

# Academic issues and quality in healthcare

Dr Charles D Shaw

# Dimensions of quality in health care

Equity

Accessibility

Effectiveness

Acceptability

Efficiency

Appropriateness

Robert Maxwell

# International challenges

- Ageing populations
- Increasing public demands & expectations
- Rising costs, limited budgets
- Changes to the patterns of disease
- Burgeoning knowledge base
- Demand for transparent decision making

# “Medical injury” to in-patients

	Year	% admissions
New York (MPS)	1991	3.7
Australia	1994	13
UK (pilot)	2000	11
New Zealand	2001	13
Denmark	2001	9
France (pilot)	2002	15
Canada	2004	8
Netherlands	2005	6

Lucian Leape, 2008

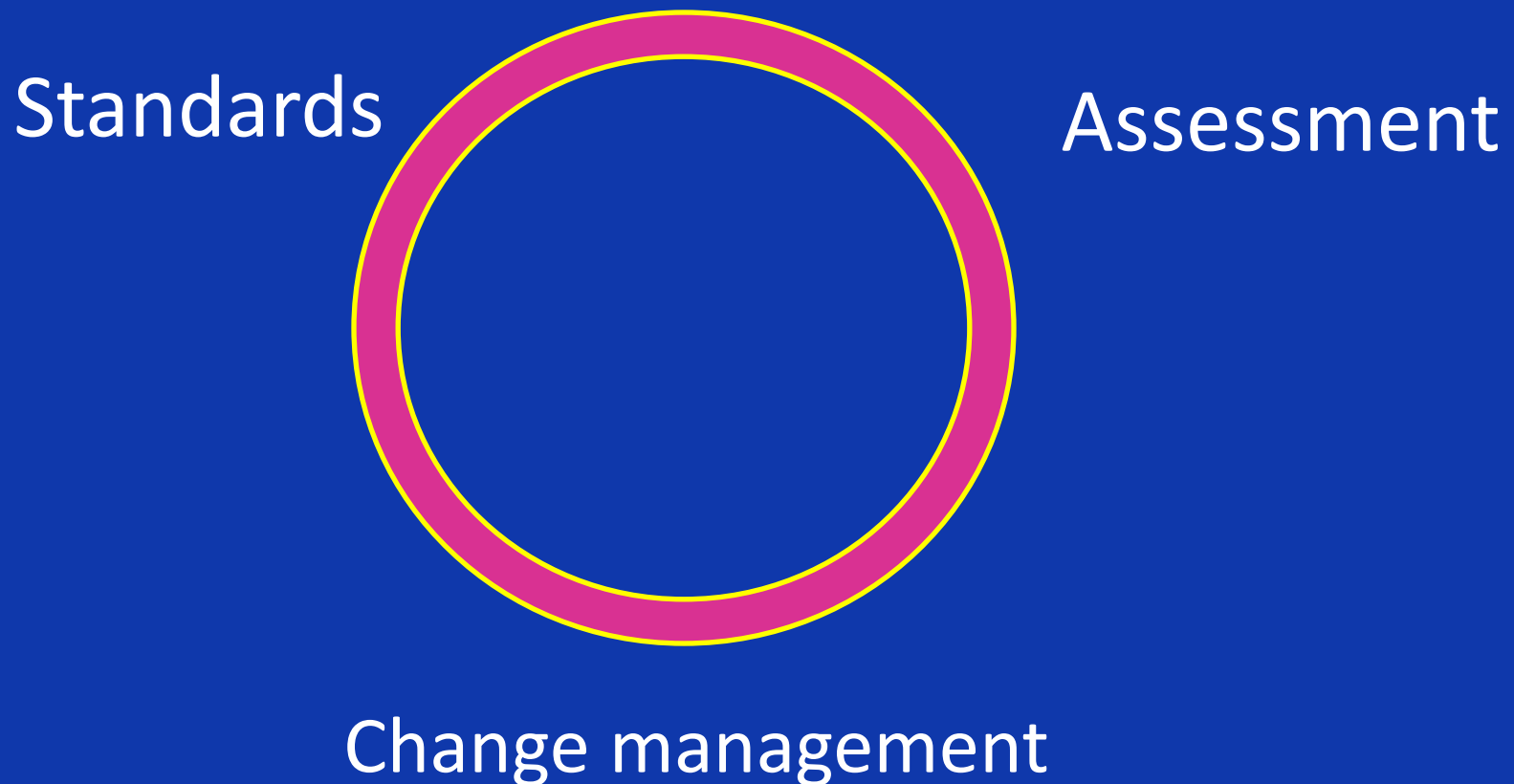
# Cost concerns, Estonia

- Cost-benefit is time-sensitive: eg MRI, CT, streptolysin
- Throughput per specialist team
  - Vascular, paediatric surgery
- Case-mix adjustment eg LoS, complications, costs
- Preventive health: avoidable morbidity eg diabetic amputations

