UK National Screening Committee (UK NSC)

Note of the meeting held on the 8 February 2017

at

Mary Ward House, London

This meeting provided recommendation on the following conditions;

- Group B Streptococcus
- Asymptomatic Bacteriuria
- Fetomaternal and Neonatal Alloimmune Thrombocytopenia (FMAIT)
- Alcohol Misuse

Members

Dr Sunil Bhanot (Vice Chair)	GP
Professor Alan Cameron	Consultant Obstetrician at Southern General Hospital, Glasgow
Ms Eleanor Cozens	Patient and Public Voice (PPV)
Dr Paul Cross	Consultant Cellular Pathologist, Queen Elizabeth Hospital Gateshead Health NHS Foundation Trust
Professor Gareth Evans	Consultant in Genetics Medicine, St Mary's Hospital, Manchester
Ms Jane Fisher	Patient and Public Voice (PPV)
Ms Hilary Goodman	Operational Manager of Antenatal Services/Screening at Hampshire Hospitals Foundation Trust
Dr John Holden	Joint Head of Medical Division, Medical and Dental Defence Union of Scotland
Professor Chris Hyde	Public Health Specialist, University of Exeter
Dr Greg Irving	GP

Mrs Margaret Ann Powell	Patient and Public Voice
Dr Graham Shortland	Consultant Paediatrician, Cardiff and Vale University Health Board, Noah's Ark Children's Hospital for Wales and Executive Medical Director, Cardiff and Vale University Health Board, University Hospital for Wales

Observers;

Dr Hilary Angwin	Screening & Immunisation Lead, NHS England/PHE Chair of FMCH
Dr Kathryn Callaghan	Department of Health Screening Team, Emergency Preparedness and Health Protection Policy Global and Public Health Group
Dr David Elliman	Clinical lead for Newborn Infant Physical Examination and Newborn Blood Spot, PHE
Dr Rosemary Fox	Director of Screening Division, Public Health Wales
Dr Ros Given – Wilson	Chair of the Adult Reference Group (ARG)
Mrs Jo Harcombe	National Lead for Stakeholder Information and Profession Education and Training
Ms Sarah Manson	Scottish Government
Mr Charles O'Hanlon	Assistant National Director, Head of Screening, National Screening Service, Republic of Ireland
Dr Heather Payne	Senior Medical Officer for Maternal and Child Health, Welsh Government
Dr Sue Payne	Directors of Public Heath, NHS Scotland
Ms Farah Seedat	ScHARR
Dr Robert Sherriff	PHE National Operations Lead
Dr Sian Taylor- Phillips	ScHARR
Dr Chloe Thomas	ScHARR

Mr Bryan Vernon	Ethics Teaching and learning champion
Dr Sophie Whyte	ScHARR
Dr Ailsa Wight	Deputy Director Emergency Preparedness and Health Protection, Department of Health

Secretariat

Dr Anne Mackie	Director of Programmes - UK National Screening Committee
Miss Zeenat Mauthoor	Secretariat
Mr John Marshall	UK NSC Evidence Lead
Dr Cristina Visintin	UK NSC Senior Evidence Review Manager

Apologies

Professor Roger Brownsword	School of Law, Kings College London
Dr Hilary Dobson	Consultant Radiologist and Clinical Director of the West of Scotland Breast Screening Service and Honorary Senior lecturer, University of Glasgow
Professor Stephen Duffy	Director of the Policy Research Unit in Cancer Awareness, Screening and Early diagnosis and Professor of Cancer Screening, Centre for Cancer Prevention, Wolfson Institute of Preventive Medicine
Mr Tim Elliott	Department of Health; Senior Cancer policy lead
Professor Alastair Gray	Director at the Health Economics Research Centre, Nuffield Department of Population Health and

	Professor of Health Economics at the University of Oxford
Dr Anne Kilgallen	Deputy Chief Medical Officer, Northern Ireland
Prof Bob Steele	Chair

Welcome and Introductions

1. The Vice Chair of the Committee, Dr Sunil Bhanot chaired the UK NSC meeting as Prof Bob Steele was ill. The Vice Chair welcomed all to the meeting and a round of introductions was initiated.

   Members were given the opportunity to update the Committee on any conflicts of interest which may be relevant to this meeting. No conflicts were raised.

