The place of evidence based practice in UK medical care

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- My roles
- The rise of evidence based medicine
- Critiques of evidence based medicine
- Evidence based medicine in practice

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My roles

- Clinical guideline development

  Based at Royal College of Physicians in London

  Develop clinical guidelines for NICE

  Systematic reviews of evidence for other organisations

  Train other organisations in evidence appraisal and synthesis

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Evidence based medicine (EBM)

- 1972 – *'Effectiveness and efficiency'* Archie Cochrane

  - contemporary practice ineffective/harmful- need to use randomised controlled trials (RCT)

- Ideas picked up in public health and epidemiology
- Development of 'clinical epidemiology'… a science to underpin clinical medicine'
- 1985 *'Clinical epidemiology' 1st edition (Fletcher)*

- 1990's 'Evidence based working group'
- 1991 *Clinical Epidemiology: A Basic Science for Clinical Medicine (*Sackett, Haynes, Tugwell, Guyatt) 2nd edition
- McMaster Medical School, Canada

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Evidence based medicine

'*the ability to track down, critically appraise and incorporate….the growing body of evidence into clinical practice*' Sackett and Rosenberg 1995

Evidence-based Medicine (from Working group 1992)

……also involves applying traditional skills of medical training.

……another traditional skill required …….is a sensitivity to patient's emotional needs.

……deals directly with the uncertainties of clinical medicine and has the potential for transforming the education and practice of the next generation of physicians.

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Subsequent developments

- Inclusion of EBM in medical education
- Development of systematic reviews of evidence, evidence summaries
- Cochrane collaboration
- Development of guidelines
- Outputs of EBM by paying and regulatory bodies

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Examples of success of EBM

- Retinopathy - pre-mature babies
- British Thoracic Society asthma guidelines
- Guidelines on prevention of clots after surgery

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UK - NICE

- Single payer system
- National Institute for Health and Care Excellence
- Established 1999
- Inclusion of cost effectiveness analysis
- Develops public health guidance, clinical and social care guidance, technology assessment (new drugs), quality standards……

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Some ways NICE products used in NHS

- Quality and outcomes framework (QOF)
- Funding for general practice by meeting targets based on guidelines
- Commissioning- Clinical Commissioning Groups Outcome indicator Set (CCGOIS)
- Inspection and regulation of services – Care Quality Commission
- Use of national guidelines as part of inspection

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Developing each clinical or social care guideline