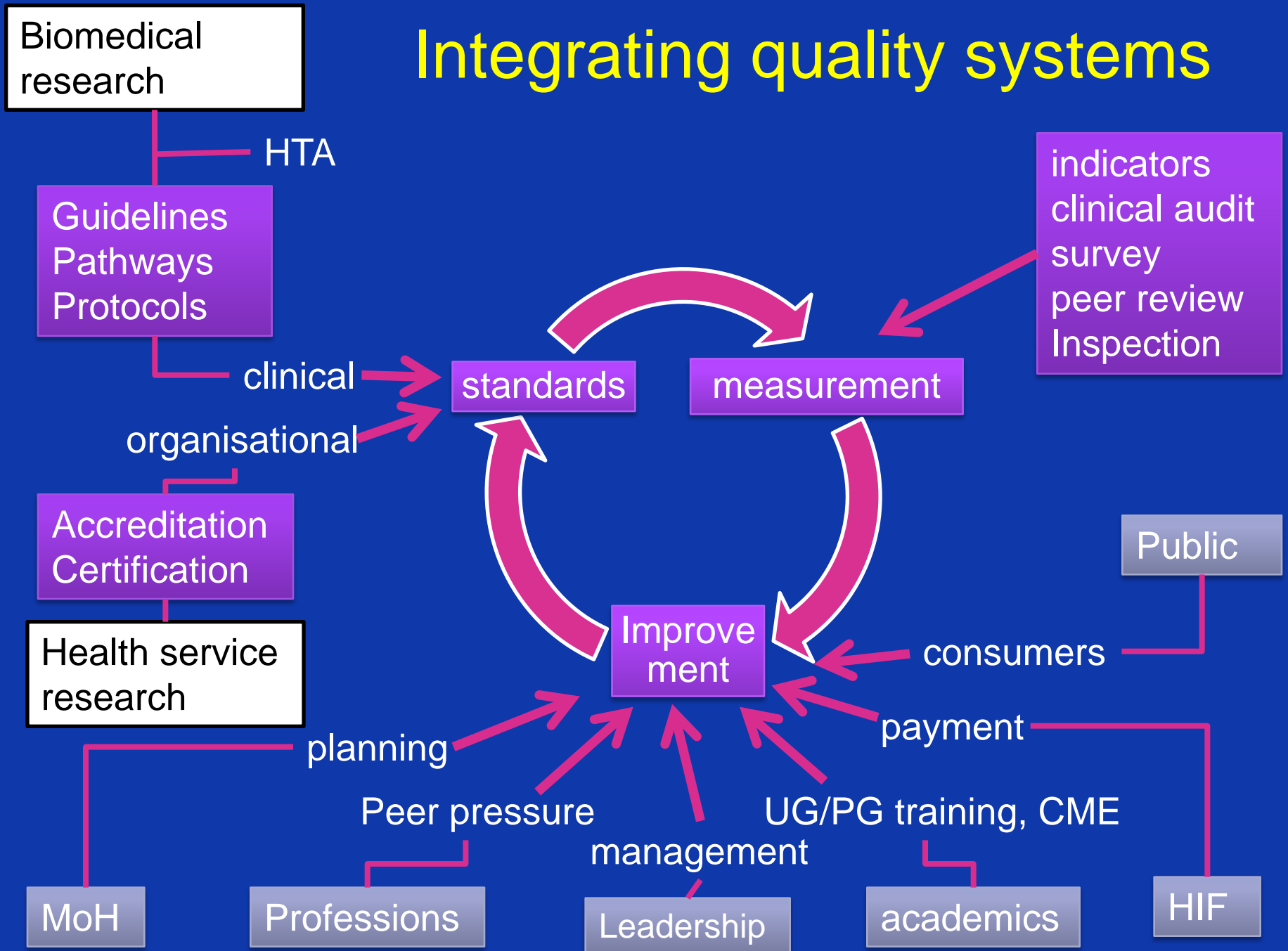
# The Production Model of Quality

Structure - Process - Outcome

# Cycle of improvement



# Integrating quality systems





# Scientific basis of clinical improvement

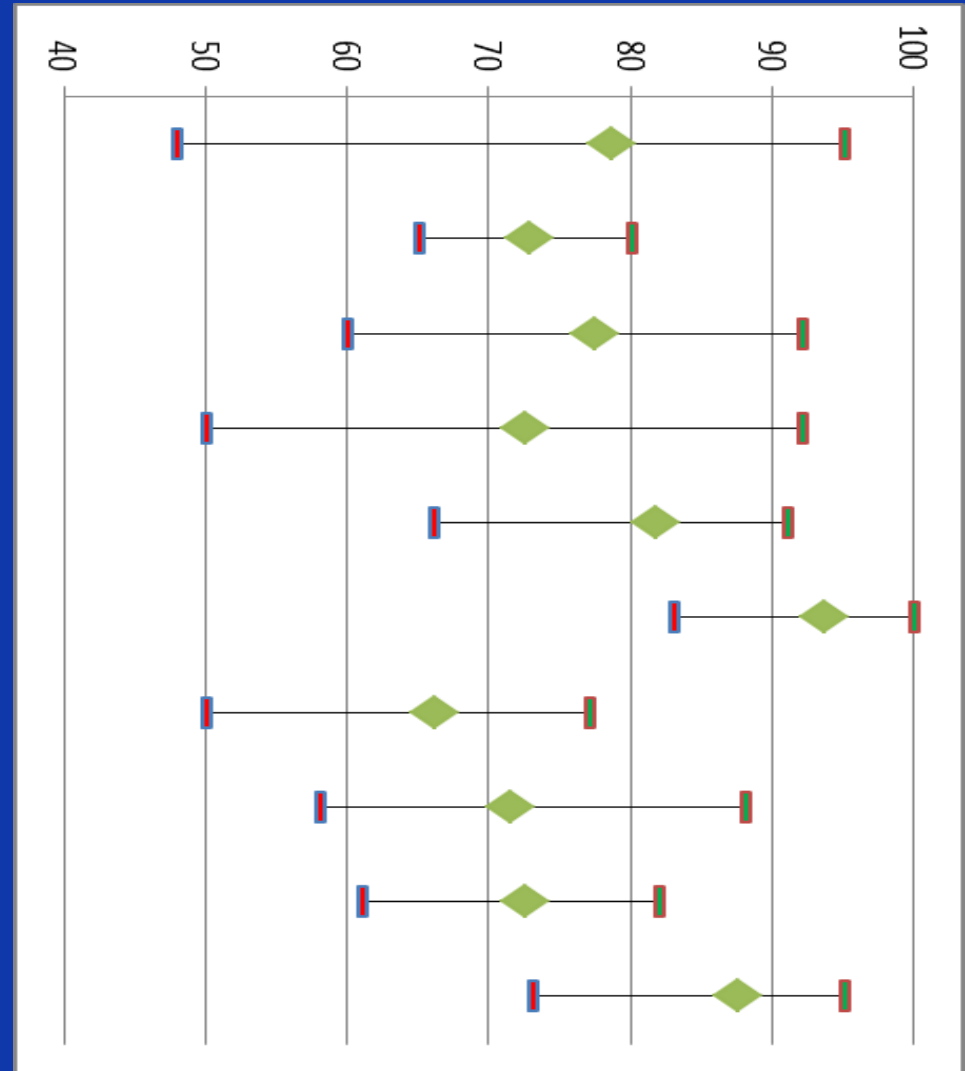
- Biomedical and health service research
- Technology assessment, guidelines, pathways, standards (clinical, organisational)
- Measurement, analysis, data presentation
- Change management: service redesign, clinical practice

