the GUM Specialist Registrar on call).

They should be subject to a uniformed OM Consultant led medical review before commencing IPDT / Deployment and Exercises to assess the risk of ballistic injury and ballistic transmission to others, and their medical support requirements in relation to the medical support available.

- All other SP are to be graded by a uniformed OM Consultant led medical board due to the requirement for on-going healthcare and the risk of infection to other SP and local civilians in situations where ballistic injury may cause exposure to blood and bone fragments from the infected person4. SP are to be graded no higher than MND E3 Perm.
- Commencement of anti-viral medication for occupational reasons alone is not (3) justified.

Hepatitis C b.

- SP who are diagnosed with hepatitis C should be graded MND for treatment by a uniformed Hepatologist where possible. Those who achieve a sustained virological response (undetectable hepatitis C RNA at 6 months post-treatment) can be upgraded MFD noting any need for further follow-up.
- SP who do not achieve a sustained virological response are to be graded by a uniformed OM Consultant led medical board due to the transmission risk in an Operational theatre and potential on-going medical requirements. SP are to be graded no higher than MND E3 Perm.
- Other Viral Hepatitis. SP diagnosed with non-A, B or C viral hepatitis should be C. initially graded MND for investigations. Thereafter, grading should be based on the advice of a uniformed Hepatologist and uniformed OM Consultant where appropriate, taking into account potential infectivity to others, treatment and follow up requirements.

Irradiated blood products

- SP who require irradiated blood products⁵ should normally be graded no higher than MND, 5. as such blood products are not routinely available when deployed. RN and RAF SP may be graded MLD (with E4 - subject to an individual risk assessment), but only deployed/employed out of the UK where there is access to emergency medical care at a level equivalent to that provided in the UK. In addition, RN SP are limited to major overseas bases only (excludes Falklands and Diego Garcia). For all SP, limitations on overseas exercises and assignments will also need to be considered as irradiated blood products will not be available in all overseas locations. Irradiated blood products are required to prevent potentially fatal transfusion-associated graft versus host disease for the following:
 - Patients treated with the following drugs: a.
 - (1) Fludarabine.
 - Cladribine. (2)
 - (3)Pentostatin.
 - (4) Alemtuzumab.

5-N-2

⁴ Prof Mutimer (Head UBHNHSFT Hepato-Biliary Team) agrees you cannot exclude infection whatever the viral load given ballistic

⁵ Treleaven J. et al, Guidelines on the use of irradiated blood components prepared by the British Committee for Standards in Haematology blood transfusion task force 2010 Blackwell Publishing Ltd, British Journal of Haematology, 152. http://www.bts.org.uk/Documents/Publications/Irradiation_BJH_2011.pdf. (Accessed 1 Feb 16).

- (5) Other novel purine analogues and related agents until evidence of safety proven.
- b. Hodgkin's lymphoma (lifelong following diagnosis).
- c. Aplastic anaemia patients receiving immunosuppressive therapy with anti-thymocyte globulin and/or Alemtuzumab.

Medically unexplained symptoms following operational deployment

6. In the aftermath of every conflict for which records exist some returning SP have complained of ill-health. This includes any individuals who have returned from Operational deployment, or who were prepared for deployment but did not actually deploy, who believe that their health has been adversely affected. In many cases symptoms are vague and non-specific, which can lead to inappropriate and unwelcome reassurance, delays in investigation and, often, loss of confidence in the DMS. All medical practitioners must be aware of ways in which health concerns can present following Operational deployment, the investigations which should be carried out, and the procedures for obtaining referral for specialist investigation. These are detailed in JSP 950 Part 1 Lft 2-1-2 The Management of Medically Unexplained Symptoms Following Operational Deployment.

Fatigue syndrome(s)

7. The diagnosis of the group of conditions known as chronic fatigue syndrome, fibromyalgia, myalgic encephalomyelitis, and post-viral fatigue syndrome, is often made by exclusion of somatic pathology. All have similar poorly defined symptoms with variable somatic (ie variable and flitting muscle and joint pains, trigger points etc), and psychological (ie anxiety and, or depression etc) manifestations. Each should be dealt with on an individual basis, and they should be graded in accordance with functional capacity taking appropriate occupational medicine advice. Cognitive behavioural therapy and graded exercise therapy have been shown to be of definite benefit, with pacing of possible benefit and so early referral for such interventions should be considered; guidance has been published by NHS Plus with the support of the Faculty of Occupational Medicine⁶. Grading should reflect the functional level during this rehabilitation phase. Final outcomes are variable and consideration may have to be given to medical discharge.

