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The Industrial Injuries Advisory Council

Proceedings of the 14th Public Meeting

Held on 2 July 2015
London

Table of contents

Foreword

The fourteenth public meeting of the Industrial Injuries Advisory Council (IIAC) was held in London on 2th July 2015. This event built on the previous successes of the Public Meetings held around Great Britain over the past 13 years.

These meetings allow members of the Council to hear directly from interested members of the public and for the public to get a much better understanding of the Council's work. Again, this public meeting proved an informative occasion for the Council with a number of topics being brought to our attention. I would like to thank all members of the public who came to the meeting for contributing to the lively discussions which made the occasion so worthwhile. As always, important issues were raised, which the Council and the Department for Work and Pensions (DWP) will consider going forward.

IIAC is a non-departmental public body that advises the Secretary of State for Work and Pensions and the Department for Social Development (DSD) in Northern Ireland on the Industrial Injuries Scheme. The DWP and DSD are responsible for the policy and administration of the Scheme. IIAC is independent of the DWP and the DSD. It is supported by a Secretariat provided by the DWP and endeavours to work cooperatively with Departmental officials in provision of its advice.

This document is a record of the London public meeting and covers events and discussions up to 2 July 2015. However, this report should not be taken as guidance on current legislation, or current policy within the DWP or DSD, as members may have expressed personal views, which have been recorded here for information.

Professor Keith Palmer
Chairman IIAC

Agenda

09:15 – 10:00	Registration
10:00 – 10:30	**Welcome Remarks** Chair of IIAC – Professor Keith Palmer
	IIAC's approach to scientific decision making Chair of IIAC – Professor Keith Palmer
10:30 – 10:45	**The facts behind the Industrial Injuries Scheme** Professor Sayeed Khan
10:44 – 11:00	**Discussion and questions**
11:00 – 11:20	Break
11:20 – 11:35	**Occupational epicondylitis** Dr Karen Walker-Bone
11:35 – 12:05	**Matters raised at past public meetings** Professor Paul Cullinan
12:05 – 12:30	**Discussion and questions** Panel
12:30 – 13:30	Lunch
13:30 – 14:00	**Stress at work** Dr Ira Madan
14:00 – 14:30	**Diesel exhaust emissions and cancer** Professor Neil Pearce
14:30 – 15:00	**Commissioned review of medical assessments** Mr Richard Exell
15:00 – 15:15	**Open Forum and Closing remarks** Mr Doug Russell
15:15	End of public meeting

Welcoming Remarks

Professor Keith Palmer
Chair of IIAC

1. Professor Keith Palmer welcomed everyone to the London public meeting and the IIAC members introduced themselves.

2. The Industrial Injuries Scheme provides non-contributory, no-fault compensation which principally includes Industrial Injuries Disablement Benefit (IIDB). This is paid to people who become ill as a consequence of a workplace accident or an occupational or 'prescribed' disease. These terms have specific legal meanings and have been refined by case law. A workplace or 'industrial accident' is defined as "an unlooked for occurrence" or "mishap" arising "out of and in the course of employment". A prescribed disease is one that is associated with an occupational cause and which is listed in the Scheme's regulations; IIAC uses a specific approach to check for this.

3. The Scheme compensates employed earners; the self-employed are ineligible to claim IIDB for work-related ill-health or injury. Claimants can receive benefit from ninety days after the accident or onset of the prescribed disease; shorter periods of disablement are not compensated.

4. Certain prescribed diseases are given the benefit of 'presumption' – if a claimant is diagnosed with a disease and had an appropriate exposure then it is presumed that their occupation has caused the disease; the rule is complicated and two reports detailing the Council's reviews of presumption have recently been published.

5. The Scheme compensates for "loss of faculty" and its resultant "disablement", as compared to an age- and gender-matched person as assessed by medical advisers engaged by the Department. Assessments of disablement are based on loss of function, rather than loss of earnings and are expressed as a percentage. Thresholds for payment are applied such that, in general, payments can be made if disablement is equal to, or greater than, 14%. The exceptions to this are pneumoconiosis and byssinosis where payment can be made if disablement is 1% or more and occupational deafness where the threshold for payment is 20% disablement. Assessments of disablement can be aggregated (this is the process whereby two or more concurrent assessments are added together to produce one award of benefit).

6. IIAC is a statutory body, established under the National Insurance (Industrial Injuries) Act 1946, to provide independent scientific advice to the Secretary of State for Work and Pensions and the DSD in Northern Ireland on matters relating to the IIDB Scheme or its administration. The members of IIAC are appointed by the Secretary of State after open competition, and consist of a Chair, scientific and legal experts, and an equal number of representatives of employers and employees. Officials from the Health and Safety Executive (HSE) and relevant policy divisions

of the DWP, Ministry of Defence and DSD may attend IIAC meetings to provide information and advice. There are four meetings of the full Council per year.

7. The majority of IIAC's time is spent providing advice to the Secretary of State on the prescription of occupational diseases. IIAC's other roles are to advise on proposals to amend regulations under the Scheme, to advise on matters referred to it by the Secretary of State, and to advise on general questions relating to the IIDB Scheme. The Council has no involvement in decision-making of individual claims.

8. A permanent sub-committee of the Council, the Research Working Group (RWG), monitors and reviews medical and scientific literature to identify developments in the field of occupational ill-health which are then brought before the Council. This work is supported by a Scientific Adviser. The RWG meets four times a year.

9. IIAC also investigates diseases following referrals from the Secretary of State, correspondence from MPs, medical specialists, trade unions, and others, including topics brought to its attention by its own members and by other stakeholders.

10. IIAC produces several different types of publication. Command Papers are reports that are presented to Parliament by the Secretary of State for Work and Pensions, often forming the basis of legislation or changes to DWP policy (the reports are produced by 'command' of Her Majesty). Position Papers are published on important subjects that IIAC has considered, but where it does not recommend prescription or where the matter has not been referred by the Secretary of State. IIAC also publish information notes detailing the Council's review of a broad range of topics where a recommendation to prescribe is not appropriate and where there is insufficient evidence to warrant a position paper. Commissioned research reports may be published from time to time, funding permitting, and are instigated at the request of the Council. These reports are carried out by an independent third party, usually by an academic expert, following a bid via open competition, and are used to provide a research analysis of a specific area of the Council's work programme. Finally, IIAC publishes an annual report and the proceedings from its public meetings.