- Clear process, very rigorous
- Takes about 2 years
- £400,000 per guideline

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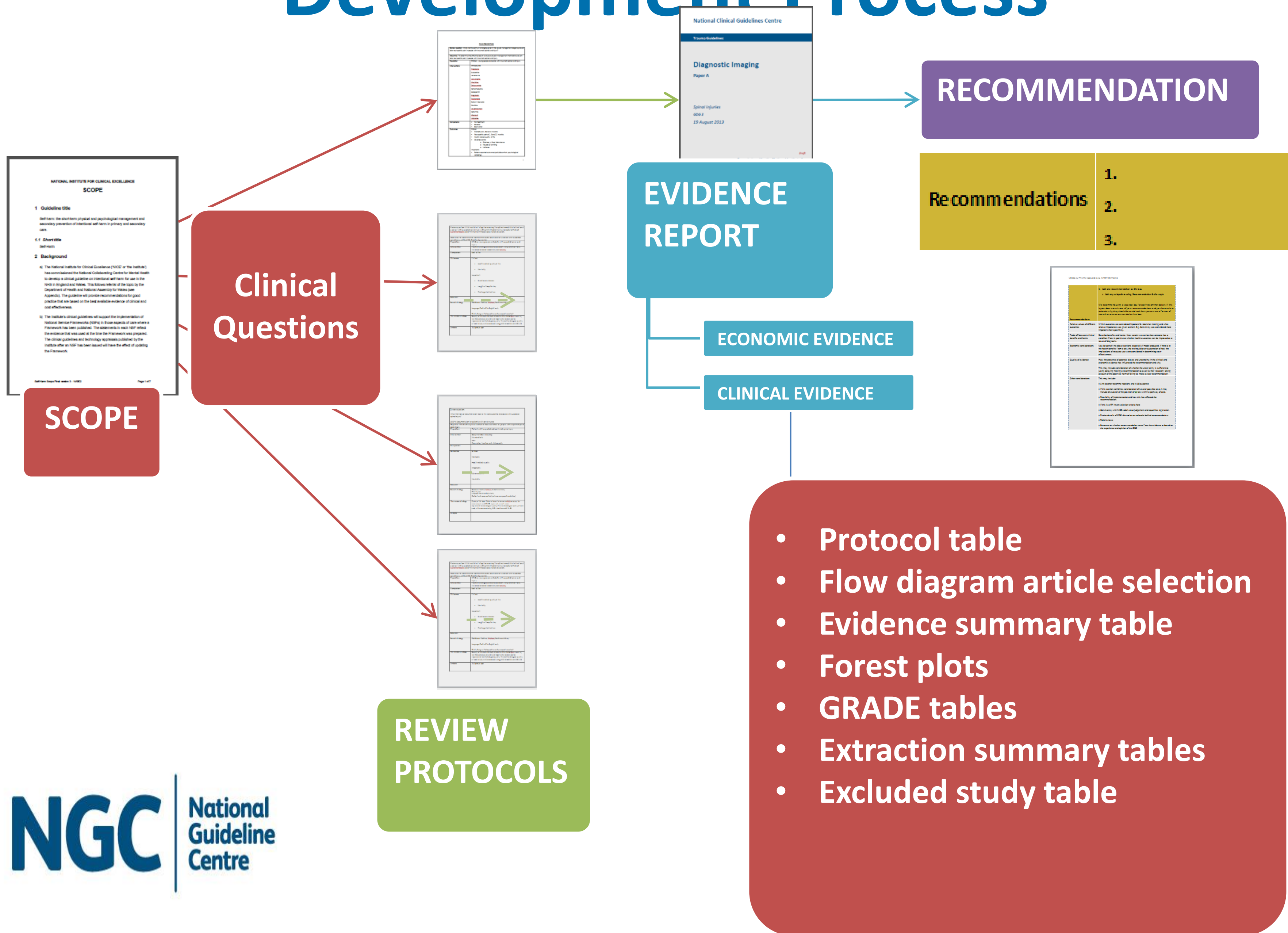
Development Process



What evidence considered

- Study/evidence should be appropriate for question
- Include questions on diagnosis, prognosis, patient experience as well as interventions
- Transparent reporting of studies and limitations of evidence e.g. population
- Principles of standard hierarchy of evidence i.e. systematic review > RCT> cohort study etc.

….need to be robust as making recommendations for NHS

…….limited by where evidence is

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My roles

- Guideline development
  Based at Royal College of Physicians in London
  Develop guidelines for NICE
  Systematic reviews of evidence for other organisations
- Medical practitioner
  GP, working same area for 24 years
  Area of high deprivation

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General practice

- Very well established in UK
- Gateway to services
- Generalist service and training
- Provision of continuing care over time
- Personalised and individualised care
- Government policy ‘Named’ GP for all patients
- Group practices, increased use of non-medical clinical staff- nurse practitioners, physician associates

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General Market
Food Market

Evidence based medicine in practice

- Guidelines treated as directives/rules
- Payment subject to achieving QOF targets…..rhetoric of patient choice
- Short consultation times
- Lack of continuity related to shortage of staff
- Multiple separate guidelines for separate conditions
- Emphasis often on preventative care – population perspective of NHS - patient emphasis on current lived problems (- often social)

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Evidence based medicine in practice

- Lack of understanding by professionals of nature of evidence and how it could be used
- Generation of clinicians trained on ‘what does guideline say?’
- Lack of skill in explaining to patients
- Patient expectation of certainty
- Patients problems not covered by evidence – mis-match between rhetoric of role and reality
- Patient different priorities….