Climatic injuries

- 8. Individuals who have conditions known to be aggravated by service in hot or cold climatic conditions should be grader no higher than MLD E2 or E3 to reduce the risk of further exacerbation, recurrence or harm. Examples of such conditions are chronic otitis externa, chronic suppurative otitis media, hyperhidrosis, severe ichthyosis, sprue, chronic blepharitis, Raynaud's phenomenon and previous heat or cold injury (including freezing and non-freezing cold injury).
- 9. JSP 539 Climatic Illness and Injury in the Armed Forces: Force Protection and Initial Medical Treatment covers Force Protection and the initial medical management of heat illnesses and cold injuries. These cases should initially be graded MND until assessed and stabilised. Thereafter, grading is based upon the functional capacity, on-going treatment and the requirement to protect against further exposure as above. Appropriate MedLims should be used to indicate the requirement for enhanced PPE or limitations of exposure to cold or heat where required. A tri-Service Heat Illness Clinic (HIC) and Cold Injury Clinic (CIC) is offered by the Institute of Naval Medicine (INM) which can provide clinical assessment of and advice on SP, with grading and employability advice available from the ROHTs.

Immune system disorders

⁶ Occupational Aspects of the Management of Chronic fatigue Syndrome – a national guideline http://www.nhshealthatwork.co.uk/images/library/files/Clinical%20excellence/CFS_full_guideline.pdf (Accessed 1 Feb 16).

- 10. Allergy and anaphylaxis. The development of severe allergic reactions and/or anaphylaxis during service should be dealt with on a case-by-case basis and grading should be responsive to risk assessment conducted with due regard to continuing employment and the specific medical and logistic support requirements of the individual. SP should be referred to the Lead Consultant at any of the British Society of Allergy and Immunology allergy clinics detailed in Table 1. SP with a requirement to carry a self-administered adrenaline auto-injector (confirmed by an appropriate medical specialist) require uniformed OM Consultant review to determine their grading, which will be no higher than MLD).
- 11. Desensitisation treatment is prolonged (usually >3 years) and is not guaranteed to resolve the allergy (most sites do not undertake post-treatment exposure tests to confirm the results). SP deciding to undertake desensitisation treatment should be advised of the potential employment consequences of long-term downgrading without a guarantee of being MFD on completion.
- 12. **Drug allergy.** Allergic reactions to drugs should be investigated and appropriately recorded in both the medical records and on warning tags. Downgrading to MND may be necessary to allow for investigations to be completed and is mandatory for anyone who is under investigation for allergy to key drugs on Operations (eg morphine in auto-injectors, CBRN prophylaxis or treatments or regularly used anaesthetic drugs). SP with a proven allergy must as a minimum have a L2 Perm medical marker. SP who have proven allergy to drugs that are required on Operations are permanently non-deployable.

Table 1 – Recommended allergy and immunology clinics for military patients.

Region	Hospital Clinic/Service
Bath	Consultant Paediatrician, Zone B11, Department; Paediatrics, Royal United Hospitals, Bath Foundation Trust, Combe Park, Bath BA1 3NG
Belfast	Consultant Immunologist, Immunology Day Centre, The Royal Hospitals, Grovenor Road, Belfast, Northern Ireland BT12 6BN
Birmingham	Senior Lecturer and Consultant Immunologist, University Hospital Birmingham, Mindelsohn Way, Edgbaston, Birmingham B15 2GW
Birmingham	Consultant Immunologist, City Hospital NHS Trust, Dudley Road, Birmingham, B18 7QH
Birmingham	Allergy & Clinical Immunlogy Consultant, Birmingham Heartlands Hospital, Bordesely Green, East Birmingham B9 5SS
Cambridge	Allergy & Asthma Consultant, The Allergy Clinic, Addenbrookes Hospital, Hills Road, Cambridge CB2 0QQ
Cardiff	Consultant Clinical Immunologist, Department of immunology, University Hospital Wales, Heath Park, Cardiff CF14 4XW
Edinburgh	Dermatology Clinical Director, Department of Dermatology Lauriston Place Edinburgh EH3 9HA
Essex	Respiratory Consultant, Department of Respiratory Medicine and Allergy, Broomfield Hospital, Mid Essex Hospital Services NHS Trust, Court Road Chelmsford CM1 7ET
Glasgow	Consultant Clinical Professor, West of Scotland Anaphylaxis, West Glasgow ACH, Dalnair St, Glasgow G3 8SJ
Hereford	Respiratory Consultant, Wye Valley NHS Trust, County Hospital, Union Walk, Hereford, Herefordshire HR1 2ER
Leeds	Consultant Clinical Immunologist, St James' University Hospital, Beckett Street, Leeds LS9 7TF
Leicester	Respiratory Consultant, Institute of Lung Health, Dept of Respiratory Medicine, Glenfield Hospital, Groby Road, Leicester LE3 9QP
London	Paediatric Allergy Consultant, Paediatrics, Kings College Hospital, 3rd Floor, Cheyne Wing, London SE5 9RS
London	Consultant Allergist, The Allergy Clinic, Guys Hospital, Great Maze Pond, London, SE1 9RT
London	

