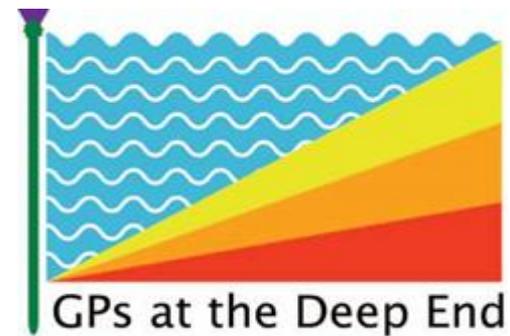


# Generating Research and Evidence in the Deep End



Stewart W Mercer

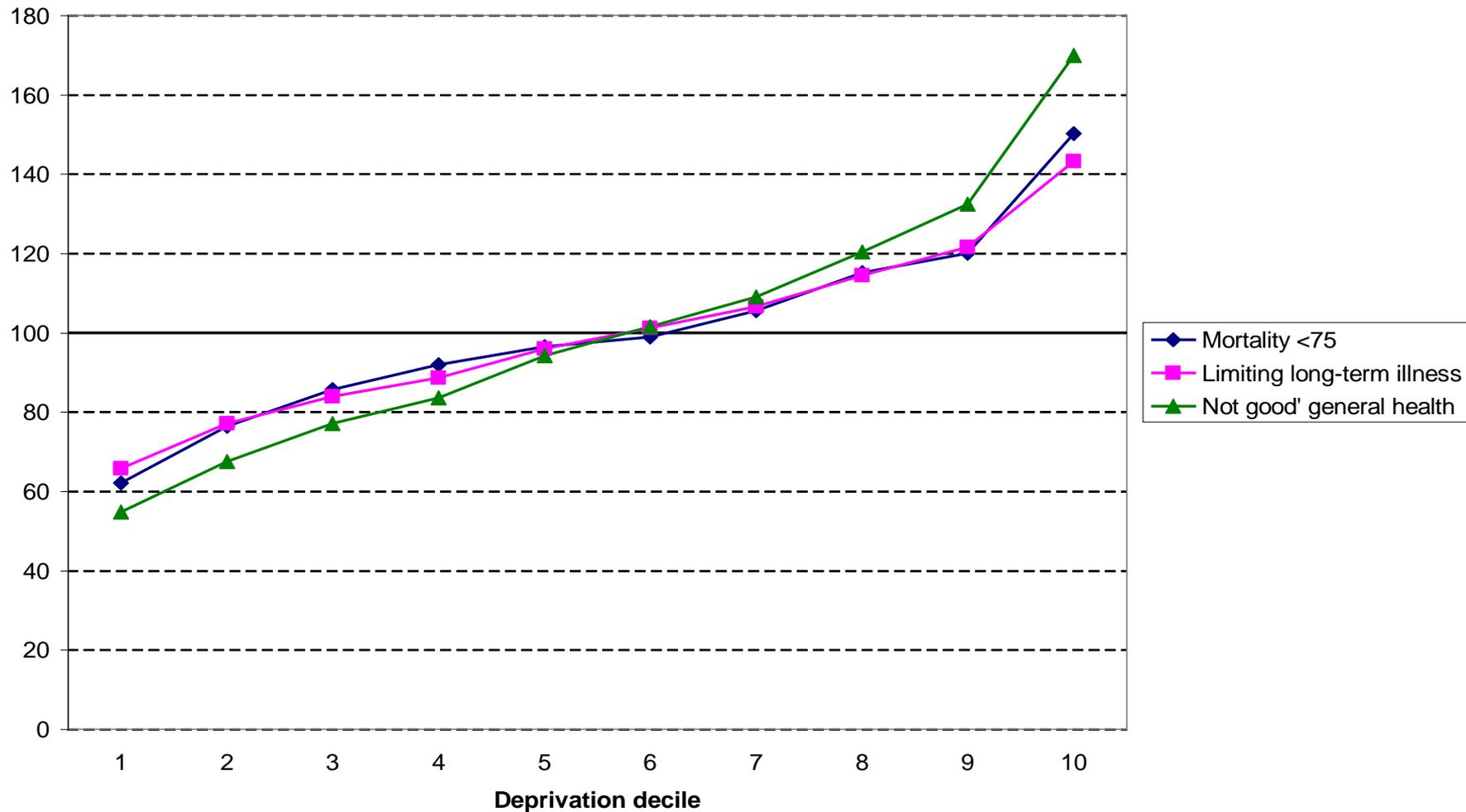
Professor of Primary Care Research

University of Glasgow

Director of the Scottish School of  
Primary Care

# The context

# ILL-HEALTH and Health inequalities in Scotland



“In the varied topography of professional practice, **there is a high, hard ground overlooking a swamp.** On the high ground, manageable problems lend themselves to solutions through the use of research based theory and technique.