11. IIAC's current and recent work programme includes, by way of examples, reviews of the diseases due to ionising radiation, diesel exhaust emissions and cancer, medical assessments of disablement, occupational epicondylitis and osteoarthritis of the knee in joiners.

IIAC's approach to scientific decision making

Professor Keith Palmer
Chair of IIAC

12. How does IIAC decide which diseases to prescribe? The Council is bound by the legal requirements set out in the Social Security Contributions and Benefits Act 1992. The disease must be a risk of the occupation and not a risk common to all persons, and attribution of the disease to the occupation in an individual case must be capable of being established or presumed with reasonable certainty.

13. Some occupational diseases are relatively simple to verify in that they have unique clinical features that can be ascertained and occur relatively rarely outside work. Examples of 'easy' cases are specific poisonings and mesothelioma; also, occupational asthma and contact dermatitis, where challenge with the suspected occupational agent confirms the diagnosis. On the other hand, where a disease is common in the general population and has no clinical features that are unique to occupational cases it is much more difficult to establish a link between the occupation and the disease. Both back pain and stress are examples of 'tough' cases to verify and attribute as being caused by occupation. At the 'tough' end, judgements depend on assessment of the probabilities from the scientific literature rather than specific medical tests.

14. When considering a disease for prescription, IIAC has to address the question of attribution, i.e. whether there is a link between the job and the disease that can be presumed with reasonable certainty. For the purposes of the Scheme, 'reasonable certainty' is taken to mean 'more likely than not' – the usual civil law standard of proof. Epidemiology is the branch of medicine that deals with the distribution and determinants of disease in human populations, and IIAC applies epidemiological principles when considering prescription.

15. In epidemiological terms 'more likely than not' can be represented mathematically as an attributable fraction (i.e. the percentage of cases in occupationally exposed claimants that have been caused by that exposure, assuming a causal relationship). 'More likely than not' means, for those with the occupational exposure, an attributable fraction greater than 50%. Imagine we have two working groups of equal size (for example 1000 in each group), an exposed group and a non-exposed group. Imagine there are 100 cases in the exposed group and 50 cases in the non-exposed group. Then it is clear that there is an exact doubling of risk in the exposed group (100 per 1000 vs. 50 per 1000). Also, the total risk in the exposed group can be split into two parts (i) the 50% that is due to the background risk and would occur anyway and (ii) the 50% excess risk that is due to exposure. If the excess were slightly more (greater than a doubling of risk) then it would also be the case that the disease was 'more likely than not due to the exposure' in exposed claimants.

16. IIAC's task is to determine whether there is good evidence that the risk of a particular disease is more than doubled in a group with defined occupational exposure. If the answer to this question is yes, then in the absence of other factors IIAC would recommend that the disease is prescribed with the intention that the exposure is presumed to have caused the disease in an exposed worker on the basis of the defined group's probability.

17. The Council has already recommended prescription for several diseases where the process of attribution to occupation has been complex. These diseases include Vibration-induced White Finger (VWF), carpal tunnel syndrome (CTS), chronic bronchitis and emphysema (now commonly known as chronic obstructive pulmonary disease) and osteoarthritis (OA) of the hip in farmers.

18. In order to establish whether there is a more than doubling of risk of a disease attributable to a particular occupation, IIAC looks to scientific research and academic experts for evidence. It is important that the evidence is consistent and comes from more than one independent, good quality study, and ideally several studies of different design, since this reduces the likelihood of methodological problems resulting in error or bias, and of any decisions being overturned by the results of future research. The occupational circumstances also have had to have affected UK employed earners (at least in the past, if not presently).

19. Practically speaking, it is also important that the disease and the relevant exposures can be easily verified and that the disease is a cause of significant impairment.

Osteoarthritis of the hip in farmers – an illustrative example of decision making in practice

20. Professor Palmer outlined IIAC's scientific decision making in practice, using OA of the hip in farmers as an example.

21. OA of the hip is common in the general population and has a similar clinical appearance in farmers to other people. An increased incidence of OA in farmers was first suspected as this occupational group appeared on hip surgery waiting lists more often than expected from the frequency of farming in the population. This observation in itself was not proof that farmers were more at risk of OA of the hip, since the data could have arisen because farmers presented themselves to hospital for treatment more readily (their livelihood depends on their ability to perform physically demanding work). However, this observation was followed by additional research which concluded that the disease was more common in farmers.

22. In one line of inquiry, researchers used X-rays which displayed the hip joints but which had been taken for other diagnostic purposes (e.g. to look for kidney disease). The frequency of farming was considered in those with and without hip OA. Studies from the University of Southampton and research groups in Sweden showed that there was between a two-fold to 10-fold increased risk of OA of the hip in farmers. In this research the problem of 'volunteering' bias was limited since the

comparisons were made among people who had not been selected on the basis of their care-seeking for hip disease.

23. The consistent demonstration of a greater than doubling of risk in multiple surveys from more than one country and across a range of study designs allowed the attribution of OA of the hip in farmers to their occupation on the balance of probabilities.

24. Verification of OA of the hip is straightforward since there are well-defined diagnostic criteria. Professor Palmer presented pictures of X-rays of normal hips and an osteoarthritic hip. An osteoarthritic hip is characterised by a narrowing of the joint space between the pelvic socket (acetabulum) and the head of the femur (thigh bone), and roughened joint surfaces. Bony spikes and bone cysts may also be present. Thus the disease can be confirmed, can be disabling, and has been shown to be at least twice as common in farmers as in other comparable groups.

25. The Council then had to consider an exact definition of the occupational criteria for exposure – the definition of farming and whether particular types of farming carried special risks. No evidence was found on which to restrict prescription to a defined sub-category of farming activity; evidence was additionally found on the necessary duration of exposure.