	Allergy & Respiratory Consultant, Department of Upper Respiratory Medicine, Imperial College NHLI, Guy Scadding Building, Royal Brompton Campus, Dovehouse Street, London SW3 6LY
London	Paediatric Allergy Consultant, St Marys Hospital, Imperial Colleage NHS Trust, Praed Street, London W2 1NY
Manchester	Consultant Allergist, The Allergy Centre, Wythenshawe Hospital, CRC NIHR Building, University Hospital, South Manchester NHS Foundation Trust, Manchester M23 9LT
Manchester	Consultant Immunologist, Manchester Royal Infirmary, Immunology Department, Oxford Road, Manchester, M13 9WL
Oxford	Consultant Immunlogist, The John Radcliffe Hospital, Level 4, Academic Street, Headley Way, Headington, Oxford OX3 9DU
Plymouth	Consultant Immunologist, Derriford Combined Laboratory, Level 7, Derriford Hospital, Plymouth, PL6 8DH
Sheffield	Consultant Paediatrician, Sheffield Children's Hospital, Western Bank, Sheffield. S10 2TH
Sheffield	Consultant in Immunology & Allergy, Clinical Immunology and Allergy Unit, Northern General Hospital, Herries Road, Sheffield S5 7AU
Southampton	Allergy & Imunology Consultant, Room CG89, Mailpoint 52, Level G, West Wing, Southampton General Hospital, Tremona Road, Southampton SO16 6YD
Staffordshire	Consultant Immunologist, University Hospital of North Staffordshire, Hilton Road, Stoke-On-Trent ST4 6QG
Surrey	Consultant Paediatrician, Paediatric Department, St Peter's Hospital, Guildford Road, Chertsey, Surrey KT16 0PZ

13. Immune deficiency disorders will require specialist opinion from a Consultant Physician experienced with the management of these conditions and also require uniformed OM Consultant review. Grading will depend on assessed susceptibility to infection, and the requirement for on-going treatment and follow-up, and will be no higher than MLD.

Malignant disease

14. SP with proven malignant disease in the first instance should be graded MND. In such cases, continuance of employment and medical grading should be governed by current functional capacity and requirement for on-going treatment and follow-up. Where malignancy has been successfully treated, consideration may be given to a grading of MFD.

Malignant hyperpyrexia

15. The diagnosis of malignant hyperpyrexia will require permanent grading no higher than MLD and not fit for Operational deployments or isolated environments. Medical Warning Tags should record this information in accordance with single-Service instructions.

Suxamethonium sensitivity

16. Individuals who are discovered to carry the atypical cholinesterase gene should be graded MND until they are assessed to identify whether they require special anaesthetic precautions. SP who require special anaesthetic precautions are to be graded no higher than MLD, and are not fit Operational or isolated environments, due to the risk of SP with this condition obstructing the critical pathways associated with casualty treatment and evacuation. If Service anaesthetic opinion is that they do not require special anaesthetic precautions they may be graded MFD with an L2 marker. Medical Warning Tags should record this information in accordance with single-Service instructions.

Sexually Transmitted Infections (STIs) (excluding BBVs)

17. These are commonly treated outside of, and may not be declared to, the DMS. Certain STIs for example syphilis, gonorrhoea, chancroid, chlamydia, non-specific urethritis, should not affect the grading unless affecting functional capacity or requiring regular hospital based

treatment.

Absent or dysfunctional spleen

- 18. SP who have had a splenectomy or who have significant splenic dysfunction (hyposplenism) should be graded MND in the first instance. SP suffering recurrent infections should remain graded no higher than MND. All individuals should be encouraged to take long-term antibacterial chemoprophylaxis, together with appropriate vaccination in accordance with JSP 950 Part 1 Lft 7-1-1 Immunological Protection of Entitled Personnel and guidance from a Consultant in Infectious Diseases. They must not be deployed into tropical areas, or where there is a risk of contracting malaria. There is a lifelong risk of Overwhelming Post Splenectomy Infection (OPSI), which may be caused by a wide range of pathogens, which in turn may be transmitted by a number of vectors. This risk must be considered when advising about fitness for duty and travel outside the UK. Occupational exposure to certain pathogens is a risk factor and dog handling is contraindicated for those SP. Other occupational exposure to pathogens should be considered on a case-by-case basis.
- 19. If the individuals are otherwise fit in all respects with no evidence of recurrent disease, and / or abdominal sequelae, or occupational exposure risk, they can be considered for grading no higher than MLD L3, E2 unfit malarial areas by a Medical Board with input from a uniformed OM Consultant. The assessment should include consideration of the following factors associated with an increased risk of OPSI:
 - a. Age \geq 50 yrs.
 - b. ≤ 2 yrs since splenectomy/diagnosis of hyposplenism.

