

UK National Screening Committee

Screening for Oral Cancer

19 November 2015

Aim

1. To ask the UK National Screening Committee to make a recommendation, based upon the evidence presented in this document, whether or not screening for oral cancer meets the NSC criteria to support the introduction of a population screening programme.

This document provides background on the item addressing screening for oral cancer.

Current recommendation

2. The 2010 review of screening for oral cancer concluded that systematic screening of adults in the population is not recommended.

This was due to the considerable uncertainty regarding the natural history of the disease, and in particular an inability to predict which oral lesions could progress to cancer. There was also no clear evidence-base for the management of potentially malignant lesions.

Review

- 3. This review has been undertaken by Solutions for Public Health, in accordance with the triennial review process.
- 4. The scope of this review focused on three key areas: the natural history, the test and the management and treatment of oral cancer. These were identified as problematic areas in the previous review.
- 5. The conclusion of this review is to reaffirm the UK NSC recommendation not to screen for oral cancer in the UK adult population. The key reasons are:
 - a. <u>The condition</u>: a biomarker suitable for screening the general population has not been identified. Therefore the identification of potentially malignant lesions that will progress to cancer cannot be achieved with sufficient reliability. **Criterion 2 not met.**



- b. The test: a reliable screening test (or combination) has not been identified. The review considered tests which may be an alternative to, or an addition to, the visual examination. There is insufficient evidence to determine the accuracy of test candidates when used in the general UK population. Studies reviewed were undertaken in non-UK populations and in high risk groups. **Criterion 5 not met.**
- c. The intervention and screening programme: surgical intervention for early-stage cancer has been shown to be beneficial, however there is no clear evidence-base for the management of potentially malignant lesions, therefore it is not clear which individuals detected through screening should be offered treatment. Criterion 11 not met.

Consultation

- A three month consultation was hosted on the UK NSC website. Communication of the consultation was promoted through both PHE Events and the PHE Screening Twitter platform. Direct emails were sent to stakeholders of whom 20 organisations were contacted directly. Annex A
- 7. Responses were received from the following 7 stakeholders: Association of British Academic Oral and Maxillofacial Surgeons, British Association for the Study of Community Dentistry, Cancer Research UK, Royal College of Physicians & Surgeons of Glasgow, Royal College of Radiologists. Additionally we received comments from the NHSE National Clinical Director for Diagnostics, and an STR in Oral & Maxillofacial Surgery. All comments are in Appendix B, below.

No respondent disagreed with the recommendation of the review. The lack of an RCT with generalisability to the UK population is acknowledged as a critical gap in the evidence.

Recommendation

8. The committee is asked to approve the following recommendation:

A systematic population screening programme for oral cancer is not recommended.

A reliable screening test that can detect potentially malignant lesions which will progress to cancer has not been identified. It therefore remains unclear which individuals detected through screening should be offered treatment.



Based upon the 22 UK NSC criteria set to recommend a population screening programme, evidence was appraised against the following seven criteria:

Criteria						
The	Condition					
1	The condition should be an important health problem.	Met ✓				
2	The epidemiology and natural history of the condition, including development from latent to declared disease, should be adequately understood and there should be a detectable risk factor, disease marker, latent period or early symptomatic phase.					
The	Test					
5	There should be a simple, safe, precise and validated screening test.	Not met				
6	The distribution of test values in the target population should be known and a suitable cut-off level defined and agreed.					
The	Intervention					
10	There should be an effective treatment or intervention for patients identified through early detection, with evidence of early treatment leading to better outcomes than late treatment.	Met ✓				
11	There should be agreed evidence based policies covering which individuals should be offered treatment and the appropriate treatment to be offered.	Not met				
The	Screening Programme					
13	There should be evidence from high quality Randomised Controlled Trials that the screening programme is effective in reducing mortality or morbidity.	Not met				



Annex A

List of organisations contacted:

- 1. Association of British Academic Oral and Maxillofacial Surgeons
- 2. The Ben Walton Trust
- 3. The British Association for Cancer Research
- 4. The British Association for the Study of Community Dentistry
- 5. British Association of Surgical Oncology
- 6. British Dental Association
- 7. British Dental Health Foundation
- 8. Cancer Research UK
- 9. The Dental Professionals Association
- 10. Faculty of General Dental Practice (UK)
- 11. Faculty of Public Health
- 12. Mouth Cancer Foundation
- 13. Radiology: National Clinical Director for Diagnostics NHSE
- 14. Royal College of General Practitioners
- 15. Royal College of Physicians
- 16. Royal College of Physicians and Surgeons of Glasgow
- 17. Royal College of Physicians of Edinburgh
- 18. Royal College of Radiologists
- 19. Royal College of Surgeons
- 20. Royal College of Surgeons of Edinburgh
- 21. Society and College of Radiographers

Annex B

Name:	ne: Jonathan Iloya			Email address:	xxxx xxxx		
Organisation (if appropriate):			The British Association for the Study of Community Dentistry (BASCD)				
Role:	Honorary S	ecretary					
Do you	Do you consent to your name being published on the UK NSC website alongside your response? ${\sf Yes} \ \lor {\sf No} \ \Box$						
	n and / or number	Text	or issue to which comments relat	е	Comment		
General				this appra be able to We are pl identified toolkit for	s a registered stakeholder organisation welcomes isal of screening for oral cancer and are pleased to comment on the draft report. eased that the main risk factors reflect those in Delivering better oral health: an evidence-based prevention. Third edition ¹ and that other risk factors in identified from recent studies.		

¹Public Health England. Delivering better oral health: an evidence-based toolkit for prevention. Third edition. (2014)



Name:	Sara Bainbridge			Email address:	XXXX XXXX
Organisation (if appropriate): Cancer Resea			arch UK		
Role:	Policy Adviser				
Do you o	consent to your name being p	ublished on th			our response?
			Yes	s x No L	
Section	Text or issue to which com	ments relate			Comment
and / or					
page #					
Page 14	Implications for policy: natural history understood and has a biomarker suitable for screening been identified?		Cancer Research UK welcomes this appraisal of screening for oral cancer. The incidence of oral cancer is increasing and early detection improves patient outcomes, so close monitoring of the evidence, including the potential for a screening programme is important. However we support the conclusion of the report that at this time there is insufficient understanding of the condition, and evidence for an effective screening technique to recommend		
Page 15	Implications for policy: has a reliable testbeen identified?				
Page 15	Implications for policy: Watch and wait approach vs. treatment; large studies of other approaches?		oral cancer screening. We appreciate that the National Screening Committee is under review, but it is essential that the timetable for the next review should be clearly articulated, and that		
Page 4	Current NSC policy is that scr should not be offered	i ceriirig °		orward that the National S r to respond to emerging	Screening Committee should operate in an agile evidence.



Name:	Graham OGDEN			Email address:	xxxx xxxx	
Organisation (if appropriate): Association of British Academic Ora			Association of British Academic Ora	al & Maxillofacial S	urgeons	
Role:	Role: Researcher, Teacher and Clinician involved in the management of potentially malignant lesions					
Do you o	Do you consent to your name being published on the UK NSC website alongside your response? Yes 1 / No /					
Page number	er Issue to which comments relate Comment				t	
P8	Natural history	One of the many problems associated with a better understanding of the natural history stems from the likelihood that the evolution of the disease is in no small part driven by its aetiological agent (s). The lining of the mouth can only react in a limited number of ways (eg colour change, ulceration, swelling) so what we see doesn't necessarily reflect one particular pattern of growth. Factor in the individuals host response and its little wonder that we cannot say with any degree of certainty that a cancer will develop in x number of months. The work of Holmstrup (2006,2009) muddies the water even more, by finding that in some cases, the removal of a potential malignant lesion spurs on the development of a cancer,whereas non treatment of dysplasia can recede .They also found that there were v few parameters that were associated with a much increased risk for malignant change, namely lesions >200mm ² or non homogenous leukoplakias (whereas other factors, such as degree of dysplasia, tobacco, and even surgical intervention, were not!).				
P9		A recent attempt to predict the number of oral cancer cases that a dentist is likely to see in their lifetime (Ogden et al BDJ 2015) gave a cautious estimate of 1 in 10 yearshowever the number of potentially malignant lesions that they might see was much greater (estimated at 2 per month !).				
P13	The treatment	Although we have known for many years (Stell 1982) that biopsy excision of a small cancer can be curative, the treatment of a potentially malignant lesion is much more problematic. Getting RCT's will prove tricky when some authorities believe that every lesion should be excised, (and hence might consider that it would be unethical to do nothing) yet the lack of an accepted way to treat every such lesion is crying out for the creation of just such a RCT. Holmstrup et al found that surgical intervention wasn't always helpful.				
General	Importance	This is	s a v well referenced report. Convention	onal oral examinatio	on still offers the best chance to detect early change but	



