Identifying "red flags" when reassessing screening programmes.

On behalf of the screening re-assessment collaborating group:

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The screening re-assessment collaborating group

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PRINCIPLES AND PRACTICE OF SCREENING FOR DISEASE

J. M. G. WILSON & G. JUNGNER





Project outline

- Explain the need for and outline a framework for re-assessment of current screening practises.
- 3 components.
- 1: Standardising re-assessment procedures.
- 2: Identifying "red flags" for re-assessment.
- 3: Guidance on practical de-intensification or de-implication and monitoring its effects.



Component 2: Identifying "red flags"

- Mark critical warning signs of lack of net benefit.
- Identifies these "red flags" based on a review of historical examples of screening interventions that have been de-intensified or de-implemented.
- These flags will be classified according to the PICO-format.



Review of examples

- Two authors independently and systematically reviewed recommendations on screening from key institutions. These were supplemented with discussions within the whole group.
- US Preventive Services Task Force, the Canadian Task Force, Choosing Wisely, and NHS screening recommendations.
- We identified 22 types of screening with recommendations of restricted use compared to previous practise; where screening was recommended against; or a strong rationale for this has been made.
- **P**: Change within population: tuberculosis diminishes.
- I: New screening strategy: strong evidence that once-only sigmoidoscopy is superior to FOBT.
- C: New effective standard treatment or prevention strategy: HPV-vaccine.
- O: Substantial overdiagnosis accepted: prostate cancer screening.



Evidence: 4 RCT's, 137,214 men over 65 years, > 10 years of FU. Performed during 1980's and 1990's.

GOOD!	BAD!
RRR: 50%	



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Specific target group	
Once only test	
No invasive follow-up tests	



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RRR: 50%	ARR: 0,46% (46/10,000) (But likely -77% today)
Harmless examination	
Specific target group	
Once only test	
No invasive follow-up tests	



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RRR: 50%	ARR: 0,46% (46/10,000) (But likely -77% today)
Harmless examination	Overdiagnosis: 176 / 10,000
Specific target group	
Once only test	
No invasive follow-up tests	



GOOD!	BAD!
RRR: 50%	ARR: 0,46% (46/10,000) (But likely -77% today)
Harmless examination	Overdiagnosis: 176 / 10,000
Specific target group	Overtreatment: 37 / 10,000
Once only test	
No invasive follow-up tests	



GOOD!	BAD!
RRR: 50%	ARR: 0,46% (46/10,000) (But likely -77% today)
Harmless examination	Overdiagnosis: 176 / 10,000
Specific target group	Overtreatment: 37 / 10,000
Once only test	Deaths from OT: 2 / 10,000
No invasive follow-up tests	



GOOD!	BAD!
RRR: 50%	ARR: 0,46% (46/10,000) (But likely -77% today)
Harmless examination	Overdiagnosis: 176 / 10,000
Specific target group	Overtreatment: 37 / 10,000
Once only test	Deaths from OT: 2 / 10,000
No invasive follow-up tests	Further compl.: 12/10,000



Figure 1. The value framework.





Harris RP, Wilt TJ, Qaseem A. Ann Int Med 2015;162:712-7.

Archie Cochrane's challenge



"It is surely a great criticism of our profession that we have not organised a critical summary, by specialty or subspecialty, adapted periodically, of all relevant randomised controlled trials." Cochrane 1979



Photograph: Cardiff University Library, Cochrane Archive, University Hospital Llandough

Challenge from the screening re-assessment collaborating group:

"It is surely a great criticism of our profession that we have not organised an independent critical review process, adapted periodically, and following a structured, empirically founded methodology, of the evidence base for all currently used screening interventions".