In the **swampy lowlands, problems are messy and confusing and incapable of technical solution.**

The irony of this situation is that the problems of the high ground tend to be relatively unimportant to individuals or society at large, however great their technical interest may be, while **in the swamp lie the problems of greatest human concern.**

The practitioner [researcher] is confronted with a choice. Shall he remain on the high ground where he can solve relatively unimportant problems according to his standards of rigor, **or shall he descend to the swamp of important problems where he cannot be rigorous in any way he knows how to describe”.**

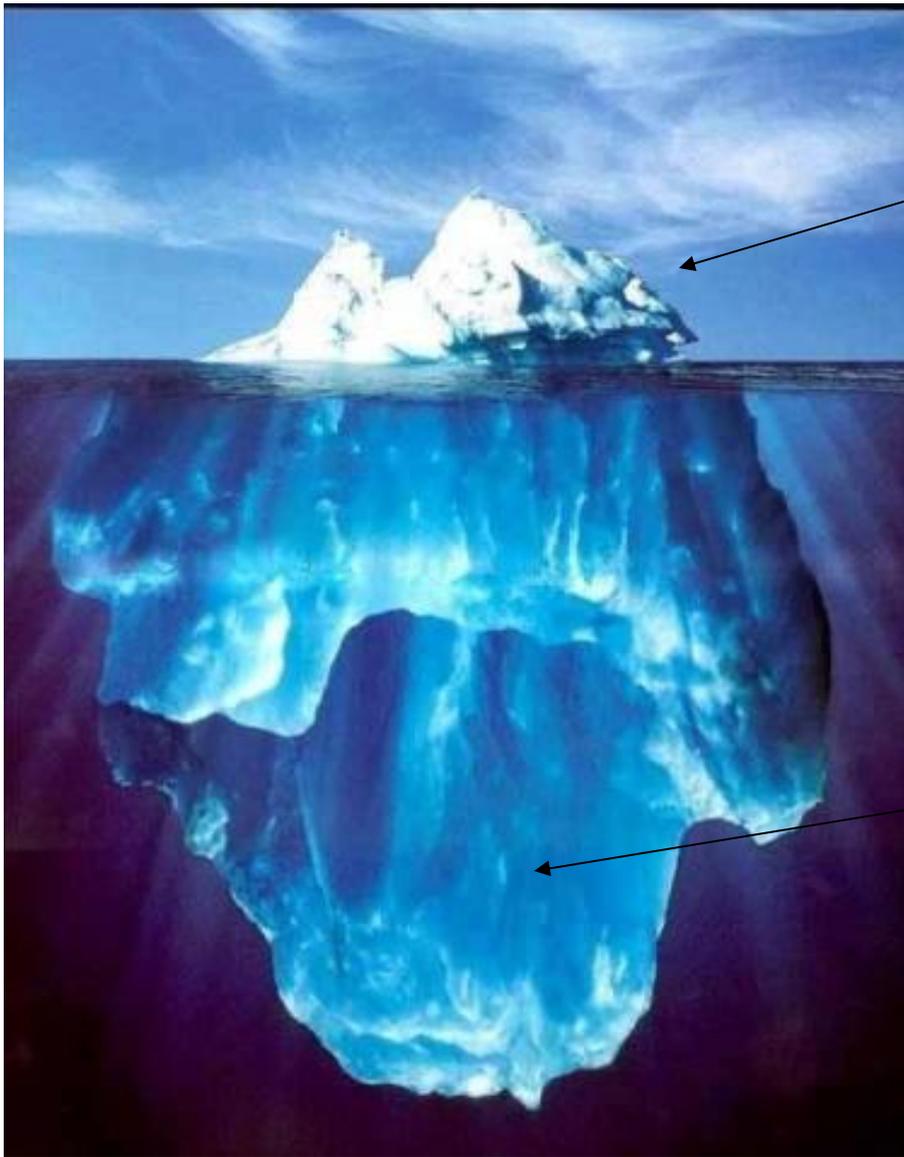
(Philosopher/sociologist Donald Schon)

