Assessment of clinical need

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DEC theme: Needs Assessment

Diagnostic Evidence Co-operative
Oxford

Needs assessment
Identifying unmet diagnostic testing needs in primary care

2. To what extent do you agree with the following statements?

- Disagree Completely
- Strongly Disagree
- Somewhat Disagree
- Somewhat Agree
- Strongly Agree
- Agree Completely
What is clinical needs assessment?
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‘a process by which information is gathered regarding the scope and potential impact of gaps or deficiencies in the current delivery and practice of health care’

Weigl et al. 2012
Why perform needs assessment?

• Provision of information on a problem to guide design and development of solutions

• To guide development of strategies for the eventual introduction of a product

• Poor product uptake common where there is a shortfall between capability and expectations

• To highlight context-specific holes in health service provision and to assess the potential of a technology to address these
Who conducts assessments?

- Healthcare product manufacturers
- Health authorities
- Academic institutions
Components of needs assessment

- **Critical review** of information to identify gaps in health care
- Identification of methods or technologies that may help to address shortfalls
- Identification of stakeholder requirements
- Consideration of potential barriers and facilitators to uptake of new technologies
Types of clinical needs assessment?
Case study 1: Review
Components of needs assessment: Development of PET services in England

- Critical review of information to identify gaps in health care
- Identification of methods or technologies that may help to address shortfalls
- Identification of stakeholder requirements
- Consideration of potential barriers and facilitators to uptake of new technologies
A Framework for the Development of

Positron Emission Tomography (PET) Services in England
Development of PET scan services in England

- Review of existing evidence carried out by the Department of Health to identify needs and highlight benefit
- Identified clinical benefit
- Identified current shortfalls and contrasted with other W. European countries
- Detailed estimate of need based on throughput and population
- Identified costs of provision and additional requirements
Case study 2: Questionnaire
Components of needs assessment: Questionnaire based survey of primary care

- Critical review of information to identify gaps in health care
- Identification of methods or technologies that may help to address shortfalls
- Identification of stakeholder requirements
- Consideration of potential barriers and facilitators to uptake of new technologies
Point-of-care Testing in UK Primary Care: a needs assessment

Philip J. Turner, Ann Van den Bruel, Caroline Jones, Annette Plüddemann, Carl Heneghan, Matthew Thompson, Christopher Price and Jeremy Howick
Research methodology: questionnaire development

• Systematic review of qualitative research (Jones et al. 2013)
• Discussion with content experts
• Piloted with 30 GPs / family doctors in the UK
• Survey was conducted online through Doctors.net
Point-of-care diagnostics: example of open questions

Q1 Diagnosis
Please name up to 5 conditions for which a POCT could help you make a diagnosis. Please list the conditions irrespective of whether or not POCTS currently exist

a) _________ (please specify)
b) _________ (please specify)
c) _________ (please specify)
d) _________ (please specify)
e) _________ (please specify)

• I do not believe POCTS would help me make a diagnosis

*Open end: Must select “Open End a” or “I do not believe...”; Open ends b-e are non-mandatory*
Survey response rates

• Survey was made available to 1635 regionally representative GPs in the UK in 2012

• 1109 recipients completed the survey
Conditions for which GPs (family doctors) would like to have POC diagnostics to assist with diagnosis, & monitoring and management?
Historic research priorities in primary care

Executive summary

A review of near patient testing in primary care

FDR Hobbs\(^1\)  GH Thorpe\(^3\)
BC Delaney\(^1\)  ASM Earl-Slater\(^4\)
DA Fitzmaurice\(^1\)  S Jowett\(^1\)
S Wilson\(^1\)  RS Tobias\(^1\)
CJ Hyde\(^2\)

\(^{1}\) Department of General Practice
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\(^{3}\) Wolfson Applied Technology Laboratory
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Proposed research priorities

(Note: A modelling exercise to demonstrate the potential for health gain should be considered before embarking on a full-scale evaluation.)

Further primary research, if the quantitative systematic review indicates that knowledge is incomplete. Likely topics are those identified above for further systematic reviews.

Primary research into NPTs or EDI where promising evidence exists but where there is insufficient material to justify a further quantitative review. For example:

- screening for iron deficiency in the child development clinic
- NPT for the exclusion of deep venous thrombosis
- NPT for HbA1c in the practice diabetic clinic
- NPT for microalbuminuria in the practice diabetic clinic
- home monitoring of blood glucose by patients in tight control of diabetes
- NPT for cardiac muscle damage in the diagnosis of acute chest pain
Clinicians attitudes to POC tests: facilitators and barriers?

Q6 Other comments
Please share any other comments, including benefits and concerns about POCTs.

Open end. Non-Mandatory
References