   Apologies were noted.

   Dr Rose Fox informed the Committee that this was her last meeting as she would soon be retiring. Additionally this was also Dr Sunil Bhanot's last meeting as a Committee member. On behalf of the Committee Dr Anne Mackie thanked Dr Bhanot and Dr Fox for their ongoing support and commitment to the Committee. The post of vice chair would now be vacant and members interested in fulfilling this post were asked to email the Secretariat.

   Action 1a: Members of the Committee interested in fulfilling the post of vice chair should email Zeenat Mauthoor expressing an interest. The Chair and Four Country reps would then discuss and nominate a suitable successor.

Minutes and Matters arising

2. Two corrections were requested to be made to the October minutes;

   - Attendance of Graham Shortland was incorrectly noted; he was not in attendance
   - Paragraph 3.8 on HPV implementation to be revised to 'Scotland informed the Committee of their progression and plans to move to HPV screening in the next two years.' Removal of the reference to Northern Ireland who are yet to make a policy decision on this.

Following the aforementioned amendments the remainder of the minutes were confirmed as a true and accurate record.

Two action points were identified from the October meeting;

Consultation on GBS

GBS Model work to be brought to a future UK NSC meeting- on the agenda

Presentation on School Age Hearing Screening Tests

Dr Heather Payne to discuss with Prof Hyde with Welsh data on school age hearing screening- in hand

***Director's* Update**

3. Dr Mackie gave an update on the following

Update on combined testing in Fetal Anomaly Screening Programme (FASP)

3.1 The UK NSC's recommendation on Non Invasive Prenatal Testing (NIPT) for Down's, Patau's and Edwards' syndromes to be introduced as an additional test into the NHS Fetal Anomaly Screening Programme (NHS FASP), as part of an evaluation, was accepted in October by Ministers in England.

3.2 The Committee were aware of the imminent publication of the Nuffield Bioethics report to be published at the beginning of March and agreed that it would be beneficial if the authors could present their report to the Committee at its next meeting.

Action 3a: Authors of Nuffield Bioethics report to be invited to the June UK NSC meeting

UK NSC's reference groups

3.3 An equivalent reference group to that of the Fetal Maternal Child Health (FMCH) group is being set up to address adult issues. The Adult Reference Group (ARG) will discuss and help develop robust, clear and authoritative evidence documents for consultation. Dr Ros Given-Wilson, in attendance, is to Chair the Group and membership has been approved.

3.4 Dr Sue Payne expressed support of this group and informed the Committee that Scotland had a similar arrangement and would be happy to share their model with the UK NSC.

Action 3b: Dr Sue Payne to forward the Scottish Medical Consortium model to the Ms Zeenat Mauthoor

Tyrosinaemia Workshop

3.5 The Committee looked at the evidence to screen for the Tyrosinaemia Type 1 at its previous meeting and concluded that although it appeared to be a possible candidate for screening further work was needed. A workshop was set up between the UK NSC, academics, and clinical and 3rd sector stakeholders to discuss in detail what work is needed and how this could be actioned. The notes of the meeting are available on request.

Subaneurysmal aortas in Abdominal Aortic Aneurysms (AAA)

3.6 Dr Mackie informed the Committee that the AAA screening programme had been looking at various optimisation initiatives. One of the initiatives was to consider whether men who screen positive for subaneurysmal aortas should be entered into an ultrasound surveillance programme. Members of the Committee were told that the review document would be sent to them in the following week for comments before going out for public consultation. Jonothan Earnshaw (clinical lead for the programme) would attend the next meeting to describe the range of activities.

UK NSC Annual Stakeholder Conference- December 2016

3.7 Mrs Jo Harcombe summarised the outcome of the UK NSC's December Stakeholder Conference to the Committee. The event received positive feedback and all presentations were well received. Dr Angela Raffle's interactive and question segment was found to be informative and met the expectations of many attendees alongside Sir Muir Gray's video. Mrs Harcombe stated that the event was attended by over 100 stakeholders. Quite a few of the attendees were from public sector organisations

involved in the commissioning or delivery of screening programmes e.g. screening and immunisation leads or hospital based screening coordinators and therefore much more au fait with the usual business of screening and the UK NSC. As a result one or two 3rd sector organisations were unable to register. In addition, a small number of comments from professional screeners stated that the meeting was too high level and they wanted more detail.