# Quality of Care

1. Access
2. Effectiveness

Technical  
effectiveness

Interpersonal  
Effectiveness



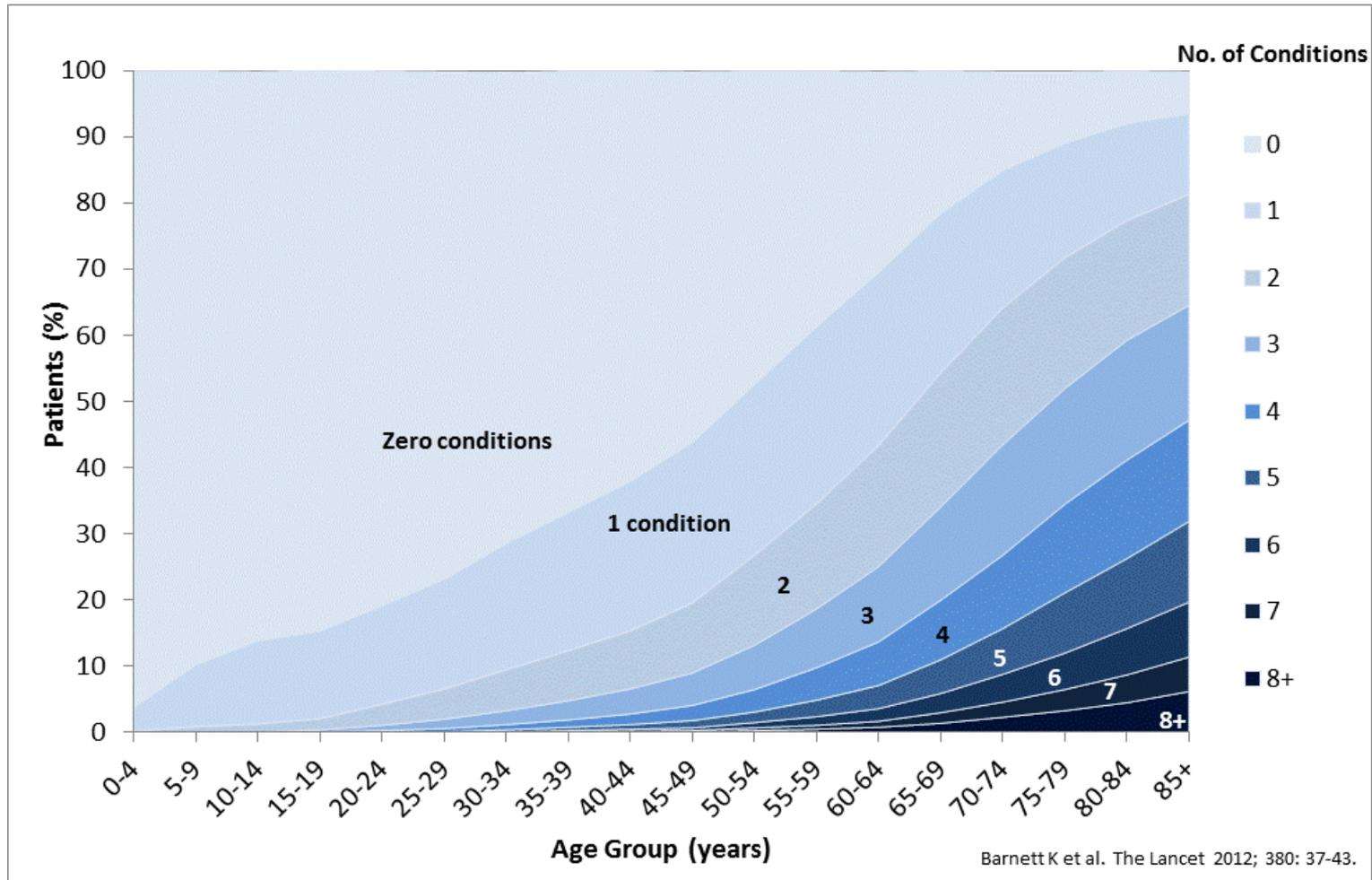
**The “clinical”  
narrative**