26. OA of the hip in farmers fulfilled the criteria necessary to attribute a disease that is common in the general population to a particular occupation. Thus, IIAC recommended that OA of the hip be added to the list of prescribed diseases for those a) employed for at least 10 years in aggregate as a farm worker or farm manager and b) having OA of the hip* or having had it prior to hip surgery (*as diagnosed by a specialist and based on a painful hip with restricted movement and on a hip joint radiograph).

27. As part of the review, OA of the hip in other occupations (such as those involved in heavy lifting) was also considered, but the strength of evidence was much lower than for farming. IIAC regularly monitors emerging scientific literature on this and other issues and reviews the terms of prescription where necessary. Future advances in research may enable the prescription for OA of the hip to be widened. The case of OA in farmers illustrates the nature and level of evidence the Council needs in prescribing for the “tough” cases as defined in paragraph 13.

The facts behind the Scheme: the journey of a claim

Professor Sayeed Khan
Representative of employers

28. Professor Khan gave a presentation focusing on what happens to a claim during its journey through processing.

29. The numbers of new claims has been gradually reducing over the past few years; whereas there were just under 50,000 new claims in 2004 (with around 20,000 new accident claims and just under 30,000 prescribed disease claims), there were just over 20,000 in 2013 (with just over 10,000 new accident claims and just over 10,000 new claims for prescribed diseases). A spike in claims activity was observed in 2008-2010 due to introduction of the newly prescribed disease, OA of the knee in underground coal miners (PD A14).

30. Reduced Earnings Allowance (REA) was abolished 28 years ago although there remains around 50-60 new claims for REA for accidents occurring or prescribed diseases contracted before 1990.

31. What happens to a 'successful' claim? There has been an increase in the proportion of claims for prescribed diseases accepted from 20% in 2003 to 50% in 2014. The reasons behind this change are unclear, but Professor Khan discussed whether it may be that the reduction in number of claims had led to 'better' claims (i.e. those with more chance of success) being submitted.

32. Successful claims may be accepted and result in payment. However, claimants are not eligible for payments where their claim is accepted but results in no loss of faculty or where the assessment for disablement is below the payment point for that prescribed disease. An assessment of less than 14% disablement does not normally attract benefit payments, unless the disability is caused by pneumoconiosis (PD D1), byssinosis (PD D2) or diffuse mesothelioma (PD D3). Benefit can only be paid in respect of noise-induced hearing loss (PD A10) if the assessment is 20% or more.

33. Claimants have the right to appeal decisions, which may arise as their claim has not been accepted, or they disagree with the percentage disablement following an assessment or re-assessment. In 2013/14 there were 3,800 disposals (or decisions) with 85% cleared at the hearing. The remaining 15% of disposals were cleared without a hearing which could be due to reasons such as the claimant and/or their representatives did not attend. A third of appeals led to decisions being made in favour of the claimant, with two-thirds of decisions about the claim made by the Department being upheld.

34. In October 2013 the Department introduced a process change to invite claimants for a mandatory re-assessment of their claim if they had submitted an appeal. This aims to reduce the number of appeals as the re-assessment provides an opportunity for the original decision to be

clearly explained or for the claimant to submit new evidence to support their claim.

35. The IIDB caseload (the pool of existing cases in payment) has remained relatively static over the last decade with approximately 200,000 recipients of IIDB only, 50,000 recipients of both IIDB and REA and 50,000 recipients of REA.

36. How much do claimants get? Weekly payments start at £33.60 for assessments of disablement of 20% rising in 10% increments to £168.00 for 100% disablement. The average weekly amount paid in 2013 was £47.80. The amounts are uprated in line with inflation.

37. Raising awareness of the existence of the Scheme to potential claimants is important. Trade union representatives, health and safety representatives, occupational health professionals and GPs, clinicians and clinical nurse specialist can, and do, play a role in providing information about the Scheme to claimants. The Department also provides information about the Scheme online and in JobCentre Plus offices.

Comments, questions and answers from the 'Welcoming Remarks', 'IIAC's approach to Decision Making' and 'The facts behind the Scheme' sessions

38. ***Mr John Thomson (National Union of Mineworkers; NUM) commented about the importance of raising awareness of the Scheme. Trade unions are very good at highlighting Scheme benefits, but there is a decline in the number of union representatives. Some JobCentre Plus staff are not fully versed on the Scheme and are unable to provide the necessary advice to claimants. More training from the DWP for their staff would be welcomed.***

39. ***Mr Bob Fitzpatrick (NUM) commented that claim processing for some decisions can seem too quick, casting doubt about whether the claim has been thoroughly considered.***

40. ***Mr Chris Skidmore (NUM) – We are aware of a case where a claimant with pneumoconiosis was originally assessed at 1% disablement early on in his disease. Ten years later the claimant died and he was posthumously assessed at 70-80% disablement. Pneumoconiosis can be a progressive disease and the claimant was not re-assessed whilst alive. Should claimants with diseases which are known to be progressive be invited for re-assessments so that they may receive the appropriate level of benefit in life?*** A Departmental medical policy official stated that the DWP accepts that pneumoconiosis and COPD can be progressive diseases. A claimant can request a re-assessment at any time if they feel their condition has changed. The Department's policy is not to ask claimants to come for routine re-assessments. The NUM may wish to write to Ministers to raise this issue and ask for consideration of routine re-assessments for progressive diseases. However, another attendee raised the point that claimants who are very unwell or terminally ill may not welcome a request from the Department to undergo a re-assessment.

41. ***Ms Clare Haddow (Clare Haddow Occupational Health Specialists Ltd) – To raise awareness about the IIDB Scheme and the work of the Council IIAC members could give a presentation to the Occupational Health Group, a group that is always interested in new speakers***.

42. ***Mr Orlando Heijmer-Mason (Scottish government) – Are there any examples of occupational diseases that have been too expensive to prescribe?*** IIAC makes its recommendations to Ministers based on whether the risks of the disease can be attributed to the occupation with reasonable certainty. In general this means that it considers whether there is epidemiological evidence that the occupation in question is at a greater than doubled risk of developing the specified disease compared to a suitable reference population. The Council's decisions are not based on costs to the Scheme. It is up to Ministers to decide whether to implement IIAC's recommendations and political and cost implications may play a part in this decision.