Sleep disorders

- 20. **Insomnia.** Insomnia is a symptom not a diagnosis. SP with insomnia causing disability need a physical and mental health assessment to determine possible underlying cause. Any underlying cause then suspected will need to be referred to the relevant specialist as appropriate. SP with persistent insomnia (< 4 weeks) or that requires more than 2 weeks hypnotic medication should be graded MLD pending either further or specialist assessment or a return to normal sleep.
- 21. **Hypersomnolence disorders.** SP with hypersomnolence causing disability need a physical and mental health assessment to determine possible underlying cause. Any underlying cause then suspected will need to be referred to the relevant specialist as appropriate. Whilst symptomatic, awaiting assessment and evaluation of treatment, SP should be graded MND.
- 22. **Narcolepsy.** Suspected cases of Narcolepsy should be referred to a sleep clinic. A confirmed diagnosis of Narcolepsy would normally be graded MND.
- 23. **Breathing related sleep disorders.** Suspected cases of Sleep Apnoea should be referred to a sleep clinic. SP with sleep apnoea should be graded MND until treatment response has been evaluated. Successful conservative or surgical treatment with no residual disability can lead to MFD L2. If Continuous Positive Airway Pressure is required the person will need to be restricted in their fitness to allow access to this treatment and regular medical follow-up; normally graded MLD.
- 24. **Circadian rhythm sleep-wake disorders.** Suspected cases of Circadian Rhythm Sleep-Wake Disorders should be referred to a sleep clinic. Whilst occupational and social dysfunction is interfering with safe or satisfactory military role, the person should be graded MND, pending assessment and successful treatment.
- 25. **Non-REM sleep arousal disorders.** This includes Sleep Walking (Somnambulism) and Night Terrors. Sleep walking considered to interrupt safe or satisfactory military role should be referred to a psychiatrist for exclusion of mental illness, and graded MND until satisfactory resolution of the sleep walking.

- **REM sleep behaviour disorders.** This includes a variety of behavioural anomalies that 26. occur only during REM sleep (Sleep Paralysis, Nightmares, Dream enactment etc). SP with these symptoms should be referred to a psychiatrist to exclude mental disorder, and a sleep clinic for proper diagnostic assessment. Whilst symptomatic, awaiting assessment and evaluation of treatment, SP should be graded MND.
- Restless Leg Syndrome (RLS). This condition is common (general population prevalence is 15%), and in majority of cases is mild and causes little dysfunction. However, it can worsen the prognosis of some mental disorders and be exacerbated by psychotropic medication. SP with RLS (or Peripheral Limb Movement Disorder – a closely related disorder – see below for details) with significant daytime dysfunction resulting, should be graded MND pending assessment and treatment. Underlying causes, including anaemia, chronic neck or spine pathology should be excluded. If long term medication is required, the person will need to be graded MLD to account for medication supply and infrequent review by a medical officer.
- Periodic Limb Movement Disorder (PLMD). Diagnosis is made following polysomnography. If PLMS (periodic limb movements occurring during sleep) are present without clinical sleep disturbance or daytime impairment, the PLMS can be noted as a polysomnographic finding, but the criteria are not met for a diagnosis of PLMD. To establish the diagnosis of PLMD, it is essential to establish a reasonable cause and effect relationship between the insomnia or hypersomnia and the PLMS. PLMS are common but PLMD is thought to be rare in adults. It cannot be diagnosed in the context of RLS, narcolepsy, untreated Obstructive Sleep Apnoea or REM sleep Behaviour Disorder. The diagnosis of RLS takes precedence over that of PLMD when potentially sleep disrupting PLMS occurs in the context of RLS. In such cases, the diagnosis of RLS is made and the PLMS are noted. See RLS for grading advice.

5-N-7

SECTION SIX: HARMONISATION OF MEDICAL BOARDS LEADING TO DISCHARGE

Summary

1. This leaflet introduces policy concerning tri-Service medical discharge boards for servicemen and women. It also introduces the FMed 23, to be used for recording the outcome of all medical boards leading to discharge. This policy aligns the single Services (sSs) together in terms of procedure and consistency of process for medical discharge boards and harmonises the output to other organisations.