3.8 Following a discussion the Secretariat felt that it would be beneficial to offer a smaller, more focused and detailed event for 3rd sector stakeholders only. Opportunities already exist for professionals involved in screening day to day to learn about the UK NSC and these will be maximised through the year.

3.9 The Committee acknowledged the feedback received from PHE Events. They discussed the merits of a big annual event and a smaller more focused event. They agreed that on balance they were in agreement with the smaller more focussed annual event and ongoing communications and bespoke sessions with existing screening professionals. The Committee thanked both Mrs Harcombe and the working group for their hard work in delivering another stakeholder event and expressed their support for a 2017 event.

UK NSC Annual Call for Topics

4. The Committee was informed that the Annual Call for Topics which closed on the 9th January 2017 received a total of four submissions.

4.1 The Evidence Team, with the support from the Evaluation group, recommended that further examination of the submissions was not necessary. This was because three submissions related to existing recommendations that are already on the UK NSC's list. These three submissions should therefore be treated as requests for an early update. The other submission did relate to a new condition but had been submitted at an earlier point and was being handled as a pilot for the formal call for topics.

4.2 The Committee agreed that they were content with the outcome. They also approved letters to all submitters.

4.3 Mr Marshall asked whether they felt that the call for topics should continue. All members supported the continuation of the annual call for topics. The fixed period allowed for focused communication to alert people to the work of the UKNSC and had had stimulated some responses.

4.4 Mr Marshall confirmed that letters to submitters would be sent in the coming weeks and that the Evidence team will confirm the date for the 2017 annual call for topics.

Action 4a: Mr Marshall to send out outcome letters to submitters from the annual call for topics

Action 4b: Mr Marshall to confirm the 2017 date for the annual call for topics

Informed Choice- Task and Finish group update

5. Jane Fisher gave a verbal update from this group.

5.1 The group was set up in response to several of the recommendations from the House of Commons Science and Technology Committee (STC) on health screening. Ms Jane Fisher said that the group had met twice and were progressing well with developing a definition for 'informed choice' and were now seeking academic expert input. At the same time, the four countries had shared their lists of publications and were looking to develop the four country wide publication process guide. It is hoped that a document would be issued for consultation later this year and be brought back to the UK NSC next year for sign off and publication.

5.2 The Committee thanked Ms Jane Fisher for the update and asked that a blog be written on the matter.

Action 5a: Task and Finish Group update to be added to June UK NSC meeting

Action 5b: Progression of the Task and Finish group to be blogged

Optimising bowel cancer

6. Dr Mackie said that the Secretariat had asked the Sheffield School of Health and Applied Research (ScHARR) to examine how bowel cancer screening could be optimised. They had been asked to look at how FIT and bowel scope could be used in the most cost effective combination. They had also been asked to take colonoscopy capacity into account to ensure that the NHS could deliver diagnostic and treatment services to those found to be screen positive. The report had been produced in draft form two weeks before the UK NSC meeting, so this was an opportunity for the committee to hear of the work in an early form. Dr Sophie Whyte and Dr Chloe Thomas presented a high level summary of the work and early findings.

The preliminary report and presentation is for UK NSC consideration only at this point.

Action 6a: The Committee is asked to review the document and to forward comments to Dr Mackie and Dr Whyte by 28 February for further consideration

Action 6b: Dr Mackie to consider how to gain more stakeholder views on the document when the UK NSC comments had been received and considered by the ScHARR team.

Fetal Maternal and Child Health

7. Dr Hilary Angwin, Chair of the FMCH, provided the UK NSC with a verbal update following the FMCH meeting in December 2016.

7.1 The group continue to seek new members and letters of appointment are to be sent out shortly so that the group may convene in May.

7.2 Six evidence review documents were discussed at the meeting and approval was granted for all of them allowing these to move towards public consultation in the coming months. These were;

- Antenatal screening for HTVL infection
- Antenatal screening for Chlamydia infection
- Newborn screening for Biliary Atresia
- Screening for iron deficiency in children under five years old
- Screening for Biotinidase deficiency
- Screening for elevated blood lead levels in children aged 1-5 years

7.3 The Committee asked for the FMCH report to be circulated after the meeting.

Action 7a: FMCH report to be circulated to the UK NSC

Screening for Group B Streptococcus (GBS) carriage in pregnancy

GBS screening model

8. Mr John Marshall introduced the discussion on GBS with an overview of the modelling work undertaken by an expert group, brought together by the UK NSC to explore the preventive potential of GBS Screening when added to the current risk based strategy to prevent Early Onset GBS (EOGBS).