# Current projects in Indonesia

- HAPIE project
- KARS accreditation
- Mapping policy, organisations, methods
- National strategy for improvement

# Hospital review summary, HAPIE 2013 n=9

- 1 Hospital governance
- 2 Patient orientation
- 3 Human resources
- 4 Clinical practice
- 5 Infection control
- 6 Human tissue, transfusion
- 7 Facilities management
- 8 Medication safety
- 9 Surgery, anaesthesia
- 10 Documentation, records



# Human resources

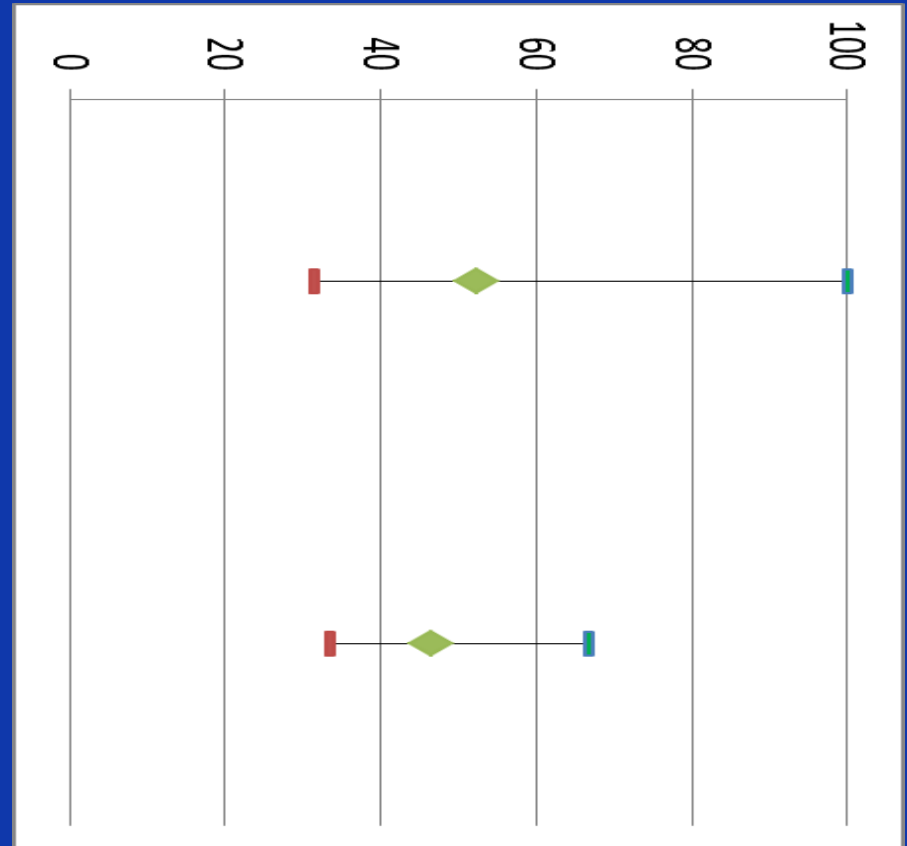
- Mechanism to verify professional qualifications of an applicant prior to appointment 78%
- Clinical staff are training in CPR according to international guidelines, at induction and with annual update training 89%
- Record kept of all clinical staff being engaged in regular formal CPD activities 72%