**The “human”  
narrative**

# Research in the Deep End

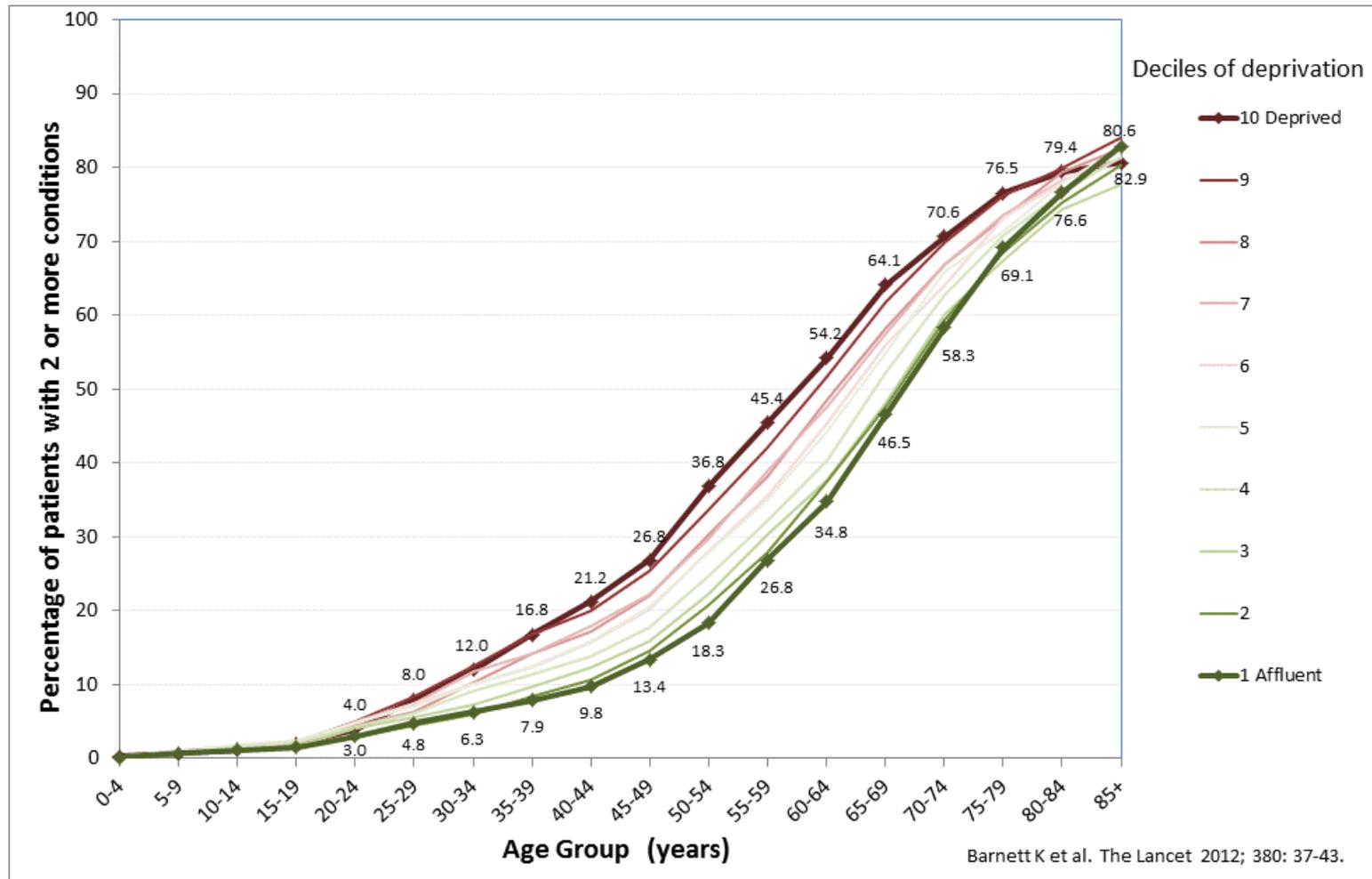
- *Doing research on the Deep End?*
- *Doing research with the Deep End?*