8.1 The exercise was undertaken as an action following the discussion after the conclusion of the previous review of this topic. The expert group had broad membership from all UK stakeholder organisations. This was the first time a project like this had been attempted in the UK. The project sought to establish a common set of assumptions which would help inform the debate about screening.

8.2 GBS in the first seven days of life is classified as Early Onset GBS infection (EOGBS). If the infection occurs after this point it is classified as Late Onset disease (LOGBS). The severity of EOGBS, range from mild infection to pneumonia, sepsis and meningitis. EOGBS is the most common cause of severe infection in the first seven days of life. It was noted that the majority of affected babies make a full recovery and are thought to have no long term problems. However EOGBS has a mortality rate of between 5% – 10% (~20 – 40 / year). A similar rate of severe disability from the condition has been reported.

8.3 The Committee is fully aware that EOGBS can be a devastating condition and that the experience of parents, and other family members, of affected babies was an important element of the discussion about screening. The public interest in testing for GBS carriage in pregnancy was reflected in the petition with over 250,000 signatures which had been presented to the Secretary of State for Health, the Chief Medical Officer for England and Public Health England's Chief Executive.

8.4 The modelling exercise considered culture based screening for GBS carriage using vaginal and rectal swabs offered at 35 - 37 weeks. Those testing positive for GBS carriage would be offered intravenous antibiotics which would be administered during the start of labour. The modelling exercise estimated that there would be 1 - 2 cases of EOGBS in every 1000 carriers in low risk women who deliver at full term. This was the group in which screening would impact the most.

8.5 It was noted that, in this group, the modelling exercise also estimated that between 1,000 and 1,800 screen positive women would need to receive antibiotics to prevent one case of EOGBS. To prevent one death, between 24,000 and 32,000 women would need to receive antibiotics in labour. The effect of this would be to prevent between 50 to 100 cases of EOGBS and approximately 3 – 4 deaths to EOGBS / year. This suggested that screening would be a difficult fit with high level healthcare initiatives such as the Antimicrobial Resistance (AMR) strategy's aim of reducing unnecessary antibiotic use and the aim of reducing the number of neonatal deaths.

8.6 The expert group encountered a very limited evidence base and many of the model input parameters had to be populated on the basis of clinical opinion rather than published evidence.

8.7 The Committee thanked Mr Marshall for the informative report and agreed that the findings helped address previous concerns of the Committee and would be considered with the evidence review of the GBS before a recommendation could be made.

Evidence review of culture based screening for GBS carriage in late pregnancy

9.1 Ms Farah Seedat and Dr Sian Taylor Phillips presented this item to the Committee.

The review was carried out in accordance with the UK NSC's evidence review process. In this respect the evaluation was undertaken using rapid review methods to address a number of questions identified during the previous review process, this included questions from consultees. The key questions covered the epidemiology of the condition, the test, the treatment and the screening programme. Two systematic reviews were included in the review document. These explored whether:

i) there are maternal characteristics or characteristics in the bacterium that are predictive of GBS transmission (mother to baby) or GBS transition (from GBS colonised baby to early-onset GBS disease)

ii) the use of intrapartum antibiotic prophylaxis (IAP) treatment for any preventative reason had an adverse effect on the women or her baby

The systematic reviews were included to address new questions which had not been discussed in previous reviews.

9.2 In terms of the incidence it was noted that Health Protection Agency / Public Health England laboratory surveillance data suggested that the incidence of EOGBS had increased slightly in recent years. The most recent enhanced surveillance study indicated that about 450 cases of EOGBS were reported in 2014 – 2015. This suggests an overall incidence of 0.57 / 1000 live births compared to 0.48 / 1000 in the previous enhanced surveillance study which was undertaken in 2000 - 2001. In the full term women, the incidence was estimated by the reviewers to be 0.41 / 1000 compared to an estimated 0.37 / 1000 live births based on the previous enhanced surveillance study. A total of 19 deaths were reported by the most recent study with nine occurring in full term women. This compared with a total of 39 deaths in the previous study with 14 in the full term women. As with previous reviews, the current review found very little evidence relating to long term outcomes in babies who were affected less severely. The review concluded that EOGBS is a serious condition but that its most severe outcomes were rare in the population likely to be screened at 35 – 37 weeks.

