UK National Screening Committee

18 June 2014

Screening for Type 2 Diabetes

Purpose

1. This document provides background on the item addressing type 2 diabetes.

Current policy

2. The current policy is:

   'General population screening should not be offered. Whole population screening has been assessed against the UK National Screening Committee (UK NSC) criteria and does not meet a number of the criteria.

   The UK NSC has identified the need for a Vascular Risk Management Programme, however, which includes diabetes.'

Review

3. A review was undertaken by Warwick Medical School with funding from the HTA which updated an earlier review. The earlier review was published in 2007.

4. This found that interest in screening has been stimulated by a number of factors including the rising number of people with diabetes and with people with raised blood sugar who don't meet the formal level for a diagnosis of diabetes. Recognition that primary prevention measures (such as lifestyle change) are having limited effect, increased understanding of how raised blood sugar (at any level) relates to a broad range of vascular risk, change in international views on testing, improvement in management of diagnosed diabetes and developments in treatment of people with raised blood sugar but who are not diabetic.

5. The review came to the conclusion that, on the balance of the evidence, universal screening should not be recommended.

6. Key findings to support that conclusion were:

   - A randomised trial of screening did not demonstrate a benefit in terms of cardiovascular outcomes or self-reported health status at 13 years follow up. Another trial, though not of screening, did not show a benefit from intensive management over standard care.
   - There is variation in the uptake of testing which was associated with the type of test and ethnicity.
   - The simpler testing options (for example HbA_{1c}) were less sensitive and more expensive than other tests and
   - Treatment and care of people with existing diabetes remains less than ideal

7. However the report suggested that this did not rule out the value of early detection in high risk groups or, in England, the NHS Health Check. In relation to the NHS Health

Check the review was concerned to highlight that testing for diabetes may not add significantly to the overall vascular risk score. It also suggested that, with a reported sensitivity of 67%, the process that the health check use to detect people with diabetes could be improved.

Consultation

8. A three month consultation was hosted on the UK NSC website. The following organisations were contacted directly: Diabetes UK, Royal College of General Practitioners and the British Society for Immunology. Diabetes UK hosted a presentation and discussion on the draft review during the consultation period.

9. Responses were received from Diabetes UK and Dr Greg Fell. These are attached for reference.

10. The overall conclusions of the report, summarised above, were not challenged by the responses. However there was some concern about the difficulties that may be experienced by service providers trying to interpret the overlapping guidance from the National Institute for Health and Care Excellence, the UK NSC and the NHS Health Check.

11. Recommendation

12. The committee is asked to agree the following statement:

The UK NSC does not recommend universal screening for type 2 diabetes.

Type 2 Diabetes Mellitus

Consultation comments

March 2014

1.

Organisation:	Diabetes UK		
Name:	Nikki Joule	**Email address:**	[redacted]
Please tick whether you are making this submission as an individual or on behalf of an organisation. **Individual** ☐ **Organisation** ☒			

Section and / or page number	Text or issue to which comments relate	Comment *Please use a new row for each comment and add extra rows as required.*
xv	Conclusions	Diabetes is a serious public health issue. Diabetes UK supports the conclusions of the Health Technology Assessment that there is a case for selective screening for Type 2 diabetes. In England there is an opportunity for this to be incorporated into the NHS Health Check programme for people over 40. Widespread risk assessment programmes should also be considered to target groups at high risk of Type 2 diabetes not covered by the Health Check programme (in the devolved nations; and in communities who are at high risk before they reach the age of

		40). As specified in NICE guidance PH38 GPs and other primary healthcare professionals should use a UK validated risk-assessment tool to identify people on their practice register who may be at high risk of type 2 diabetes. If a computer-based risk-assessment tool is not available, they should provide a validated self-assessment questionnaire, for example, the Diabetes Risk Score assessment tool. This is available to health professionals on request from Diabetes UK. . Selective screening based a risk assessment should result in patients identified with both IGT and diabetes being referred for appropriate interventions that can help them address modifiable risk factors (for those at high risk) and minimise complications (for those diagnosed with Type 2 diabetes).
55 and 59	NSC criteria 10 and 19	While the evidence that changes to lifestyle can help people avoid or prevent Type 2 diabetes has been well-established, there is a need for further research into lifestyle interventions that lead to sustained behaviour change. This research would need to establish both the effectiveness and cost-effectiveness of interventions.
61	Recent evidence from the NHS Health Check programme	The NHS Health Check programme has potential to identify patients with undiagnosed diabetes and IGT. However, the evidence, as cited in the HTA report that the current diabetes filter fails to detect up to a third of those with diabetes or those at risk indicates a need to review the filter. Diabetes UK recommends that family history of diabetes and waist measurement are taken into account in the diabetes filter.

2.

UK National Screening Committee

Type 2 Diabetes

Consultation comments

Organisation:			
Name:	Greg Fell	**Email address:**	[redacted]
Please tick whether you are making this submission as an individual or on behalf of an organisation. **Individual** ☒ **Organisation** ☐			

Section and / or page number	**Text or issue to which comments relate**	**Comment** *Please use a new row for each comment and add extra rows as required.*
General, not specific to any particular page		Thank you for the opportunity to comment on Prof Waugh's report. It is an excellent analysis of some of the issues in this area I think, in terms of consultation, there might need to be some further clarity about precisely what the policy question is. NHS Health Checks are here, for better or worse, following the Vascular Risk Assessment work. Almost exclusively a test for diabetes is included in the implementation of this, so one could make a case that "screening" for diabetes is here. That leaves a policy question of whether there is a case for more intensified screening / case finding in the population already eligible for health checks (more frequent call / recall), separate efforts to find ONLY

		diabetes; it also throws into the question as to whether there should be consideration given to screening those who are not eligible (too old, too young) for health checks. Given the state of the primary evidence, it seems hard to make a case that screening for DM in those older than the high cut off for health checks is viable and would lead to health gain, given the time from onset to complications. However there MAY be a case in high risk populations younger than NHS H Check age – obese, south asian, other factors determining level of risk. This was an issue certainly explored in PH38 economic analysis – from memory such a strategy would be cost saving. It seems THE key issue is the seeming discrepancy, and quite a significant one between NICE PH38 and the NSC position. I cannot see a case, and Prof Waugh's analysis has further cemented this that a case is made for alternate efforts to screen in those eligible for H Checks (after PH38 recommendations). If I am honest, Prof Waugh's report seems directly contradictory to PH38 – this might be an area the NSC would explore further. These (PH38 and NSC position – assuming NSC position remains unchanged) will be differentially interpreted by those wanting to back a case to screen / not screen Prof Waugh's review considered the recent primary evidence, notably ADDITION, which was done in a high risk population (as was the NICE

		PH38). It seems clear that NICE PH38 has set out “the evidence for the intervention”, or in this case a strategy. It has not set out a case for a screening programme in this high risk population. If there is no national programme (outwith NHS H Checks) or no central specification or QA standards, there seems a very high risk of sporadic, patchy and incomplete implementation of downstream interventions from the test – particularly poor implementation of intensive lifestyle. Whilst this might not cause harm (there DOES remain potential for some harm) it may certainly be wasteful of resources, which might be spent on other activities. I fear a risk of a wide range of approaches being used to undertake a test – from OGTT, through to point of care A1C. There would need to be a high level of QA about this, especially the latter modality. There is also the potential, quite a significant one, of this drawing attention away from optimal management of patients already known to be diabetic.