

# Primary care: making a difference to patients and populations



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# Is primary care research a “lost cause?”

Historically, overshadowed by and underfunded relative to the more prestigious basic biomedical sciences

Poorer productivity compared with other clinical specialties

- 1% as productive as internal medicine
- 0.5% as productive as public health
- 1.6% as productive as surgery



Anonymous. Lancet 2003; 361: 977

Cooksey R. A Review of UK Health Research Funding. Stationery Office, 2006

Askew DA, Glasziou PP, Del Mar C. Med J Aust. 2001; 175: 77–80

# Is primary care research “a lost cause?”

## Potential impact of “strong primary care”

Better population health  
Narrowing of disparities  
Reduced costs

## Significant contributions of research

Acute conditions  
Long term conditions  
Prevention



Starfield B, Shi L, Macinko J. *Milbank Q* 2005;  
83: 457–502

Mant D, et al. *Lancet* 2004; 364: 1004–1006

# Bed rest for acute low-back pain and sciatica



“People with acute low-back pain who are advised to rest in bed have more pain and are less able to perform every day activities, on average, than those who are advised to stay active.”

Hagen KB, Hilde G, Jamtvedt G, Winnem M. Cochrane Database of Systematic Reviews 2004, Issue 4

# Collaborative care for depression



**“Strategies effective in improving patient outcome generally were those with complex interventions that incorporated clinician education, an enhanced role of the nurse, and a greater degree of integration between primary and secondary care. Telephone medication counselling delivered by practice nurses or trained counsellors was also effective.**

**“Simple guideline implementation and educational strategies were generally ineffective.”**

Gilbody S, Whitty P, Grimshaw J, et al.  
JAMA 2003; 3145-3151

# Physician advice for smoking cessation

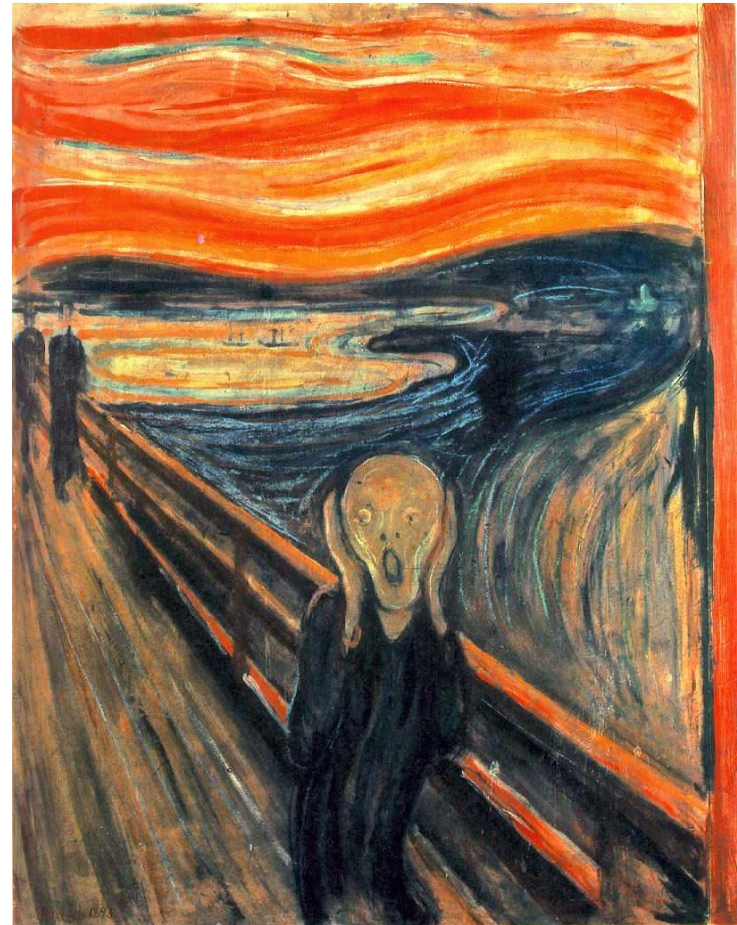


“Assuming an unassisted quit rate of 2 to 3%, a brief advice intervention can increase quitting by a further 1-3%.