9.3 Regarding the natural history, the review reaffirmed that GBS carriage in pregnancy remained poorly understood in terms of whether carriage of the bacterium is transitory or persistent, the mechanisms promoting or preventing transmission to the newborn and those promoting or preventing disease in the colonised newborn. The systematic review in this area looked to see if measuring the quantity of the bacteria in the women (bacterial load) could be a possible predictor for GBS But the review highlighted that the evidence base in this area was weak and required further research.

9.4 In relation to the test, the review reaffirmed that there was reasonable quality evidence that that culture screening at 35 – 37 weeks was a poor predictor of carriage at term. In the included studies, between 11% - 28% of women with positive results did not carry GBS at term. Between 5% - 9% of women with negative test results did carry GBS at term. In addition the test could not distinguish women who would transmit the bacterium to the baby from those who would not. It was estimated that the test had an extremely low positive predictive value (0.1 – 0.2%) when EOGBS was the outcome. With no risk refinement strategy the test would result in great deal of over detection and many women would be classified as high risk when there was very little chance of their babies being affected by EOGBS. Bacterial load was thought to be a possible means of refining risk in screen positive women but this would require further research.

9.5 In relation to the treatment, the review reported that studies of penicillin Intrapartum Antibiotic Prophylaxis (IAP) reported high levels of effectiveness but the quality of the evidence was very limited. This was highlighted by the Cochrane Review of Random Control Trials (RCT) of IAP. This reported a pooled effectiveness of 83% in the prevention of EOGBS but did not find a reduction in mortality. The included trials were considered to be of poor quality. Subsequent observational studies reported similar levels of effectiveness and one study suggested that duration of treatment had an impact on effectiveness. However the low quality of these studies made any conclusions uncertain.

9.6 In relation to the harms of IAP, the systematic review in this area identified a number of studies reporting a broad range of potential harms. For example neonatal gut changes which have been associated with respiratory and metabolic illnesses had been identified in studies of penicillin IAP however the studies had not followed up the clinical significance of the changes. Other potential harms included asthma, infection with ampicillin resistant organisms, maternal thrush, neonatal respiratory distress, increased length of postnatal stay. However it was considered difficult to quantify any of the evidence relating to these outcomes. The review concluded that further research would be required to estimate the balance of benefit and harm from penicillin IAP.

9.7 The Committee discussed the modelling work in conjunction with the review and noted that a sense of perspective was required to consider the severe outcomes of EOGBS in the context of the impact of screening on the population as a whole. This was particularly the case given the lack of evidence on the long term outcomes in the less severely affected cases which comprised about 80% of affected babies. It was agreed that a better testing strategy was needed to avoid the high rate of overdetection from culture based screening. The consequences of poor post-test information for maternal decision making on a broad range of issues such as IAP uptake or place of birth had not been explored. There was also concern about the lack of good quality information available to support decision making on issues such as the benefits and harms of IAP. The Committee heard a report of a fetal death due to maternal anaphylaxis to penicillin. The anecdotal nature of this report highlighted that very little was known about the potential for harm from the prophylactic use of antibiotics in large numbers of low risk women.

9.8 The Committee considered the consultation responses and noted that overall the number of responses was quite small, particularly from national bodies. The vast majority of the 65 response were made up of 57 individual submissions that were in favour of screening. The smaller number of responses from national patient and professional stakeholder organisations was more evenly split.

9.9 The Committee considered that the evidence did not support the introduction of a population screening programme. It was noted that the review's conclusions were consistent with those of previous reviews and that the current policy recommendation should be reaffirmed. It was hoped that the DH research workshops would lead to work to overcome some of the gaps in the evidence base.