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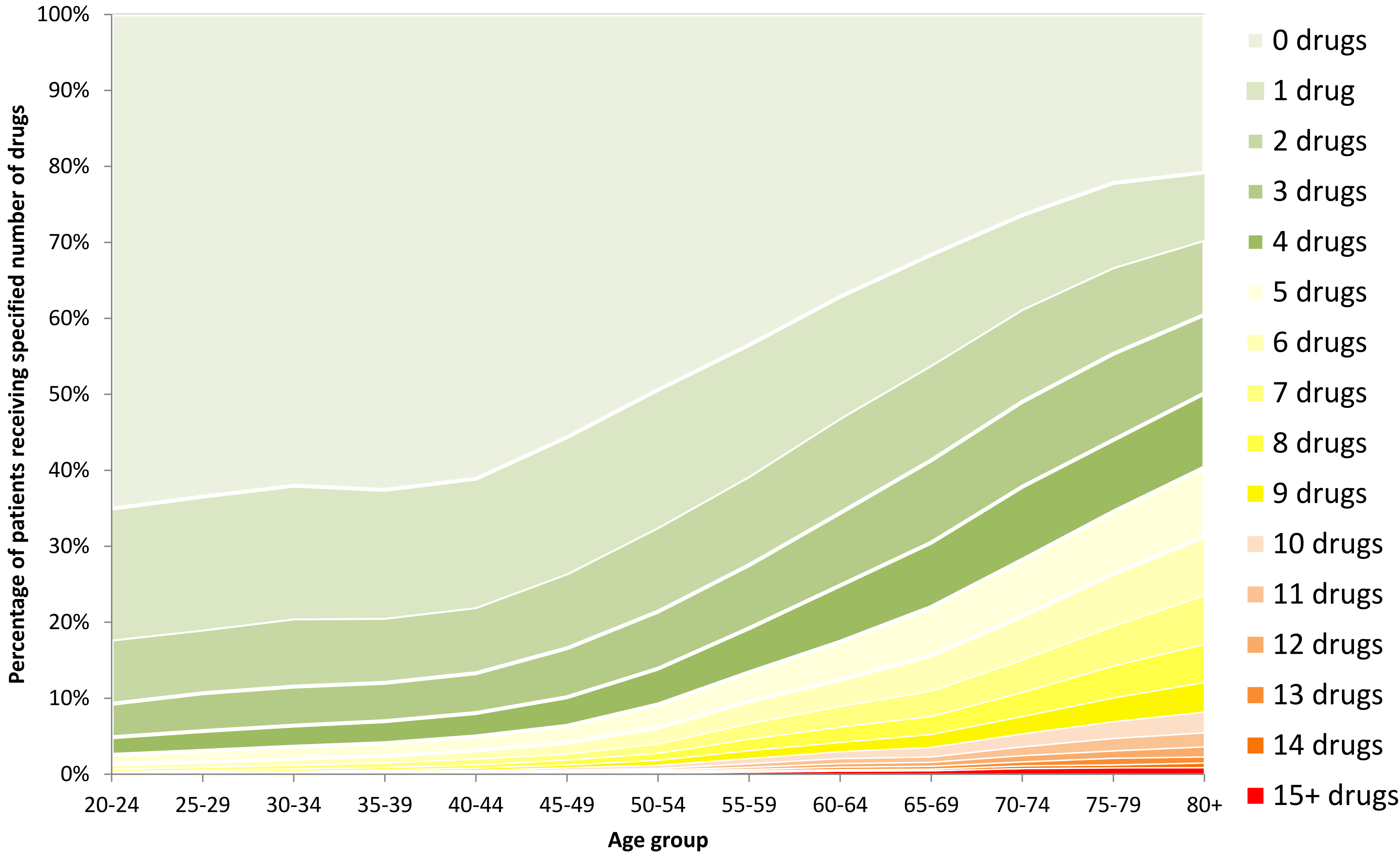
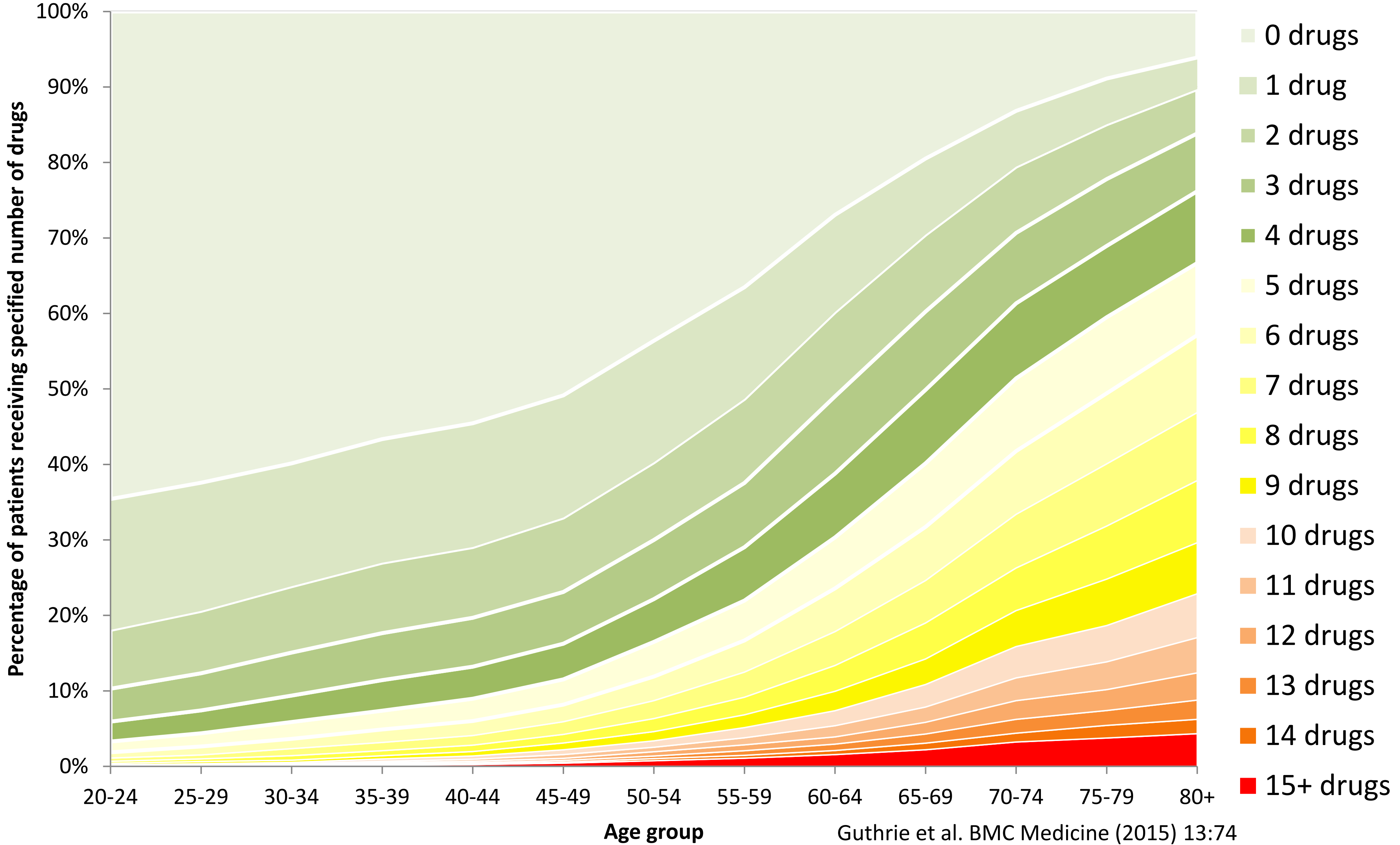
Consequences of EBM