“The challenge as to whether or not this benefit will be realized depends on the extent to which physicians are prepared to systematically identify their smoking patients and offer them advice as a matter of routine.”

# Translating evidence into practice

“In almost all studies the process of care did not reach the standards set out in national guidelines or set by the researchers themselves.”



Seddon ME, Marshall MN, Campbell SM, Roland MO. *Qual Health Care* 2001, 10:152-158.

# Translating evidence into practice

## Three of the challenges

1. Measuring and understanding the uptake of evidence-based practice
2. Changing clinical and organisational practice
3. Methodology





# Measuring and understanding the uptake of evidence-based practice



Sound and timely data on the uptake of evidence-based practice

Diagnosing the cause of implementation gaps

# Changing clinical and organisational practice

## **Need for evidence-based implementation**

Difficult to predict with any confidence which type(s) of intervention will work for any given targeted behaviour and context



# Did the Quality Outcomes Framework for general practice 'work'?

## **Trends**

- Modest acceleration in rate of improvement for diabetes and asthma after QOF
- But not for coronary heart disease

## **Comparison with indicators not in QOF**

- Performance higher for QOF indicators
- But no significant difference in RATE of improvement

Campbell et al. Quality of Primary Care in England with the Introduction of Pay for Performance. NEJM 2007;357:181-190

# Did the Quality Outcomes Framework for general practice 'work'?

## Difficult to interpret without 'controls'

- Uncertainty around wider evidence

## Background of improving quality

- Multiple other initiatives

## Concern about 'crowding out' motivation

- Or potential 'halo effects' on other indicators

# Randomised v. non-randomised studies



Review of interventions to improve prescribing

Poorly controlled studies more likely to show effect than well controlled studies

Soumerai SB, McLaughlin TJ, Avorn J (1989). *Milbank Quarterly*, 67, 268-317.

# Changing clinical and organisational practice



Need for evidence-based implementation

**Difficult to predict with any confidence which type(s) of intervention will work for any given targeted behaviour and context**

# What is a theory?



A coherent and non-contradictory set of statements, concepts or ideas that organises, predicts and explains phenomena, events, behaviour, etc.