# AMI, resuscitation facilities,

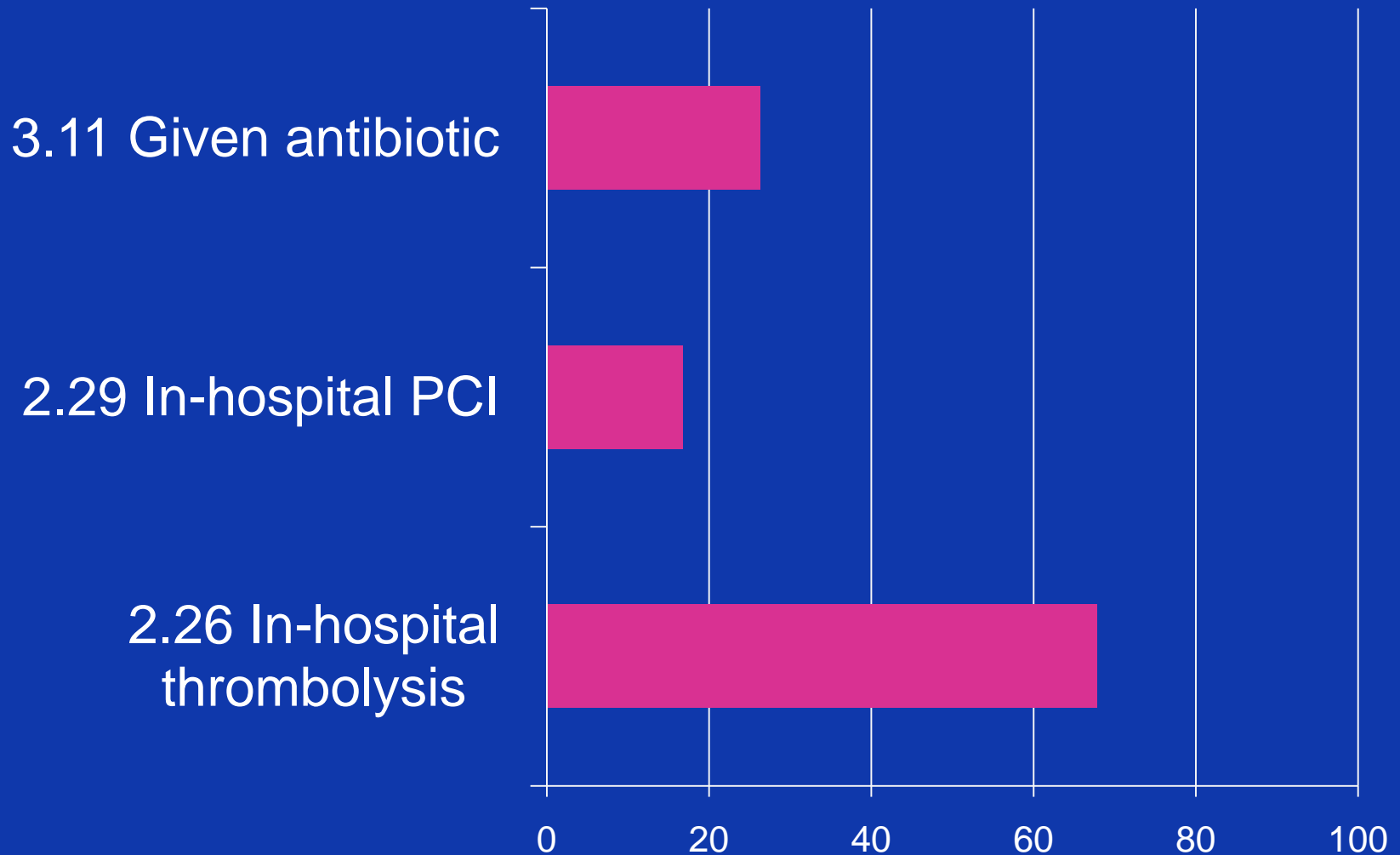
## Facilities for AMI

- PCI
- Fibrinolytic treatment
- Coronary angiography
- Ambulance telemetry

Completed "crash cart"  
checklists, 3 departments



# AMI interventions, HAPIE 2012 n=9



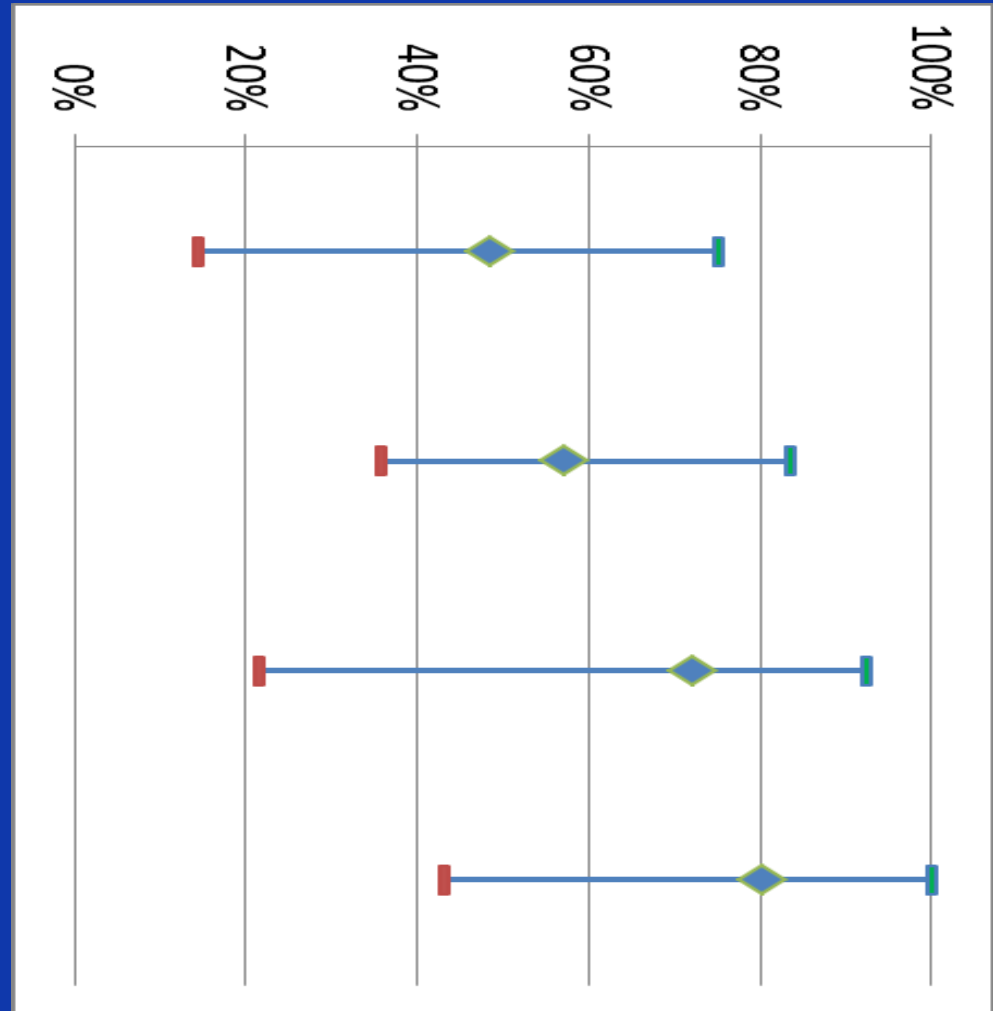
# AMI discharged from hospital on

beta adrenergic blocker

ACE inhibitor

Statin

aspirin / antiplatelet



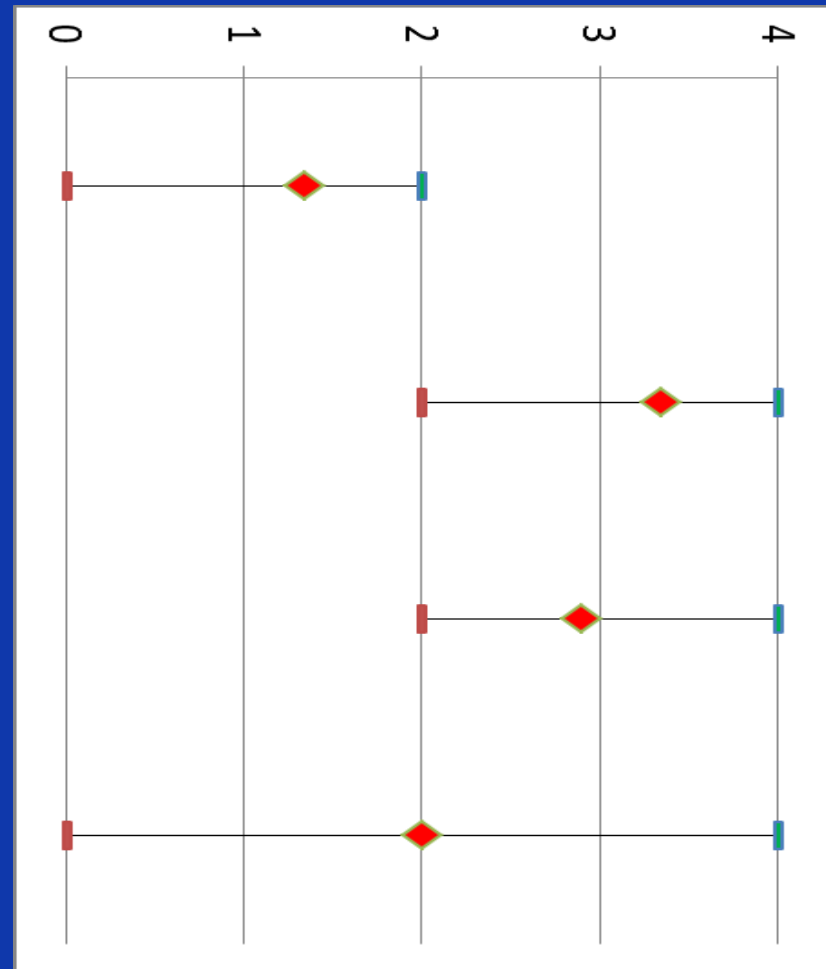
# Clinical review

AMI38 adverse events

D12b MCH outcomes

Hip18 adverse events

P16 pneumonia indicators





# Strategic issues in HAPIE

- Health system
  - planning
  - Resource allocation
- Management systems
- Clinical policy, practice
- Education, training

# Comments on HAPIE presentation, March 2013

- “Lack of supervision of trainees in academic hospitals
- Weak undergraduate training in patient communication, “informed” consent etc
- Unclear criteria for recognition of medical specialist competences”

# Teaching and learning

- Is patient safety, quality improvement visible in undergraduate, postgraduate curriculum, teaching and examination?
- Are knowledge, attitudes and skills explicit?
- Peer review, clinical audit as basis for CME and individual performance appraisal
- Sharing learning within and between clinical teams and specialties
- Translating audit into management action

# Why have clinical audit?

- improve quality of patient care
- educate and train clinicians
- make best use of resources
- improve service organisation

Medical Royal Colleges, UK 1991

# Higher medical training Generic Curriculum, UK

- Organisation of clinical governance
- Risk management
- Evidence
- Audit
- Guidelines

Joint Committee on Higher Medical Training 2003

# Technical, or behavioural solutions?

Research  
Technology assessment  
Clinical guidelines  
Care pathways  
Indicators

Governance  
Leadership  
Incentives  
Organisation  
Systems  
Teamwork  
Feedback  
Training  
Evaluation

St John, Newfoundland  
-est 300,000,000 tons

June 2013