# Multimorbidity is common in Scotland

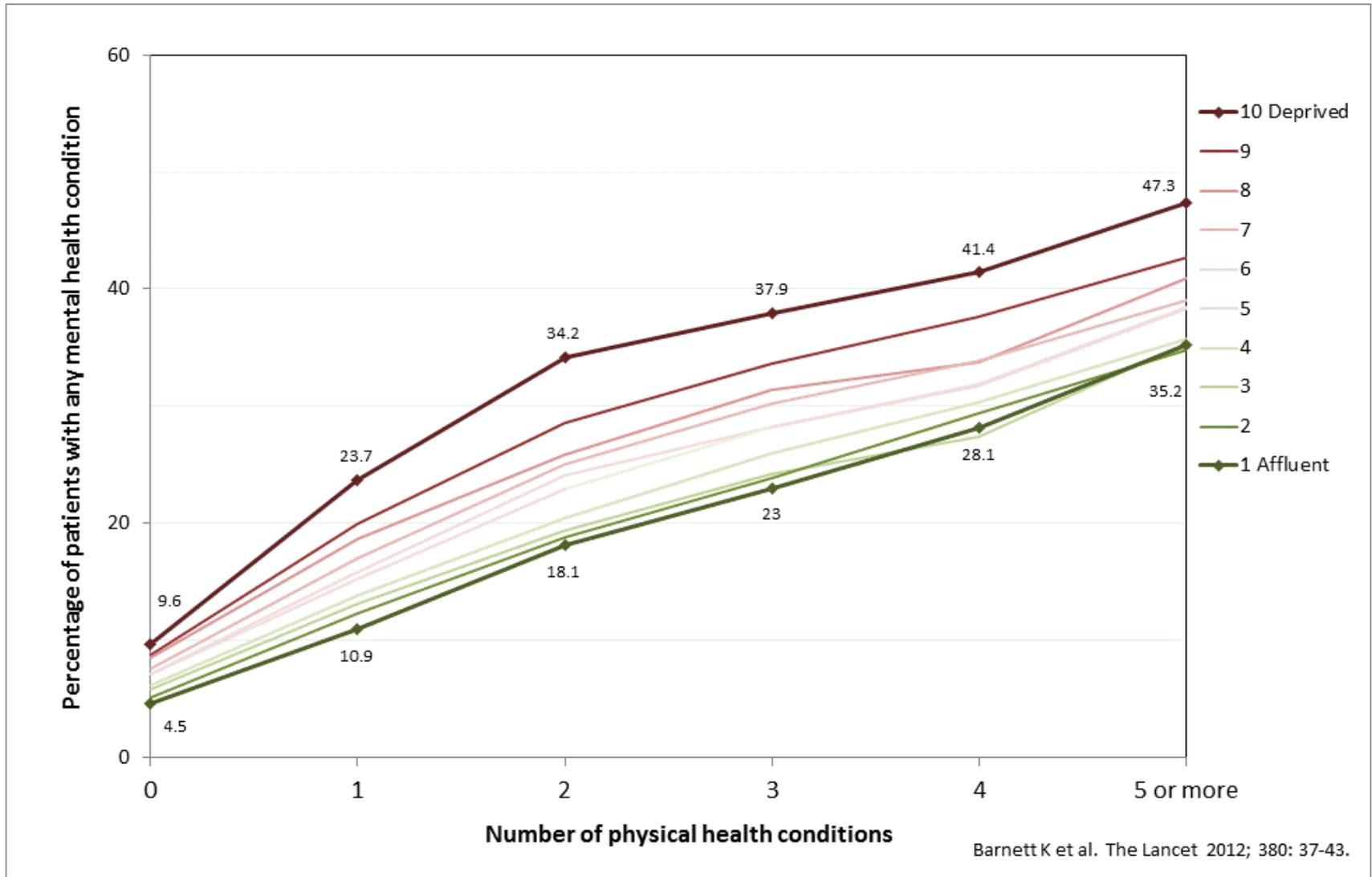


- The majority of over-65s have 2 or more conditions, and the majority of over-75s have 3 or more conditions
- More people have 2 or more conditions than only have 1

# People living in more deprived areas in Scotland develop multimorbidity 10-15 years before those living in the most affluent areas



# Mental health problems are strongly associated with the number of physical conditions that people have, particularly in deprived areas in Scotland



# The Inverse Care Law: Clinical Primary Care Encounters in Deprived and Affluent Areas of Scotland

*Stewart W. Mercer, MBCbB, PhD*

*Graham C. M. Watt, MBCbB, MD*

General Practice and Primary Care, Division of Community-Based Sciences, University of Glasgow, Glasgow, Scotland

---

## ABSTRACT

**PURPOSE** The inverse care law states that the availability of good medical care tends to vary inversely with the need for it in the population served, but there is little research on how the inverse care law actually operates.

**METHODS** A questionnaire study was carried out on 3,044 National Health Service (NHS) patients attending 26 general practitioners (GPs); 16 in poor areas (most deprived) and 10 in affluent areas (least deprived) in the west of Scotland. Data were collected on demographic and socioeconomic factors, health variables, and a range of factors relating to quality of care.