# Theory in health and health care



Coronary heart  
disease and lipids

Duodenal ulcers and  
*Helicobacter pylori*

Tobacco smoking  
and stages of  
change



# Use of theory in implementation research

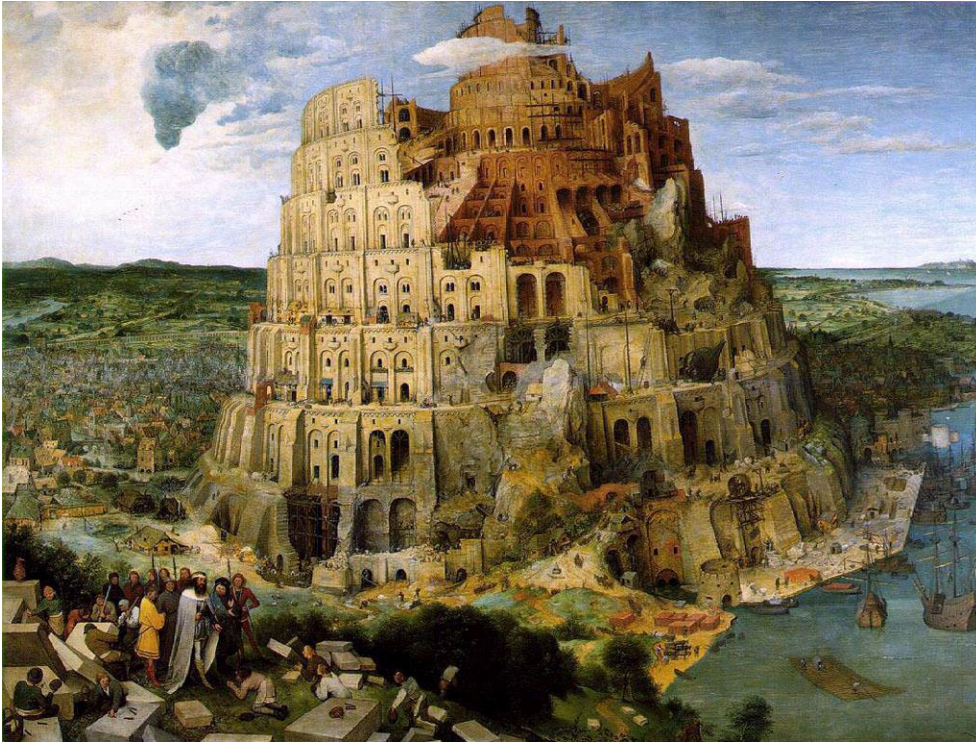


Explaining clinical and organisational behaviour

Selection or tailoring of interventions to change behaviour

Evaluation of effects, including mechanisms of action and other influences

# Methodology



Division over how research can best inform and influence the implementation of evidence-based practice

# Berwick D. The science of improvement

## JAMA 2008; 299: 1182-4

“Academic medicine has a major opportunity to support the redesign of health care systems; it ought to bear part of the burden for accelerating the pace, confidence, and pervasiveness of that change. Health care researchers who believe that their main role is to ride the brakes on change—to weigh evidence with impoverished tools, ill-fit for use—are not being as helpful as they need to be.

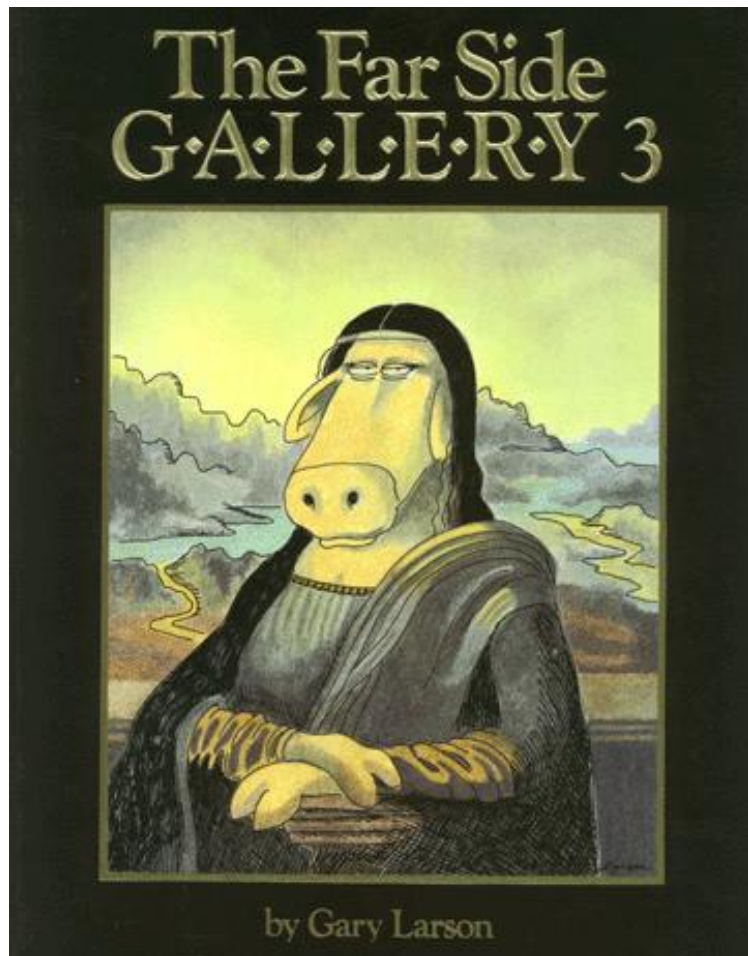
“Where is the randomized trial?” is, for many purposes, the right question, but for many others it is the wrong question, a myopic one.”





"Either you're for us or you're against us."

So... in summary



Primary care research has a key role in improving health outcomes

Implementation of this evidence might benefit from a bit more science and a bit less of the 'art'