- Too much medicine!



Guthrie et al. BMC Medicine (2015) 13:74



No. of drug classes dispensed in last 84 days in 2010
Percentage of patients receiving specified number of drugs
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
20-24
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70-74
75-79
80+
Age group
0 drugs
1 drug
2 drugs
3 drugs
4 drugs
5 drugs
6 drugs
7 drugs
8 drugs
9 drugs
10 drugs
11 drugs
12 drugs
13 drugs
14 drugs
15+ drugs
Guthrie et al. BMC Medicine (2015) 13:74

Critiques of EBM

- Studies are population based i.e. groups of patients
- Trials exclude large number of people
- Patient missing – outcomes used in studies, questions asked in studies
- Application of ‘simple’ designs to complex systems

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EBM as paradigm

- Challenge to professional autonomy – judgement, experience, tacit knowledge
- Challenged back!
- Ivory tower versus ‘my patients’
- Seen particularly in surgical specialities – effect of individual surgeon and technique
- ‘Art’ of surgery
- IDEAL collaboration (2009)

Log out

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Idea, Development, Exploration, Assessment, Long-term follow-up

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Other influences of practice - policy and power

- Surgical practice - continuing use of techniques shown not to be of benefit

………Joint arthroscopy and Back injections

- Pharmaceutical interests - development of pre-disease states/treatment of risk

…………Osteoporosis and Diabetes

- Government policy in health can be political

………….drug policy

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Some lessons?

- Political expediency and use of targets
- Requirement for education and understanding of evidence
- Recognition of limits to formal evidence
- Threats to professional autonomy and judgement
- Lack of involvement of patients
- But- very useful starting place

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Thank you!

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