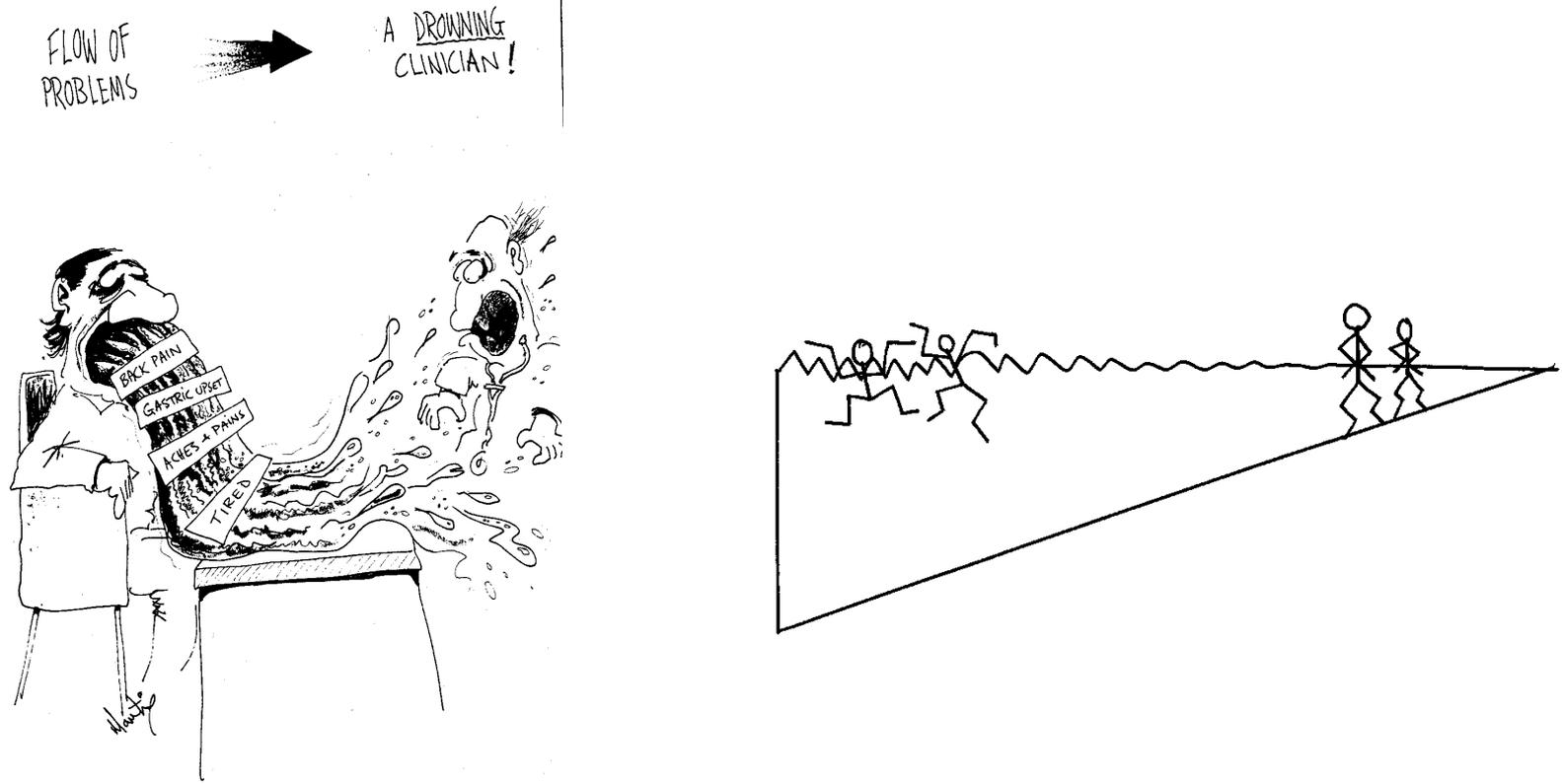


**MORE ONLINE**

**RESULTS** Compared with patients in least deprived areas, patients in the most deprived areas had a greater number of psychological problems, more long-term illness, more multimorbidity, and more chronic health problems. Access to care generally took longer, and satisfaction with access was significantly lower in the most deprived areas. Patients in the most deprived areas had more problems to discuss (especially psychosocial), yet clinical encounter length was generally shorter. GP stress was higher and patient enablement was lower in encounters dealing with psychosocial problems in the most deprived areas. Variation in patient enablement between GPs was related to both GP empathy and severity of deprivation.

**CONCLUSIONS** The increased burden of ill health and multimorbidity in poor communities results in high demands on clinical encounters in primary care. Poorer access, less time, higher GP stress, and lower patient enablement are some of the ways that the inverse care law continues to operate within the NHS and confounds attempts to narrow health inequalities.

# Multiple morbidity and the inverse care law



*Patient enablement never occurs with  
low empathy.....*

Mercer et al (2012) Patient enablement requires physician empathy: a cross sectional study of general practice consultations in areas of high and low socioeconomic deprivation in Scotland. BMC Family Practice 2012,13;6

# General Practitioners' Empathy and Health Outcomes: A Prospective Observational Study of Consultations in Areas of High and Low Deprivation

*Stewart W. Mercer, PhD<sup>1</sup>*

*Maria Higgins, MSc<sup>1</sup>*

*Annemieke M. Bikker, MSc<sup>1</sup>*

*Bridie Fitzpatrick, PhD<sup>1</sup>*

*Alex McConnachie, PhD<sup>2</sup>*

*Suzanne M. Lloyd, BSc<sup>2</sup>*

*Paul Little, FMedSci<sup>3</sup>*

*Graham C.M. Watt, FMedSci<sup>1</sup>*

<sup>1</sup>Academic Unit of General Practice and Primary Care, Institute of Health and Well-

---

## ABSTRACT

**PURPOSE** We set out to compare patients' expectations, consultation characteristics, and outcomes in areas of high and low socioeconomic deprivation, and to examine whether the same factors predict better outcomes in both settings.

**METHODS** Six hundred fifty-nine patients attending 47 general practitioners in high- and low-deprivation areas of Scotland participated. We assessed patients' expectations of involvement in decision making immediately before the consultation and patients' perceptions of their general practitioners' empathy immediately after. Consultations were video recorded and analyzed for verbal and non-verbal physician behaviors. Symptom severity and related well-being were measured at baseline and 1 month post-consultation. Consultation factors predicting better outcomes at 1 month were identified using backward selection methods.

**RESULTS** Patients in deprived areas had less desire for shared decision-making ( $P < .001$ ). They had more problems to discuss ( $P = .01$ ) within the same consultation time. Patients in deprived areas perceived their general practitioners (GPs) as less empathic ( $P = .02$ ), and the physicians displayed verbal and nonverbal behaviors that were less patient centered. Outcomes were worse at 1 month in deprived than in affluent groups (70% response rate;  $P < .001$ ). Perceived physician empathy predicted better outcomes in both groups.

**CONCLUSIONS** Patients' expectations, GPs' behaviors within the consultation, and health outcomes differ substantially between high- and low-deprivation areas. In both settings, patients' perceptions of the physicians' empathy predict health outcomes. These findings are discussed in the context of inequalities and the "inverse care law."