43. The Department has introduced prescribed diseases based on the Council's evidence-based recommendations despite increased costs implications for the Scheme, such as OA of the knee. The Department also asked the Council to review provisions for claimants with prescribed diseases that were likely to be terminal to ensure the Scheme remained fair and equitable for all.

44. ***Mr Bob Fitzpatrick (NUM) – To qualify for PD A13 (OA of the hip) a claimant must have worked as a farmer for 10 years in aggregate. For PD A14 (OA of the knee) an underground miner must have worked for 20 years in aggregate. This does not take into account workers who worked longer daily hours. A pro rata calculation should be made to take this into account when considering claims for PD A13 and A14.*** Decision makers calculate a claimant's working time to the nearest day. The research used to frame the prescription for PD A13 and A14 was based on a 'full time' worker, thus a requirement for hours worked would not be in line with the evidence. Furthermore, not all claimants have good historical hourly time records available and so taking into account hours worked would disadvantage these claimants. Decision makers do not take time periods of less than three months' work absence (e.g. for sickness) into account when calculating qualifying work history.

45. ***Mr Bill Palmer (UNISON) commented that training for health and safety representatives should include awareness about the provisions of the Industrial Injuries Scheme.*** Other attendees highlighted that compensation and the availability of the Scheme is covered during Stage II training for health and safety professionals.

Presentations

Occupational Epicondylitis

Dr Karen Walker-Bone
Independent member

46. Epicondylitis is a rheumatic disorder of the elbow joint (or epicondyle) resulting in pain to the outside (lateral) or inside (medial) of the elbow. In 1882, Morris first described lateral epicondylitis as ‘lawn tennis arm’ due to the propensity for lawn tennis players to report symptoms. It is now more commonly known as ‘tennis elbow’ but can also occur due to other exposures. Medial epicondylitis is more commonly known as ‘golfer’s elbow’.

47. Originally, epicondylitis was thought to be due to local inflammation around the elbow joint causing a painful, burning sensation. Hence its nomenclature as an ‘itis’, a suffix usually denoting inflammation. Few cases of epicondylitis require surgical intervention, thus, limiting the opportunity to study tissue samples to understand the pathology of the disease. Modern imaging methods, such as magnetic resonance imaging (MRI), suggest that epicondylitis results from more of a degenerative, rather than inflammatory, process. The elbow joint has a good blood supply and is well nourished, but with ‘wear and tear’ due to advancing age and excess use the body’s repair mechanisms fail, and damage and pain ensue.

48. Burning pain around the epicondyle is a common symptom associated with epicondylitis. The pain may travel up or down the arm and may be aggravated by certain movements, such as lifting shopping bags and gripping movements.

49. It is a common condition, affecting 1-3% of all adults, especially those between the ages of 30-50 years. Studies of people of working age show that men are more commonly affected than women; conversely the incidence/prevalence is higher in women in studies of whole populations. The main risk factors for epicondylitis are undertaking certain sporting activities and performing gripping or rotating motions. There has been growing evidence in the research literature that epicondylitis may also be associated with certain occupational exposures.

50. In 1948, Lambrecht reported an increase in cases of lateral epicondylitis in female working in munitions factories in the Federal Republic of Germany after the Second World War. Those affected did strenuous work to which they were unaccustomed, and symptoms most commonly affected the dominant arm. A large number of studies have since accumulated, which were last reviewed by IIAC in 2006 during consideration of prescription for work-related upper limb disorders. At that time the Council concluded that there was “insufficient evidence to

recommend prescription" but agreed to continue to monitor emerging research.

51. In 2014 the Council received a request from a potential claimant to consider prescription for epicondylitis for a specific occupational category. There was no evidence supporting addition of the correspondent's occupation but IIAC took the opportunity to carry out a full review of the evidence for all occupations and occupational exposures.

52. Twenty years ago there were seven to ten different ways to diagnose epicondylitis. The lack of common, standardised diagnostic criteria posed a significant barrier to prescription as there were not enough studies using the same definition of epicondylitis to identify the risk for any particular occupational category. Several years ago, Dr Walker-Bone had published research to produce a standardised case definition for epicondylitis and, helpfully for IIAC, most studies now use this common definition to identify cases of the disease.

53. During the 2014 review, the Council searched the research literature and identified four studies (in forestry workers, female nursery school cooks, coal miners and public gas and water workers) where the risks of epicondylitis were more than doubled compared to a suitable reference population. However, five studies showed no increased risks (in sewing machinists, fish processors, engineering workers, textile workers and female poultry workers). None of the studies involved particularly large numbers of study participants (generally the results of smaller studies are associated with less statistical certainty). The studies associated with the highest risks of epicondylitis were small studies with few studies providing evidence on the same occupation(s); there were no other studies of the same group showing the same result to support the association.

54. The strongest case was found for meat cutters. Three research papers were identified, in all of which risks were more than doubled (the threshold the Council normally applies in considering prescription). However, two of the studies were from the same cohort of study participants. Whilst this was felt to be promising, the Council concluded that the evidence base was relatively small and not sufficient by itself to justify prescription for meat cutters.

55. The Council next considered whether there was evidence to support prescription for epicondylitis due to exposure to specific occupational activities, rather than specific job titles. Assessing exposures for occupational activities relevant to epicondylitis (i.e. bending and straightening of the elbow) can involve specific monitoring by an occupational hygienist or collecting self-reported questionnaire responses. IIAC considered 19 studies: one used an occupational hygiene measurement and the rest assessed exposures using questionnaires. There is a lack of consistency about how exposures were defined (forceful activities, bending/straightening elbow > one hour/day, keying four hours/day, awkward posture, etc.) making it difficult to compare the risks of epicondylitis between studies.

56. In summary, evidence has been found of elevated risks, which in some cases reached the threshold at which prescription would be considered. However, few studies shared the same definition of occupational exposure. IIAC concluded that it was currently too conjectural to propose an exposure definition for prescription scheduling and, therefore, could not recommend adding epicondylitis to the list of prescribed diseases for any occupations or occupational activities. The Council will continue to monitor additional evidence and we encourage researchers to harmonise their approach to exposures definitions in future studies.