Introduction

- 2. The term 'medical discharge board', used throughout this policy leaflet indicates a medical board that has the authority to recommend a medical category that may lead to discharge from the Armed Services. Such boards are not the route by which Service personnel are actually discharged, for medical reasons or otherwise, from the Armed Services. The actual discharge will involve non-medical processes that take place once the recommendation of the medical board has been made.
- 3. Appearance by Service personnel at a medical discharge board is necessary when a medical condition renders the service person unable to achieve the functional capacity required of them for continued service, or when the condition increases the risk of harm to themselves or colleagues to an unacceptable level, should they continue to serve. Such boards are convened by and run according to single-Service regulations but have a common function. A common medical discharge policy aims to harmonise the outputs of these medical boards and ensure consistency of process and fairness across the three Services.

Background

4. The momentum for developing a harmonised policy for medical discharge boards has come from a number of initiatives already in progress. The Defence Medical Discharge Policy Committee includes a common medical discharge process as one of the 3 important strands of work required to ensure the seamless transition of medical discharges from service to civilian life. The Managed Military Health System has a requirement for common policies, processes and standards. The Defence Medical Information Capability Programme (DMICP) provides a common medical information solution for the Defence Medical Services and harmonised processes, particularly outputs, are inherent to this programme. The output from medical discharge boards helps a number of organisations (for example, the Service Personnel and Veterans Agency (SPVA)¹ and the Department of Work and Pensions) to facilitate the move for the Service leaver to civilian life. Common outputs will lead to better understanding of Service leavers' requirements and quicker assessments of benefit.

Aim

5. The aim of this leaflet is to promulgate the policy governing medical discharge boards.

Policy

6. Constitution

a. The process for medical discharge boards is to involve 3 Medical Officers. This is consistent with other tribunals. The 3 doctors need not all sit together at the medical board that recommends the discharge, but the decision to discharge should involve them all.

¹ The Veterans Agency (VA) merged with the Armed Forces Personnel Administration Agency to form the Service Personnel and Veterans' Agency (SPVA) on 1 Apr 07.

The constitution of specific medical boards will remain an issue for single Services and detailed instructions are included in the relevant regulations.

b. The chairman or president of a medical discharge board is to be a consultant in occupational medicine.

7. Medical Category and Employability

- a. **Medical Category.** A medical board's primary role is to award a permanent medical category. Medical discharge boards are to award the highest possible medical category for the service person presenting to it, in accordance with JSP 950 Lft 6-7-5. This will ensure consistency of application of PULHHEEMS profiles and 'P' factors across the 3 Services. In particular P8 has the universal meaning 'Medically Unfit for Further Service' and is only to be awarded by a properly constituted medical discharge board. The consistency of application of PULHHEEMS profiles is necessary to allow common codes, relating to 'P' values, to be used within the DMICP while a variation in MES remains necessary.
- b. **Employment Standards.** Individual sSs have their own systems for awarding medical employment standards and it is not intended for this policy to influence with these.
- c. **Employability.** The decision of the medical discharge board will inevitably provide some degree of opinion concerning the future functional capacity of an individual. However, it is the role of an employability board² to determine whether an individual should continue to be employed in the medical category awarded to them by the medical board. At any time an employability board may request that a medical board reviews its decision on medical category, but the award of a medical category, in particular P8, should only be made by a medical board. The final decision on employability rests with the employability board, or similar body that undertakes this function; it is not a medical board decision.
- d. **Specialist Advice**. Secondary care consultants should be invited to provide occupationally-orientated prognoses on their patients who are due to attend a medical board at which their discharge is likely to be recommended. This is in line with current policy³. However, whilst consultants might make recommendations based on their own experience and competence, it is for the medical board to make the final decision concerning medical category.
- e. **Attributability.** Decisions on attributability are not to be made by medical discharge boards. MOD operates several pensions and compensation schemes with different criteria, aims and standards of proof, and such decisions should be made by the scheme administrators at the SPVA. This position has been clarified by SPPol⁴.
- f. The organisation of continuing clinical or occupational healthcare is not the responsibility of medical boards and therefore there are no fields on the F Med 23 concerned with treatment, investigations or sick leave. Board presidents may however consider it necessary to contact medical officers in some circumstances to make recommendations.
- 8. **Timing.** The timing of a discharge medical board must strike an appropriate balance between the needs of the individual Service and those of the service person. Current procedures allow for single Service differences ('tolerable variation') between the time of referral and attendance at a medical discharge board. Whilst this might appear anomalous, it is felt that the timing of medical discharge boards is likely to be appropriate to attendees' needs and wishes

-

² An employability board considers all aspects of employability, including current and future Service requirement, bearing within branch or trade and promotion prospects, in reaching a decision on whether a particular individual should be retained in Service in the medical category recommended by the medical board.