# Living well with multimorbidity: the Care Plus Study



Stewart Mercer

Bruce Guthrie

Elizabeth Fenwick

Bridie Fitzpatrick

Alex McConnachie

Rosalind O'Brien

Graham Watt

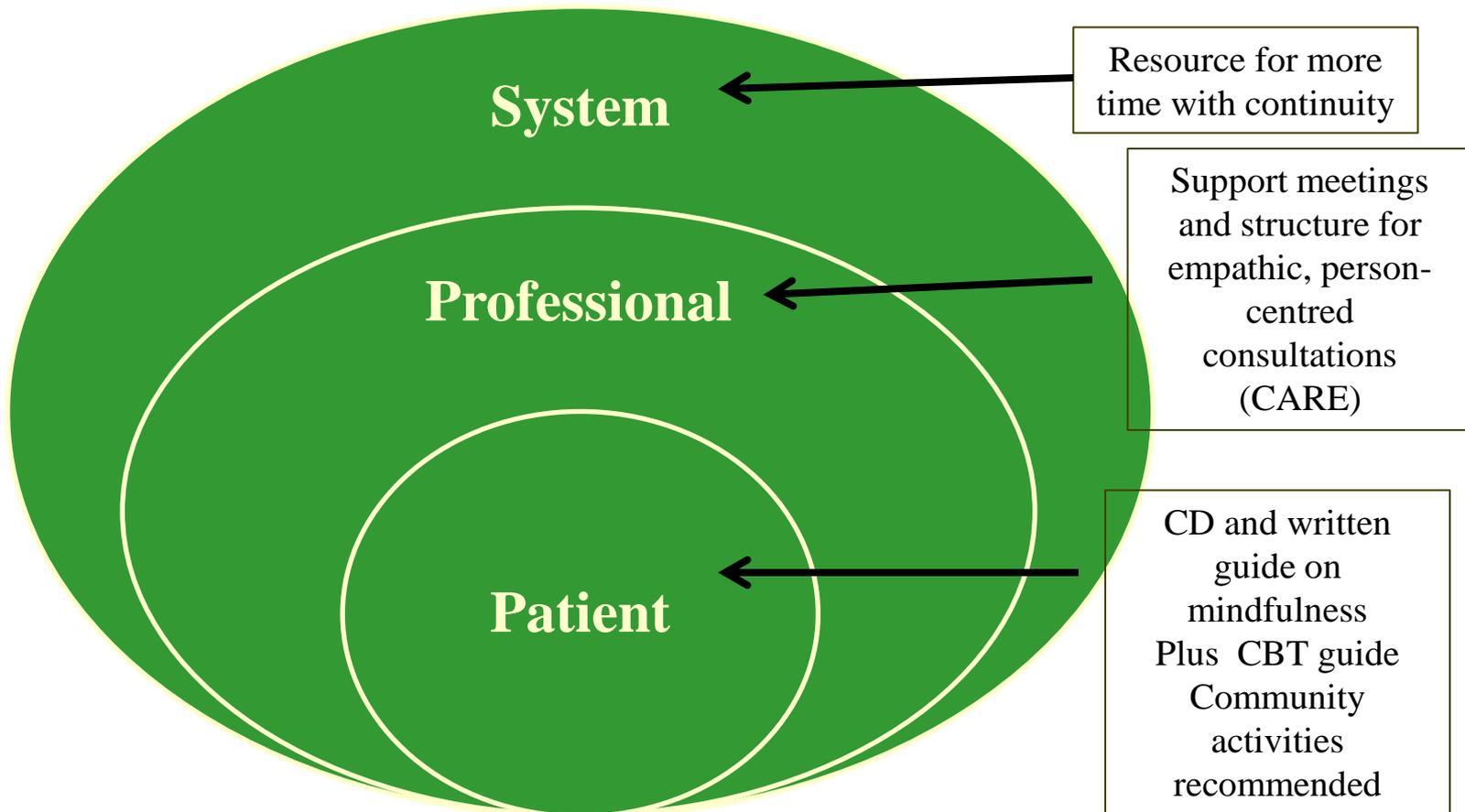
Sally Wyke

**NHS and Deep End General  
Practices**

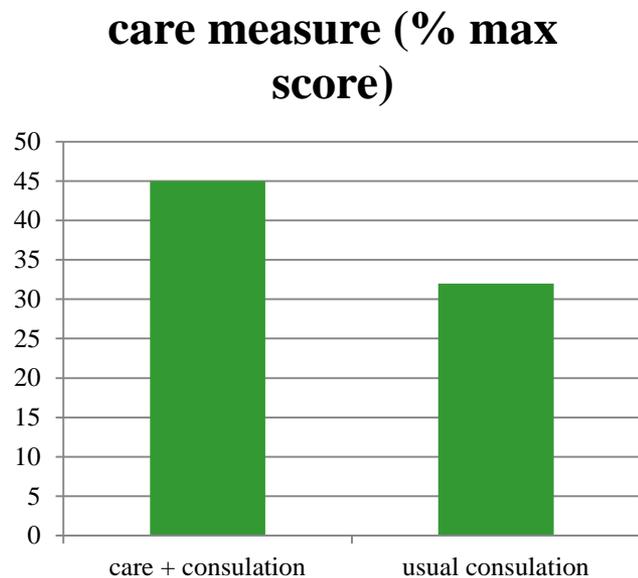
2009- 2014



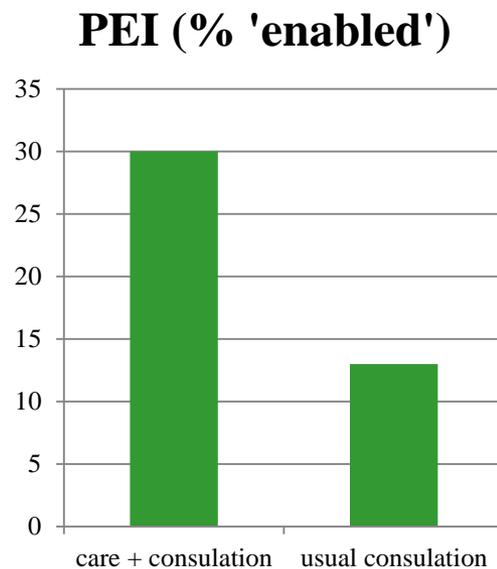
## CARE PLUS: a whole-system approach



# Are consultations 'better'?

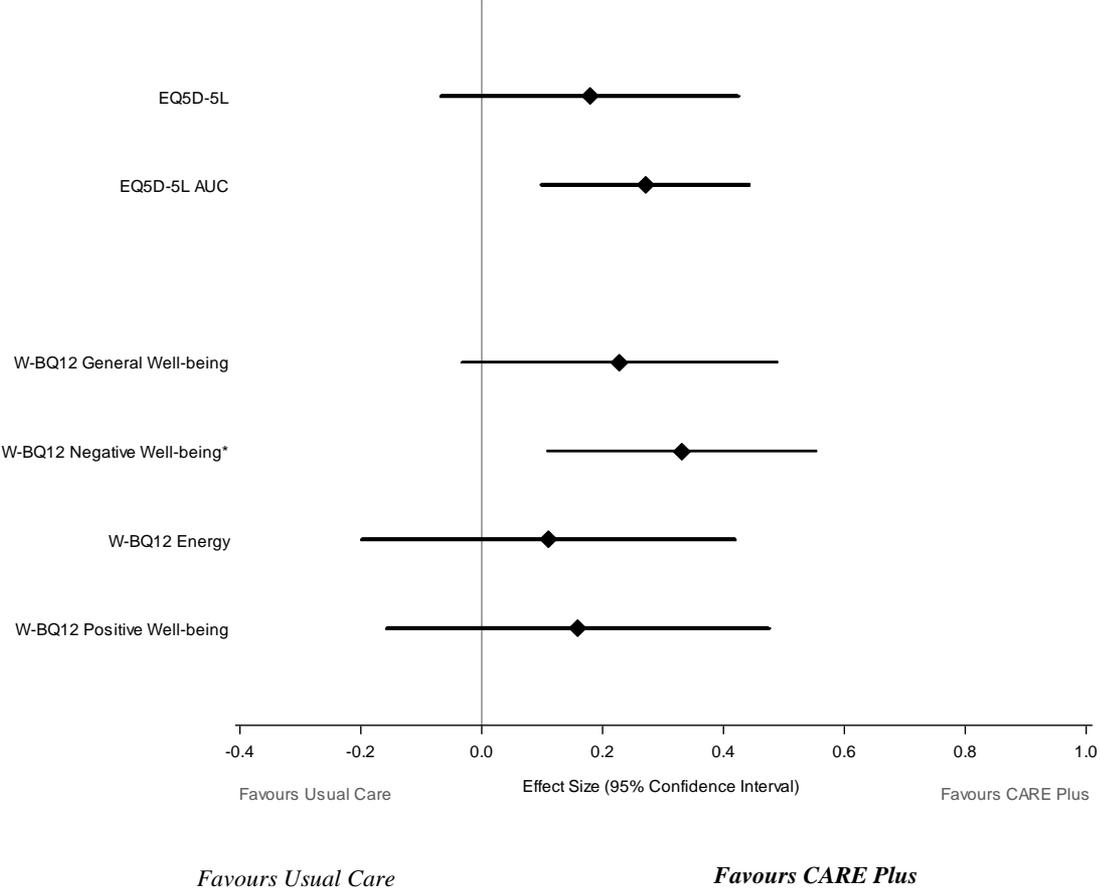


ns



ns

# Patients in the CARE Plus group had improvements in quality of life and wellbeing at 12 months



# CARE Plus was also very cost-effective

- Cost-effective:
  - Cost < £13,000 per QALY
  - NICE currently supports a cost of £20,000 per QALY

And lots of other research and  
evaluation going on....

Audit

Evaluation

Qualitative research

Big data

Observational studies

RCTs

# Summary and conclusions

- There has traditionally been a dearth of research in primary care in deprived areas
- The Deep End has given impetus to new research and shown that high quality studies can be done in ‘the swamp’
- Such research needs to be done *with* DE practitioners and patients, not done *on* them
- This requires engagement, sharing experiences and humility

**Thank you**