Questions and answers

57. ***NUM attendee – What is the difference between bursitis and epicondylitis?*** The epicondyle is the prominent bone protruding from the elbow and the bursa sits around the epicondyle. Bursitis causes inflammation of the bursa, whereas epicondylitis is due to degeneration of the epicondyle.

58. ***Chris Kitchen (NUM) – Farmers are able to claim for PD A13 (OA of the hip), but there are other occupations that use similar vehicles and involve walking on similar terrain that are not eligible. Why are the terms of prescription not drafted according to occupational activity rather than job title for OA of the hip?*** How the terms of prescription are worded depends on the evidence used to frame the prescription, and often and most conveniently this relates to job titles. Sometimes, however, as in CTS (PD A12), occupational activities are used to define exposures in the terms of prescription. However, it is generally preferable to use job titles to facilitate exposure verification with greater ease during claim processing. (In the case of OA of the hip there is in any case insufficient evidence by vehicle use or terrain worked to support a case for prescription.)

Matters raised at past IIAC meetings

Professor Paul Cullinan
Chair of the RWG and independent member

59. IIAC public meetings are a useful forum for discussing the Council's role and work whilst understanding matters of interest and concern to stakeholders. During the 13 years that IIAC has been holding annual public meetings a number of important topics have been raised by members of the public. Professor Cullinan went on to discuss five issues that IIAC had reviewed as a result of first being raised at Public Meetings over the last three years.

60. At the 2014 public meeting in Edinburgh an academic asked IIAC about coverage for asthma in cleaners within the Scheme. Research shows that cleaners report symptoms of cough and wheezing twice as often as comparison groups (controls). However, it is not clear whether these symptoms represent cases of asthma. Under the Scheme, cleaning agents which are respiratory sensitisers are covered under the terms of prescription for PD D7 (occupational asthma). However, cleaning agents are rarely sensitising agents. New onset asthma caused by accidental exposure to a cleaning product may also be covered under the Accident Provisions. Aggravation of pre-existing asthma due to exposure to cleaning agent is relatively common but would not be covered by the Scheme which is designed to compensate new onset cases of disease due to work. The Council concluded that coverage for asthma in cleaners was appropriate and no changes were necessary. An information note detailing IIAC's review was published in May 2015.

61. An attendee also queried the occupational risks of cholangiocarcinoma of the liver, a rare form of bile duct cancer, at the Edinburgh Public Meeting. There has been a cluster of cases in printers in Japan. The cause of the outbreak is unclear but exposure to 1,2- dichloropropane (DCP) and/or dichloromethane (DCM) has been implicated. The Council considered the evidence and consulted health and safety experts as to whether the implicated chemicals were likely to be in usage in the UK. IIAC concluded that whilst there does appear to be a strong link between liver cholangiocarcinoma in print workers and exposure to DCP and/or DCM, a major uncertainty at present is how representative exposure circumstances were in Japanese printers of experience in other countries including the UK. Research about this novel topic is still emerging and is likely to become available soon. The Council has agreed to keep this matter under active consideration and would review this topic when the causal agent is more clearly defined.

62. At IIAC's public meeting in Southampton in 2013 a union official raised the matter of cancer and diesel engine exhausts. This topic has become prominent recently following the International Agency for Research on Cancer (IARC) re-classifying diesel engine exhaust from a probable, to a definite, human carcinogen. Classification by IARC aims to highlight the carcinogenic risk of substances largely for the purposes of hazard identification. The threshold of proof used by IARC to make its decisions

on classification of occupational and environmental hazards differs from the doubling of risk approach used by IIAC determine which diseases and exposures should be prescribed for the purposes of compensation.

63. From the range of cancers considered by IARC, IIAC has identified that the most promising candidates for prescription (those with the greatest weight of evidence) are cancers of the lung and bladder in various types of drivers and miners. This topic is currently under active consideration.

64. Matters raised at public meetings have also resulted in changes to medical guidance. For example, an occupational health nurse queried the use of inhalers during assessments for Chronic Obstructive Pulmonary Disease (COPD; PD D12). The terms of prescription for PD D12 require that diagnosis of COPD requires a one litre loss of lung function as measured by spirometry. Some treatments may improve lung function which could alter the assessment outcome, especially in borderline cases.

65. The Council reviewed this matter and concluded that there was no scientifically valid offset that could be applied to take into account the broad range of treatments a claimant may be taking. According to respiratory experts if the treatments do improve a claimant's lung function then it may mean the disease was more likely to be asthma rather than COPD. Furthermore, the research upon which the terms of prescription was framed were relatively 'rough and ready' (e.g. did not differentiate between smokers and non-smokers) and, as such, applying a specific offset to account for small differences in lung function caused by treatments would not be justified.

66. IIAC published a Command paper recommending that the effect of treatments should be disregarded during assessments for PD D12 in July 2014. Ministers accepted the Council's recommendations and changes to medical guidance were implemented by the Department.

67. Extending coverage of PD D12 to include surface, as well as underground, coal workers also came about after this matter was raised by union officials at a previous public meeting.

68. Union officials raised concerns at the Leeds public meeting about clustering of awards below IIDB payment points (i.e. usually 14% assessments for most prescribed diseases). IIAC requested a statistical analysis from the HSE which has since been published (http://www.hse.gov.uk/statistics/adhoc-analysis/industrial-injuries-disablement-benefit.pdf). The analysis showed that there was no evidence of clustering of awards just below payment points for single claims. Data was not available for aggregated claims (i.e. claims for more than one prescribed disease).

69. In summary, the open forum and questions raised by attendees form an important part of the public meeting and have the influence to sway the Council's programme of work. IIAC is keen to be responsive to stakeholders' concerns to ensure that the II Scheme remains workable,

equitable for all and does not neglect avenues of investigation that stakeholders identify.

70. During the triennial review of IIAC one stakeholder commented that IIAC's reviews took too long to complete. Considering prescription for a disease and associated exposure is a complex matter, and for many topics involves reviewing a substantial evidence base, including published research, contacting outside experts, consulting the Department and sometimes its lawyers, and occasionally commissioning new data analyses. Beyond this further delays can arise because of the time taken for advice to be prepared for ministers and evaluated practically, and because of publication and parliamentary timetables. The Council is concerned to optimise the timeliness of its reviews and is currently auditing the various steps in the process in case opportunities for improvement can be identified.