The UK NSC recommends against an antenatal screening programme for GBS as;

- The natural history and development of GBS carriage to EOGBS remains poorly understood.
- The test for maternal carriage using selective culture at 35 to 37 weeks is not an accurate predictor of carriage at term or EOGBS
- Better quality evidence is needed to assess the balance of clinical benefits and harms from large scale prophylactic use of penicillin IAP to prevent EOGBS

The Condition		
1	The condition should be an important health problem as judged by its frequency and/or severity. The epidemiology, incidence, prevalence and natural history of the condition should be understood, including development	More research is required on why some mothers transmit GBS, and why some colonised neonates develop EOGBS disease

	from latent to declared disease and/or there should be robust evidence about the association between the risk or disease marker and serious or treatable disease	
The Test		
4	There should be a simple, safe, precise and validated screening test.	Culture testing at 35 to 37 weeks is not a reliable population screening test
The Treatment		
9	There should be an effective intervention for patients identified through screening, with evidence that intervention at a pre-symptomatic phase leads to better outcomes for the screened individual compared with usual care. Evidence relating to wider benefits of screening, for example those relating to family members, should be taken into account where available. However, where there is no prospect of benefit for the individual screened then the screening programme shouldn't be further considered.	Better quality evidence is needed to address the effectiveness and adverse events from IAP
The Screening Programme		
11	There should be evidence from high quality randomised controlled trials that the screening programme is effective in reducing mortality or morbidity	Better quality evidence is needed to assess the clinical effectiveness and the impact of the introduction of a universal screening programme for GBS in pregnancy.
14	The opportunity cost of the screening programme (including testing, diagnosis and treatment, administration, training and quality assurance) should be economically balanced in relation to expenditure on medical care as a whole (value for money). Assessment against this criterion should have regard to evidence from cost benefit and/or cost effectiveness analyses and have regard to the effective use of available resource.	

Screening review for existing five blood spots

10. Mr John Marshall presented this item to the Committee.

10.1 Following the UK NSC's Independent review and the STC's review it was recommended that a process was developed to review the evidence supporting current screening programmes. A triage process, focusing on the identification of red flags, was designed and has been piloted on the newborn blood spot programme.

10.2 The review looks at whether there has been any published evidence to suggest that the programme should be stopped. Three questions are examined: Is there evidence about:

- screening programme cessation
- the harms of screening for the condition in question
- the balance of harms and benefits of screening for the condition in question

10.3 The pilot considered these questions in relation to PKU (phenylketonuria), CHT (congenital hypothyroidism), MCADD (medium chain acyl-CoA dehydrogenase deficiency), Sickle Cell Disease and CF (cystic fibrosis). No serious issues had been raised that prompt further consideration of programme cessation.

10.4 19 stakeholder organisations were contacted during the public consultation. One response to the public consultation was received. This came from the Royal College of Paediatrics and Child Health. The response agreed with the reviews' recommendations that there is no evidence to suggest that the UK NSC should consider stopping screening for the five conditions. The Committee concluded that the screening for the 5 conditions should continue.

10.5 However the response was concerned that the methodology of the triage process, focused on negative outcomes at the expense of positive developments. This may be because the function of the reviews was not clearly articulated when contacting stakeholders at the start of the consultation. The Committee considered that although the conclusions of the reviews were sound, further thought should be given to the type of review produced to support the triage process. It was agreed that this should be done on the basis of the experience gained from both the blood spot pilot and that of the ongoing reviews of antenatal screening for HIV, syphilis and hepatitis B.

Screening for Asymptomatic Bacteriuria (ASB)

11 Mr John Marshall presented this item to the Committee which was last reviewed in 2012. Mr Marshall informed the Committee that although the UK NSC had recommended against routine population screening it noted and did not aim to undermine the practice recommendations by NICE.

11.1 ASB is a urinary tract infection with no symptoms. If untreated, pregnant women are at greater risk of developing pyelonephritis (a kidney infection). For mothers this can cause fever, breathing difficulties and kidney failure whilst the infection of the mother can cause problems for the baby such as prematurity, low birth weight and still birth.