³ SGPL 05/04 – Role of Secondary Care Consultants in Medical Board Procedures.

⁴ DD SPPol (Pensions) letter reference 'AFCS 75/Attributable' dated 23 Mar 05.

in the majority of cases. The date of the medical discharge board should always allow the timely provision of occupational health advice following the initial referral. Time elapsed waiting for further treatment may hinder this process and all cases should be carefully considered on their individual merits, with the interests of the potential Service leaver paramount.

9. **Resettlement.** There are acceptable differences in single Service rules concerning access to resettlement processes and briefings. Despite these differences it is vital that resettlement advice should be available as soon as possible once the decision has been made to refer a patient to a medical board where discharge is a possibility. Medical officers are to advise units to arrange access to resettlement advice at the time of initial referral to the medical board. The unit must arrange an initial resettlement interview before attendance at the medical board.

10. Common Reporting.

- a. The most important benefit of harmonising medical discharge board processes is to provide a common reporting process. Reports from medical discharge boards are used by a variety of organisations, outside of the MOD, for the benefit of both the Service leaver and the wider Armed Forces. DMICP has an inbuilt quality assurance system and this will ensure a consistent standard is applied to the medical discharge process.
- b. The adjudicative medical input to the SPVA processes, leading to consistent equitable decisions in pension and compensation once the Service leaver has been discharged, will be facilitated by the presentation of clear evidence in the form of a standard board output.
- c. The form to be used to record the decisions of medical discharge boards is the FMed 23. This has been completely revised and is attached at Annex A, with completion instructions at Annex B. The new form has been incorporated into a DMICP template. The form has already been incorporated into single-Service medical administrative instructions.
- d. The form has wide scope and will provide a unified method by which new Armed Forces Compensation Scheme claims and earlier War Pensions claims can be processed by the SPVA. Benefits and compensation awards are determined primarily by the nature of the principal condition and it is important that the wording of the form is not altered locally.
- 11. **Consent.** The consent of the Service leaver is required for the completed F Med 23 to be forwarded to any of the various organisations that may require it to process the leaver's transition to civilian life. Single Services are to develop a form appropriate to their individual needs. The form used by the RN is considered to be an appropriate template for this purpose and is attached for information at Annex C.

Annexes:

- A. FMed 23 Revised 04/07.
- B. FMed 23 Completion Instructions.
- C. Consent to Disclosure of Medical and Administrative Records and Information following Naval Service Board of Survey and Data Protection Act 1998 and Access to Medical Reports Act 1988.

F Med 23 (04/07)

Date of Entry

OFFICIAL SENSITIVE PERSONAL

Medical in Confidence (when completed)

Branch/Trade

Rank/Rating

Service number

									-	
Surname					Comr	nand				
Forename(s)		Ship/Unit/Station								
Date of Birth			Enlist	ment/Comm	nission					
					type					
Place of Bo						cted Depart	ure Date			
Authority fo					Ceas	ed duty on				
Date of Bo	ard									
Principal co	ondition(s) a	ffecting the	Medical		Othe	r condition(s) affecting	g the	Medical D	Deployment
-		_	e Medical B	oard		dard at the		_		
Date(s) of	origin	Places	(s) of origin		Date(s) of origin		Places(s) of origin			
FINDINGS	OF THE B	OARD								
Р	U	L	Н	Н		Е	Е	N	1	S
Medical En	nployment S	tandard								
Α		L			М			Е		
Medical Lir	mitations on	employabili	ty and future	plans	3					
Period of v	alidity of Me	dical Denloy	/ment							
Period of validity of Medical Deployment Standard										

OFFICIAL SENSITIVE PERSONAL

Medical in Confidence (when completed)

NARRATIVE (Continued on FMed 15 as necessary)					
Name		Rank		Signature	
President					
Member					
Member					
APPROVAL (NOT RN)					
Discharge approved under QR	Name				
paragraph					

OFFICIAL SENSITIVE PERSONAL

Rank

Date

Appointment

Signature of Medical Officer

- 1. The FMed 23 is the form for recording the outcome of a medical board leading to medical discharge. It is a stand-alone document and as such should not make reference to other documents without summarising their contents. If loose leafed sheets are incorporated, personal details (minimum service number, rank and name) are to be included on each sheet.
- 2. This guidance on the completion of the F Med 23 is provided in order to ensure all relevant information is included, consistency is achieved and that the information is presented in the most suitable form.

Procedure

3. The FMed 23 has been recently revised. For convenience, the front sheet of the FMed 23 has been annotated with numbers referred to in the notes below. The relevant boxes on the FMed 23 should be completed in line with the guidance notes below.