71. Finally, two further sources of potential delay in prescription are the time taken for relevant research to be conducted (often the biggest factor) and the time for the Council to identify it. In this respect, any stakeholder can draw the Council's attention to new evidence on a topic and all were encouraged to do so.

Stress at work

Dr Ira Madan
Independent member

72. Why is work-related stress not a prescribed disease? A large number of definitions of stress exist; HSE's definition of work-related stress is "the adverse reaction people have to excessive pressures or other types of demand placed on them at work". Stress, in itself, is not a disease or illness but a sensation. However, if stress is too excessive or prolonged illness may develop. A distinction has been made between stress which is a subjective symptom and anxiety and depression which are defined diseases.

73. Consideration of work-related stress within the prescribed disease provisions of the Scheme poses a number of challenges for IIAC. How do you measure exposure? One person may consider an exposure stressful, whilst others may not. Stress may occur both at work and at home. What about non-occupational factors? What about the epidemiological (population-based) research evidence? How is risk assessed? How are interpersonal and cultural factors taken into account?

74. There is some evidence of an association between work-related stress and physical disease, such as cardiovascular disease. However, the evidence demonstrating a link between the exposure and the stressors remains unconfirmed. The physical diseases linked with stress also have many other potential risk factors; such as tobacco smoking, physical inactivity and drinking alcohol for cardiovascular disease.

75. Prescription of a disease within the Scheme must meet criteria which are set down in law. This process involves defining a health outcome (a disease or condition), identifying the exposure necessary to cause the disabling condition and attributing the disease to an occupation on the basis of a) its unique clinical features or b) epidemiological (population-based) evidence that the disease is at least twice as likely to occur in an exposed group compared to a suitable unexposed group.

76. In IIAC's last review of work-related stress IIAC considered Post-Traumatic Stress Disorder (PTSD) (Position paper 13: Stress and PTSD; 2004). This condition is a recognised psychiatric disorder as defined in the American Psychiatric Association Diagnostic and Statistical Manual IV and the World Health Organisation's International Classification of Diseases (ICD-10). It is a response to an exceptionally threatening or catastrophic event or situation that would be likely to cause intense fear, horror and helplessness in almost anyone. Typical features of PTSD include avoidance of related situations, flashbacks, persistent psychological distress, high anxiety and impaired social functioning. The Council's review defined PTSD and concluded that it could be

compensated via the Accident Provisions of the Scheme. However, the review concluded that other adverse health effects reportedly ascribed to stress at work could not be recommended for prescription due to problems defining the specific nature of the disease, and problems quantifying and verifying the exposure.

Questions and answers

77. ***Mr Hugh Robertson (IIAC member) commented that there had been research about depression and anxiety in teachers; members agreed to consider this.***

Diesel exhaust emissions and cancer

Professor Neil Pearce
Independent member

78. In 2012, IARC classified diesel engine exhaust emissions as having "sufficient" evidence to be accepted as human carcinogens. This classification was contested by certain industries, both before and after the decision was made, including legal attempts to delay publication of at least one of the key studies. IIAC decided to consider IARC's evidence to see whether there were any suitable cancers and occupational exposures that warranted prescription.

79. In order to prescribe a disease it must be a recognised risk to workers in that occupation and the link must be capable of being established or reasonably presumed in the individual case. Unless the disease can be prescribed based on unique individual clinical features, there must be epidemiological (population-based) evidence that the risk of the disease is more than doubled in suitably exposed workers compared to a suitable comparator group. The evidence must be robust and ideally come from several independent studies.

80. Cancers can be challenging to prescribe because there may be both occupational and non-occupational (e.g. smoking) causes and the disease in workers exposed to a particular carcinogen is usually clinically indistinguishable from the same disease in other people.

81. The diesel engine was first patented by Rudolf Diesel in 1898. In engines, air is introduced and heated by compression to 700°K. The fuel is introduced into the combustion chamber by high-pressure injection and is mixed with the hot air until auto-ignition occurs producing a mixture of elemental carbon, polycyclic aromatic hydrocarbons, carbon dioxide, nitrogen oxides and partially burned fuel.

82. Prior to the 1920s, diesel engines were mainly used in marine applications, and began to be installed in HGVs and buses in the 1920s and 1930s in Europe and America. The first mass-produced diesel car was manufactured in 1935 and by the 1950s diesel had replaced steam in railways locomotives and replaced petrol in most HGVs by the 1960s. Today diesel is used in cars (up to 50% in some European countries), commercial vehicles, buses, industry, agriculture, construction, mining, locomotives, ships and many stationary power applications. However, with the advance of new technology and increasingly stringent emissions regulations there has been convergence on a common diesel engine architecture. Fuel technology has also changed (e.g. a reduction of sulphur content and particle filtration) to reduce emissions. As such the exposures to diesel engine emissions seen historically are likely to differ nowadays.

83. The starting point for the Council's review was consideration of evidence in the 2013 IARC monograph. The IARC review concentrated on studies

involving exposure to diesel in the absence of petroleum; these included railway workers, professional drivers (HGV, buses) and miners (both coal and non-coal mines). IARC also concentrated on lung and bladder cancers as two conditions where the evidence was strongest. The Council also searched for evidence published since the 2013 IARC monograph.

84. .An information note detailing IIAC's review of lung and bladder cancer in railway workers and professional drivers and bladder cancer in miners is currently in preparation and will be published in September.

85. The evidence for lung cancer in miners exposed to diesel exhaust emissions is complicated by the potential for co-exposure to other carcinogens (e.g. silica, radon). The Council will be reporting on this topic separately towards the end of 2015 or early in 2016.