comment	of the	only if dentists screen the mouth every time the patient attends and then refer when they see something suspicious
	disease	

Name:	Laura Mitchell, Honorary Secretary, on be			, on behalf of FDS,	Email address:	XXXX XXXX	
Organisation (if appropriate): Dental Fac			Dental Fac	culty, Royal College of	Physicians and Surg	eons of Glasgow	
Role:	le: Researcher, Teacher and Clinici			an involved in the management of potentially malignant lesions			
Do you	consent to	o your name b	eing publis	shed on the UK NSC v	_	our response?	
Section and / or page number		Text or issue		Comment		Comment	
P8 Natural history			disease progression vidifferent mutation(s) t	very difficult. A white o that caused by alco	of growth make predictions on the development of patch caused by smoking will probably have a phol or HPV. The fact that up to 25% have no t a significant number are caused by something we		
P9 Screening test			st	I was involved with the Cochrane reviews quoted. Its easy to be critical of the papers available but our recent attempt to predict the number of oral cancer cases that a dentist is likely to see in their lifetime (Ogden et al BDJ 2015) gave a cautious estimate of 1 in 10 years, however the number of potentially malignant lesions that they might see was estimated at 2 per month!			
disease first glance appear quite negative (set ag			ne 'evidence' to support national screening might at inst the trebling in numbers over the last 30 years), he UK, COE still offers the best chance to detect				



		early change but ONLY if GDP's screen the mouth every time the patient attends and then refer when they see something suspicious. Those who ask about risk factors, screen the mouth, record their findings, are aware of referral guidelines, do regular relevant CPD and have confidence are more likely to detect and refer.
P13	The treatment	Although we have known for many years that biopsy excision of a small cancer can be curative, the treatment of a potentially malignant lesion is much more problematic. An RCT is required given the lack of accepted practice.



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From the Office of the President Dr Giles Maskell MA FRCP FRCR

14 August 2015

Mr Adrian Byrtus
Evidence Review and Policy Development Manager
UK National Screening Committee
Floor 2, Zone B, Skipton House
80 London Road
London SE1 6LH

By email: adrian.byrtus@nhs.net

Dear Mr Byrtus

The NSC Recommendation on Oral Cancer Screening The NSC Recommendation on Prostate Cancer Screening

In response to the two consultations above, The Royal College of Radiologists supports the UK National Screening Committee's recommendation that there should be no national screening programme for oral cancer or prostate cancer at this stage.

This can be considered to be the College's formal response, and it has no further comments to add.

With kind regards,

Yours sincerely

Dr Giles Maskell President

president@rcr.ac.uk



Many thanks Adrian

It's a good review. No comments from me. When is a formal committee decision expected?

Best wishes

Erika

Professor Erika Denton FRCP, FRCR

National Clinical Director for Diagnostics, NHS England

Honorary Professor of Radiology

University of East Anglia and Norfolk & Norwich University Hospital

Dear Adrian

The following group of patients needs to be considered differently:

1Women with abnormal cervical smears (HPV)

2Homosexual men who have unprotected oral sex (HPV)

3Partners of the above two groups (HPV)

4Patient having upper aero digestive tract endoscopy – this group normally have risk factors for oral SCC. They also are having endoscopy and are easy to examine. cf PR examination in patients having colonscopy.

- 1-3 should be encouraged to see their GDP 4 monthly rather than 6 monthly (over the age of 45)
- 4 all patients have upper aerodigestive tract endoscopy should have oral examinations.

Thanks

Tom Walker



STR in Oral & Maxillofacial Surgery