11.2 The 2012 review recommended that screening should not be offered at there were uncertainties around:

- the number of women with (prevalence) of ASB in the UK
- the impact that screening would have in preventing pyelonephritis (kidney infection)in pregnancy
- the best way of screening for ASB infection in pregnancy,
- the optimum test, its timing and frequency and
- the effectiveness of antibiotic treatment in pregnancy

11.3 The Committee was informed that the latest review focused on the above areas to see if there was any new evidence to demonstrate that screening for ASB would bring more good than harm. A study of pregnant women in the Netherlands found that adverse outcomes (for example pyelonephritis and preterm birth) for women with asymptomatic bacteriuria were lower than expected compared to previously published figures. However the study was stopped early due to the low incidence of the primary outcomes (pyelonephritis and preterm delivery). No new evidence on the incidence or prevalence of ASB in the UK was identified.

11.4 The Committee discussed the review and concurred that the uncertainties that arose from the 2012 review remain. They therefore agreed that ASB should not be offered as a population screening programme

The Condition

1	The condition should be an important health problem as judged by its frequency and/or severity. The epidemiology, incidence, prevalence and natural history of the condition should be understood, including the development from latent to declared disease and/or there should be robust evidence about the association between the risk or disease marker and serious treatable disease..	Prevalence on how many pregnant women develop ASB in the UK is not known
The Test		
4	There should be a simple, safe, precise and validated screening test	No new evidence on the timing of the test for ASB during pregnancy. The most effective way of screening women for ASB remains uncertain
The intervention		
9	There should be an effective intervention for patients identified through screening, with evidence that intervention at a pre-symptomatic phase leads to better outcomes for the screened individual compared with usual care. Evidence relating to wider benefits of screening, for example those relating to family members, should be taken into account where available. However, where there is no prospect of benefit for the individual screened then the screening programme shouldn't be further considered.	NICE guidance available

Screening for Fetomaternal and Neonatal Alloimmune Thrombocytopenia (FMAIT)

12.1 This item was presented by Dr Anne Mackie.

12.2 The Committee was reminded that screening for FMAIT was last reviewed in 2012. The condition is genetically inherited and causes the number of platelets to be reduced preventing the blood from clotting effectively. A baby inherits surface proteins (antigens) on platelets from both mother and father. In a small number of pregnancies the baby inherits a protein from the father which is not present in the mother's blood. This may then cause the mother's body to produce antibodies against this protein. The antibodies can cross the placenta from the mother's blood to the baby and attack fetal platelets. If a baby is born with very low levels of

platelets there is a small risk of spontaneous bleeding into the brain, under the skin or into major organs. In extreme cases, this can sadly cause death or permanent brain damage causing lifelong disabilities. Because the mother's immune system learns to recognise and attack incompatible platelets FMAIT can also affect subsequent pregnancies.

12.3 The 2012 review found that screening should not be introduced because evidence suggested that the test is unreliable. There was also uncertainty whether an intervention following screening would help improve the outcome of the pregnancy.

12.4 The Committee noted that the latest review looked specifically at the three areas of uncertainty surrounding the; condition and test, intervention and screening programme. The Committee concurred with the review that a reliable predictor for FMAIT had not identified. The incidence of FMAIT in the UK was unknown and the benefit of screening and offering medical intervention was uncertain.

12.5 All consultation comments were in broad agreement with the recommendation not to screen. One submission provided an unpublished transcript to support the evidence for maternal HPA-1a antibody as a predictor of FMAIT. The Committee noted the document, but as the committee examines published peer-reviewed evidence agreed that the evidence would be considered at the next review, if published.

12.6 The Committee recommended that a whole population screening programme for FMAIT should not recommended as there is no reliable screening test and that there is a lack of evidence to support that screening improves outcomes when compared to current practise.

The Condition		
1	The condition should be an important health problem as judged by its frequency and/or severity. The epidemiology, incidence, prevalence and natural history of the condition should be understood, including development from latent to declared disease and/or there should be robust evidence about the	There is no reliable method to identify cases that would benefit from medical intervention
The Intervention		
9	There should be an effective intervention for	Lack of robust evidence to

	patients identified through screening, with evidence that intervention at a pre-symptomatic phase leads to better outcomes for the screened individual compared with usual care. Evidence relating to wider benefits of screening, for example those relating to family members, should be taken into account where available. However, where there is no prospect of benefit for the individual screened then the screening programme shouldn't be further considered.	demonstrate the screening would be of benefit when compared to current practise
The Screening Programme		
11	There should be evidence from high quality randomised controlled trials that the screening programme is effective in reducing mortality or morbidity. Where screening is aimed solely at providing information to allow the person being screened to make an "informed choice" (such as Down's syndrome or cystic fibrosis carrier screening), there must be evidence from high quality trials that the test accurately measures risk. The information that is provided about the test and its outcome must be of value and readily understood by the individual being screened.	Lack of robust evidence to support the management strategy for women considered to be high risk

Adult Screening

Screening for Alcohol Misuse

13 Dr Anne Mackie informed the Committee that this condition was reviewed in 2011. The last review concluded that screening for alcohol misuse should not be offered as there was insufficient evidence on the usefulness of the test and long term effectiveness of offering such a screening programme.