Commissioned review of medical assessments

Mr Richard Exell
Representative of employed earners

86. Medical assessments are an essential part of the Industrial Injuries Scheme. Assessing disablement for the broad range of diseases and injuries eligible for compensation under the Scheme in an equitable way is complicated. What level of disablement should an amputation be assessed at compared to chronic obstructive pulmonary disease? How to decide the level of disablement for an accidental back injury compared to noise induced hearing loss? To support consistency and equity within the Scheme, the underpinning legislation includes a schedule of Statutory Scheduled Assessments or table of injuries (Social Security (General Benefit) Regulations 1982 Schedule 2 (see below for excerpt), which describes prescribed levels of disablement for certain pre-defined categories and degrees of traumatic physical injury. Departmental medical guidance used in conjunction with the legislation provides a crucial level of detail to facilitate decision making for medical assessors. This aims to ensure the Scheme is equitable for claimants with different diseases or injuries, and those with different severities of a particular injury or disease.

SCHEDULE 2
PRESCRIBED DEGREES OF DISABLEMENT

Regulation 11

Description of injury	Degree of disablement per cent
1. Loss of both hands or amputation at higher sites	100
2. Loss of a hand and a foot	100
3. Double amputation through leg or thigh, or amputation through leg or thigh on one side and loss of other foot	100
4. Loss of sight to such an extent as to render the claimant unable to perform any work for which eyesight is essential	100
5. Very severe facial disfiguration	100
6. Absolute deafness	100
7. Forequarter or hindquarter amputation	100
Amputation cases—upper limbs (either arm)	
8. Amputation through shoulder joint	90

87. The Department invited IIAC to consider medical assessments and, in particular, the scheduled list of prescribed assessments. This list was originally drawn up many years ago for the purposes of the War Pensions Scheme and has remained essentially unchanged over many decades. It does not cover every type of injury for which a claim can be made, and is not fully representative of the pattern of injuries presented to the Scheme by present day claimants (e.g. there is no reference to psychological injury). As a part of this review the Council has been considering the scheduled list of prescribed assessments and the ranking sof other diseases and injuries against this list. To this end it

recently published a report 'Assessing disablement under the IIDB Scheme – a critical review and international comparison' that had been commissioned from external researchers. This report compared the relative disablement assessments for diseases and injuries in the IIDB Scheme with seven similar schemes internationally to highlight areas of similarity or difference. This presentation described the findings of this commissioned review.

88. The relative rankings of disablement assessments within each scheme were mapped. Separately for each scheme the assessment for each injury was compared with the assessment for each other injury of that scheme. For example, the tabled UK assessment for *Amputation of the hip* (90%) was compared with the tabled UK assessment for *Severe facial disfigurement* (100%), *Double amputation of the feet* (90%), *Loss of one eye* (40%) and so on. These pair wise comparisons were used to determine if the assessments are compatible with disablement due to one injury of a pair being ranked higher (more severe), equal (same severity) or lower (less severe) than the other in a given scheme. The UK Scheme was found to be internally consistent with assessments of disablements for more severe injuries ranking higher than those for less severe injuries. There were a number of injuries for which the rankings differed in the IIDB Scheme compared with other schemes, including severe facial disfigurement, double amputation of the feet proximal to the metatarsophalangeal joints, amputation of the toes, bilaterally, distal to the proximal interphalangeal joints and amputation of one foot resulting in an end-bearing stump. For example, several facial disfigurement is scheduled at 100% disablement under the IIDB Scheme, but is afforded a lower percentage assessment under other schemes. However, such "anomalies" of ranking in the IIDB Scheme were no more or less frequent than those of other international schemes, all of which were sometimes similarly out of line. Broadly speaking, all the schemes considered were in agreement regarding rankings of injury.

89. To identify whether there were substantial gaps in the table of scheduled injuries under the UK Scheme, the total number of tabled injuries for the UK Scheme were compared with those from the other similar schemes internationally. Fifty five injury types were listed in the UK Scheme's table of injuries, which was significantly fewer than other schemes such as Alberta (175), Denmark (474) and New South Wales in Australia (1255). The UK Scheme was originally based on physical injuries encountered during the last war. Certain schemes have based their lists on the UK list but have since grown and introduced other injuries. Some schemes base their lists on the very detailed *American Medical Association Guides to the Evaluation of Permanent Impairment.*

90. The commissioned review also considered the thresholds for payment and found that these varied between the different international schemes (14% disablement generally required for payment within the IIDB Scheme, 5% in Denmark, 6% for lump sums, 16% for regular payments in Italy; 1% for lump sums, 21% for regular payments in Luxembourg).

91. It is inherently difficult to compare assessments in different schemes due to differences in their administration, their ways of assessing injuries and

social and cultural frameworks. The Industrial Injuries Scheme was found to be, for the most part, in line with other international schemes that try to achieve the same aims. Whilst differences were noted which IIAC will bear in mind during its review of medical assessments, IIAC would require robust scientific evidence in order to recommend changing the rankings of specific injuries or extending the scheduled list of assessments for physical injuries.

92. As part of the review, the Council will also be looking at how the Armed Forces Compensation Scheme has been modernised and whether there are any lessons to be learned for the IIDB Scheme. IIAC will also be considering certain diseases and injuries that are not currently included on the schedule, such as mental health disorders and certain respiratory conditions.

Questions and answers

93. ***Keith Lamb (Durham Mechanics' Trust) – Would it be helpful to have a schedule of prescribed assessments for physical injuries and prescribed dieases, such as PD A14 (OA knee)?*** This is an area that IIAC will be considering as part of the medical assessments review and we are actively consulting with the Departmental medical policy officials. It can be very useful, in terms of consistency of decision-making, to have a scheduled list of assessments for diseases as well as injuries, but sometimes greater flexibility may also be desirable, so the arguments need to be considered from both sides.

94. ***Keith Lamb (Durham Mechanics' Trust) – Some occupational disease and injury compensation schemes internationally have a form of income replacement, similar to Reduced Earnings Allowance (REA).*** The Council were in favour of REA which facilitated claimants to remain in work whilst moving to jobs without the exposures that were responsible for their ill health; IIAC did not favour abolition of REA.

95. ***Mr Bob Fitzpatrick (NUM) - What is the Council's view about decision makers and medical assessors having the information about a claimant's award and claim history despite the conditions being unrelated?*** Assessments are made by comparing a normal person of the same age and sex and subsequent assessments should not be influenced by a claimant's case notes from previous awards. To ensure equity for all, Departmental policy ensures that that several smaller awards for more minor conditions cannot add up to more than a larger award for a more serious condition. The Council will ask the Department to consider the feasibility and pros and cons of 'blinding' (which is in some ways an ideal standard), although there are recognised difficulties (e.g. assessment is based on whole-person function) and the Council's previous analysis of clustering at payment thresholds suggests, if anything, a propensity to "push individual component assessments above the bar", which tend to argue against bias in composite assessments.