Guidance notes relating to annotated FMed 23 front sheet

- 4. Full Service Number. Self-explanatory.
- 5. **Rank/rating.** Use the approved abbreviations.
- 6. **Branch/Trade.** Use the approved abbreviations. Branch and trade names are subject to change, and the correct terminology should be checked with the patient at the time of the Board during the initial interview.
- 7. **Total full time Service.** This information should be taken from the documentation provided by the parent medical centre for prelims. It should be checked with the patient during the initial interview. It is not necessary to corroborate this with the personnel record as a matter of routine.
- 8. **Surname and forename(s).** Current full names, as appear on the medical record, should be used. Do not include previous surnames (eg maiden names) and nick names, which should be explained in the narrative if required.
- 9. **Dates.** To avoid any possible confusion with dates, the correct Service date format should be used throughout. This is in the form of numbers for the day, a 3 letter abbreviation for the month, and 2 numbers for the year, such as 29 Jul 93.
- 10. Command. Insert the appropriate abbreviation.
- 11. **Ship/Unit/Station.** The current parent unit is to be listed. Note that some referrals will have come from a different unit, which has medical parenting responsibilities, and that patients may have been posted between referral and the time of the board. This information should be checked with the patient at the time of the Board.
- 12. Type of Enlistment/Commission. Use the approved abbreviations.
- 13. **Authority of Board.** Insert the appropriate authority for the board.
- 14. **Principal condition(s) affecting the medical employment standard leading to Medical Board.** This section should be completed with care, as it may have a direct impact of the later award of a War Pension, an Armed Forces Pension or compensation under the AFCS. This should normally only list one condition. In exceptional cases where more than one condition has an equal effect on the award of P grades / PES, more than one condition may be listed. The justification for this should be included in the text.

- 15. **Place of Board.** This will normally be listed as the Medical Centre or Standing Medical Board.
- 16. **Date of board and signatures**. All dates for the Board and date of signing are to be the same, and are to be the date on which the patient was seen and the PES awarded. Delays due to typing are to be ignored.
- 17. Other condition(s) affecting the medical employment standard at the time of the Medical Board. Details of other medical conditions affecting the patient and contributing to the PES awarded should be listed here.
- 18. **Date (of principal and other conditions).** The date listed should be as accurate as possible, to the day. If the exact date of onset is uncertain, such as when a patient presents late with a problem, then the date of presentation should be stated with the fact noted (eg 1 Feb 98 (presented)), and the matter noted in the narrative. (eg "on 1 Feb 98, LCpl Bloggs presented with a history of wheeze of several months duration"). A separate date should be noted for each condition listed, using the same numbering system.
- 19. **Place of origin.** The Place of Origin should be confined to a broad geographical area, (eg UK, Germany, SBA Cyprus, or USA). If the event occurred on operations, then the inclusion of the operation is recommended (eg Op Telic, Iraq). A separate place should be noted for each condition listed in the Principal Disabilities box, using the same numbering system.
- 20. **Ceased duty on.** For those patients not currently at work, being non-effective or on sick leave (SL), the day after the individual was last fit for duty in any capacity should be recorded. This information should be sought from the patient during the Board.
- PULHHEEMS. The PULHHEEMS block should be completed in accordance with Section 1.
 - a. Place, type and date of next Medical Board. If the medical board wishes to review a PES at a set interval, the appropriate information should be entered here.
 - b. **Probable period of unfitness.** Those awarded a PES other than 'NONE' are deemed to be fit. For those graded P0 the probable period of time before return to duty / next medical board should be noted. If a period of SL is granted, then the appropriate period should be noted here.
 - c. For those graded P7 and above, any employment restrictions should be recorded here.
- 22. **Normal date of termination.** The current exit date should be entered here, as related to the type of enlistment/commission (see note 9). If a patient is due to leave on or some other mode of exit other than at the end of their normal engagement, this should be annotated here (eg 1 May 08 (PVR)), and full details noted in the narrative.
- 23. **Narrative.** The following information must be recorded:
 - a. Relevant medical history including medical treatment and medication (both past and planned)
 - b. Relevant medical examination details and findings.
 - c. The board is satisfied that advice about prognosis has been obtained from a relevant clinician.
 - d. That the board is satisfied that on-going treatment is appropriate.

- e. Current Employment (including any adaptations made for medical condition).
- f. Rehabilitation.
- g. Social and Employment History.
- h. Other considerations (eg relevant information from Appendix 18 if used, patient's wishes, Unit view etc).
- i. Recommendation.
- j. Confirmation that the patient was given an opportunity to ask questions and will be given a copy of the FMed 23.
- 24. **President's signature.** This space is for the President's signature.
- 25. **Board Members' details.** These boxes should contain the rank, initials and surnames of the Board President and Members.
- 26. **Members' signatures.** These spaces are for the Members' signatures.

