Influencing Clinical Outcomes

Mike Hallworth

The problem

- All of us believe laboratory medicine has a role in patient care
- Lots of anecdotes, little hard evidence
- We take refuge in the “70% claim”
  - ‘Laboratory medicine data influences 70% of clinical decisions’ – or similar
- Evidence for this is also poor

Editorial

The '70% claim': what is the evidence base?

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IFCC Taskforce on the Impact of Laboratory Medicine on Clinical Outcomes (TF-ICO)

- Established following proposal by CPD, reporting to EB
- Objectives
  - *To evaluate the available evidence supporting the impact of laboratory medicine in health care*
  - *To develop the study design for new retrospective and prospective studies to generate evidence-based data to support IFCC promotional activities to the healthcare community and the public*

Who are we?

Mike Hallworth (UK) Flor Vanstapel (BE) Trefor Higgins (CN) Eric Kilpatrick (UK)
Corinne Fantz (US) Sherry Faye (Beckman Coulter) S V Rana (IN)
Wenzhe Li (US)

Plus Christoph Ebert (Roche – not pictured)

What are we doing?

First project:

- First project:
- Proposed Special Report – *Clin Chem*

  "Measuring the current and future role of laboratory medicine in influencing clinical outcomes'

  - Summarize the problems
  - Identify solutions
  - Propose a plan..

The problems

- 'Outcomes' = 'results of medical interventions in terms of health or cost' (Bissell, quoted by Bruns, 2000)
- Question is not:
  - "Does the test result predict an outcome of interest?"
- But:
  - "Is the use of the test associated with an improved outcome?"
- Differentiate diagnostic accuracy and clinical utility
  - (factors such as physician inaction, result misdirection, time etc. interfere)

Solutions

- More, better-targeted research
- Specific guidance on trial design and interpretation
- Checklist for suitable outcome studies

Areas of work

- Review existing work
  - Lewin Group, AHRQ, CER etc
- Role of the lab in defining and monitoring standards of care
  - Guidelines (CHD, diabetes as paradigms)
- The role of the lab in preventing misdiagnosis (incl overdiagnosis) -
  - Work with P Epner/ITSRI project ("Improvements in Tests Selection and Results Interpretation")
  - "Diagnostic Error in Medicine" conference

Areas of work (2)

- Defining lab quality markers associated with patient outcomes (turnround/LOS etc)
- Producing/summarizing checklists for outcome studies suitable for RCTs
- Describing alternatives to RCTs for diagnostic tests
  - How can IT/EMRs help?
- Examples in targeted fields of well-conducted outcome studies

How can you help?

- What have we missed?
- What can your Task Force/Working Group contribute?

- All comments/contributions gratefully received: mike.hallworth@sath.nhs.uk

- Or via IFCC Office