Open forum and Closing remarks

Mr Doug Russell
Representative of employed earners

96. Mr Doug Russell opened the floor to the attendees, inviting questions and comments on any aspect of IIAC's work or the presentations heard during the meeting.

97. ***Mr Ian McKenzie (University of Liverpool) – Noise induced hearing loss can be defined by a notch at 4 kHz as measured by audiogram. Has IIAC considered using the 4kHz notch to define occupational exposure in the prescription for PD A10 instead of using a list of prescribed occupational exposures?*** Prescription for occupational deafness (PD A10) is complex. McBride *et al*. suggested that bilateral 4kHz notches were more commonly associated with noise exposure. IIAC has considered whether the 4kHz notch could be used as a defining feature of occupational deafness (e.g. prescribing as a unique clinical feature). However whilst the notch is a marker of noise it lacks reproducibility, sensitivity and specificity (it can also be seen in hearing loss due to other causes). Furthermore with increasing age, when hearing loss increases in the general population, the notch becomes less apparent (is less likely to be observable when most needed, in older workers with long-term exposures). However, the Council would welcome and consider any further evidence about noise-induced hearing loss.

98. ***Mr Alan Cummings (Durham Miners' Association) – Vibration White Finger (VWF) and Carpal tunnel syndrome (CTS) are two different, independent diseases. We have had a case where an off-set was made to take into account the effects of VWF or CTS in a claimant claiming both PD A11 (Hand Arm Vibration Syndrome) and PD A12 (CTS). As these are independent disease should offsets be made?*** Departmental medical policy officials stated that the medical assessments for PD A11 and PD A12 consider the claimant's functional impairment for manual dexterity. If one of the conditions is non-occupationally caused then an off-set will be made, however, no off-set should be made if both are related to occupational exposure. Mr Cummings was asked to send the details of the specific IIDB case to Departmental medical policy officials for review.

99. ***Mr Dan Shears (GMB) commented that it would be useful if the Fit for Work information could also highlight the availability of the IIDB Scheme.***

100. ***Mr Dan Shears (GMB) – Has IIAC considered the cancer risk of occupational exposure to Round-up Pesticide (glycosphate)?*** The evidence is mixed, with some studies about the carcinogenic potential of gylcosphate showing an increased risk whereas others showed no such risk. The Council monitors emerging research studies about the risks of

pesticides routinely and would review this topic if warranted by the evidence. It is happy to receive new evidence at any time.

101. ***Mr John McClean (GMB) – Has IIAC considered occupational indirect (bystander), low dose exposure to asbestos?*** IIAC has considered bystander exposure but did not find evidence of risks that were sufficiently increased to warrant prescription.

102. ***NUM attendee – We have had a case of a claimant with PD D1 (pneumoconiosis) and PD A12 (Chronic Obstructive Pulmonary Disease) where chest radiographs were not sent for.*** The NUM representative was asked to send the details of the specific IIDB case to the Department medical policy officials for review.

103. Mr Russell thanked all attendees for listening and engaging with the Council in such a lively and informed way. He noted that Public Meetings offer the Council a great opportunity to listen to the queries and comments from claimants' representatives. Attendees were encouraged to send the Council any evidence on new occupational diseases or exposures, or existing issues, individuals or organisations for IIAC to consider.

104. Council members extended an invitation to all attendees to attend the next Public Meeting which would be at another location (to be decided) in the UK in July 2017. The details of the meeting would appear on the IIAC website.

List of delegates

Surname	First name	Organisation
Baker	Paul	IIAC Member
Bennett	Alex	Midlothian Council
Burns	Jessica	Regional Tribunal Judge
Cavilla	Ian	Atos Healthcare
Cherrie	John	Institute of Occupational Medicine
Cooper	Angela	DWP
Cullinan	Paul	IIAC Member
Cummings	Alan	Durham Miners' Association
Darnton	Andrew	Health & Safety Executive
Donnelly	Susan	HMI Health & Safety (Occupational Health)
Douglas	Jackie	The Colt Foundation
Exell	Richard	IIAC Member
Faupel	Paul	IIAC Member
Fitzpatrick	Bob	NUM
Fryatt	Alison	DWP
Gibson	John	NUM
Gow	George	Atos Healthcare
Hackett	Gary	NUM
Haddow	Clare	Occupational Health Service
Hadfield	Dave	NUM
Hegarty	Catherine	IIAC Secretariat
Henderson	Des	NUM
Hooper	Dave	Durham Miners' Association
Jenkins	Kathy	
Johnson	Alan	Durham Miners' Association
Kelly	Jimi	NUM
Khan	Sayeed	IIAC Member
Kitchen	Chris	NUM
Lamb	Keith	Durham Mechanics Trust
Lunney	James T	District Tribunal Judge
Madan	Ira	IIAC Member
McElvenny	Damien	IIAC Member
McGavin	Jim	NUM Scotland
Murphy	Rebecca	IIAC Secretariat
Musgrove	Steve	NUM
Olliver	Nik	Edinburgh College
O'Sullivan	Lucy	IIAC Secretariat
Palmer	Keith	IIAC Chair
Parkinson	Alison	Occupational Health & Safety Tutor
Pearce	Neil	IIAC Member
Robertson	Hugh	IIAC Member
Seaton	Anthony	IIAC Member
Shelton	Marianne	IIAC Secretariat
Skidmore	Chris	NUM
Sullivan	Claire	IIAC Member
Sutton	Frankie	NUM Scotland
Thomson	John H	NUM

Turner	Andrew	IIAC Member
Valentine	Chris	Occupational Portfolio Doctor
Walker	Neil	DWP
Walker-Bone	Karen	IIAC Member
Watkin	Terry	Durham Mechanics Trust
Watterson	Andrew	University of Sterling
Whitty	Fergus	IIAC Member
Whitworth	Joseph	Durham Miners' Association

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