CONSENT TO DISCLOSURE OF MEDICAL AND ADMINISTRATIVE RECORDS AND INFORMATION FOLLOWING NAVAL SERVICE MEDICAL BOARD OF SURVEY (NSMBOS) – DATA PROTECTION ACT 1998 AND ACCESS TO MEDICAL REPORTS ACT 1988.

Information to Patient

- 1. Following your attendance at NSMBOS there will be various other external and internal departments / authorities who will be required to assess your individual circumstances and case for the purpose of making various decisions relating to your employment or eligibility for financial benefits on discharge. These other departments will usually require the release of certain records or information to them in order to enable a full and proper assessment/ decision to be determined.
- 2. This information that may be requested is *confidential* and cannot be disclosed without your specific consent.
- 3. The table in this paragraph gives details of the departments / authorities that are normally involved in your case after NSMBOS and also gives details of the usual information or records that are required by them. Records or information that is not usually required but *may* be requested by them dependent upon the circumstances of the case are marked with an asterisk (*).

Agency / Authority	Records that may be required to be disclosed	Usual purpose of disclosure
Naval Service Employability Board (NSMEB)	NSMBOS Forms 1,2,3 and 5 FMed 24.	To enable a full and proper assessment of your employability to be determined.
Naval Resettlement Information Officer (Medical) (NRIO(M))	DP1 E,H or U as appropriate. * FMed 24	For forwarding to the Disability Employment Advisor / Careers Advisor and providing adequate resettlement advice
Armed Forces Pension Authority (AFPAA(G))	* All Personal Medical Records (FMed 4) and any NSMBOS Records Held.	To enable a full and proper assessment of your eligibility for AFPS invaliding and Service Attributable benefits to be determined.
Armed Forces Pay Authority (AFPAA (C))	* Any medical Information related to your boarding condition only.	To enable assessment of any LSAP waiver to be determined.
Veterans Agency (VA)	All Personal Medical Records (FMed 4) and any NSMBOS Records Held.	To enable a full and proper assessment of your eligibility for War Pension / Armed Forces Compensation Scheme benefits to be determined.
Discretionary Awards Panel (DAP)	All Personal Medical Records (FMed 4) and any NSMBOS Records Held.	To enable a full and proper assessment of your eligibility for AFPS invaliding and Service Attributable benefits to be determined if further scrutiny is required in the case of an appeal against AFPAA(G) decision.

MDG(N) Med Legal	All Personal Medical Records (FMed 4) and any NSMBOS Records Held.	To deal effectively with any legal claim that you may have.
Defence Analytical Statistics Agency (DASA)	FMed 23	For statistical recording and analysis.

- 4. In some instances this information may be requested again at a later date following initial disclosure at the time of the NSMBOS (for example your condition changes and your pension / benefits needs to be re-assessed, your case reviewed etc). If you are not invalided this information may be required by some departments / authorities after you leave the service if you make a subsequent or further claim. In these circumstances the departments / authorities involved will need to obtain further consent from you before we will release the information / records to them, since the consent that you are giving on this form is not continuous, it will only last and be used for the purpose of concluding your attendance at this particular NSMBOS.
- 5. There is no requirement for you to view any documents or reports prior to us forwarding them (under the Access to Medical Reports Act 1988) since there is no information or reports being forwarded that have not already been sighted by you prior to the NSMBOS taking place, for which your separate consent was obtained.
- 6. You **do not have to** consent to the release of this information or records if you do not wish to and NSMBOS will not disclose it / them if you have not done so. You must obviously bear in mind the implications that this *may* have on any decision that those departments / authorities are required to make.

Consent

Name	Rank/Rate	
Service No	Date of NSMBOS	

- a. I have read and understand the 'Information to Patient' notes 1 6 overleaf.
- b. **I consent / do not consent** * to the disclosure of the medical and administrative records / information that is, or may be required following NSMBOS, only to those departments / authorities and only for those purposes, as detailed overleaf at paragraph 3 of this form, until expiry of this consent.
- c. I understand that if any other records / information is / are required by any other department / authority, or for any other purposes, other than those detailed at paragraph 3 of this form my separate consent will be required to be obtained.
- d. I understand that this consent is not continuous and will automatically expire after 12 calendar months from the date of the NSMBOS attended.

* Delete as required.	
Signed	_Date
e. I have explained the contents of and requirements for this of witnessed his / her signature.	consent form and have
Signed	_Date