13.1 The consumption of alcohol is a growing concern in the UK and Dr Sunil Bhanot expressed how GPs are encouraged to engage in dialogue with patients to discuss their intake. This is because high and persistent levels of drinking are associated with numerous health conditions including heart disease, stroke, liver disease and cancer. There is a real push to make people more alcohol aware and be more conscious of its effects. Ongoing misuse can also affect employment, relationships as well as be an underlying cause of abuse, depressions and anxiety.

13.2 The 2011 review recommended that screening should not be offered as there was insufficient evidence for a good screening test and long term effectiveness of a screening programme. The latest review looked at three key questions from the last review.

i. Is the screening test for alcohol misuse good enough to be used within a population screening programme?

ii. If the test were to be used what cut off levels would be used for various groups of people (women for example should drink less than men)

iii. Whether there was evidence to demonstrate the long term effectiveness of a screening programme in terms of morbidity, mortality and social harm.

13.3 Dr Mackie informed the Committee that these key questions remain unanswered following the review. The test most commonly used is the Alcohol Use Disorders Identification Test (AUDIT). This is a self-report questionnaire for use in primary care if the GP or other clinician is concerned that the patient may be drinking more than recommended levels. There was no evidence to show that this was useful in a general average risk population.

13.4 In relation to the second question, the Committee were informed that studies looking at the test performance in various subgroups had been identified. However, there was a lack of evidence to inform cut off levels for use within subgroups as part of a population screening programme. Also, there was an absence of any robust evidence to suggest that whole population screening programmes bring long term benefits in terms of morbidity, mortality and social harm.

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13.5 The Committee unanimously agreed with the recommendation from the review that population screening for alcohol misuse should not be offered.

The UK NSC recommended against screening for alcohol misuse. They were also at pains to acknowledge that alcohol misuse is a serious health problem in the UK. They noted that there are a range of interventions offered in primary care which aim to identify and address this issue

The Test		
4	There should be simple, safe, precise and validated screening test.	Use of self-reporting questionnaires are not suitable in a population screening programme
5	The distribution of test values in the target population should be known and a suitable cut-off level defined and agreed.	AUDIT remains the most used tool however is not suitable in a population screening programme
The Screening Programme		
11	There should be evidence from high quality randomised controlled trials that the screening programme is effective in reducing mortality or morbidity. Where screening is aimed solely at providing information to allow the person being screened to make an "informed choice" (eg. Down's syndrome, cystic fibrosis carrier screening), there must be evidence from high quality trials that the test accurately measures risk. The information that is provided about the test and its outcome must be of value and readily understood by the individual being screened.	No studies were identified to demonstrate that screening would have a positive effect in the long term

Approach to ethical, legal and social issues in screening

14 The need to clarify the way in which the UK NSC addresses ethical, legal and social issues relating to screening was an outcome of the independent review of the Committee's structure and function and the Government's response to the House of Commons inquiry into health screening. The Committee had received two ethical training sessions and had engaged with the Nuffield Council on Bioethics to discuss the issue of contingent screening using cell free DNA (cfDNA). A subsequent action was the development of a framework on ethical, legal and social issues relating to screening and a methodology for considering and reporting on these when necessary. The framework was presented to the Committee.

13.1 The framework was developed by PHG Foundation and focused on screening for genetically inherited conditions. It was proposed that a task and finish group chaired by Prof Roger Brownsword should be established to consider the framework's relevance to screening more generally and to develop a methodology for using the framework to help inform the UK NSC's consideration of screening. The Committee agreed with this proposal.

Updates

NIHR NETSCC Update (for information)

The Committee noted the updates

SIGN Update (for information)

The Committee noted the updates

AOB

None raised.