

# SCOPE OF INNOVATIONS IN QUALITY

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# OUTLINE

- Introduction – How can we classify innovations in quality?
- Methodology of information collection
- Results – 5 categories of innovations
- Discussion
- Food for thought



# INTRODUCTION

- How can we classify the scope of innovations in quality?
- **Innovation** – use of knowledge and insights to create new products, processes, and services.



# INTRODUCTION - 2

- **Quality** – meeting and exceeding expectations in technical quality and user satisfaction.
  - SPO - A Donabedian's structure, process, outcome; technical quality, user satisfaction,
  - SEPTTEE – IOM's 6 domains of quality – safety, effectiveness, patient centred care, timeliness, efficiency, equity

# METHODOLOGY

- Keywords – “innovations”, and “healthcare” and “quality”
- Search engines
  - Google – the terrain of the subject
  - Pubmed – search the literature in depth




# RESULTS

- Number of useful papers – not so many
- Google
  - Commonwealth Fund website – 45 papers
- Pubmed
  - ((innovations) AND (healthcare)) AND (Quality) – 267 papers → 22 papers




# RESULTS

## Five categories of innovations

1. Health system & health service innovations
  2. IOM Quality domain innovations
  3. Incentive related innovations
  4. Provider and patient education strategies
  5. Others: CPG, Pathways, Toolkits, Databases
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# 1. Health System & Health service specific innovations

- Care network
  - Hospital care
  - Transition care
  - Chronic care management
  - Rehabilitative care
  - End of life care Wellness programmes
  - Elderly care
  - Paediatric care
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# Example - #1

- **High-Performing Hospitals: Secrets to Success. Commonwealth Fund Website Jun 2005.**
- Beth Israel Deaconess Medical Center (Boston)
  - Staff committed to change and innovation. Implementation of state-of-the-art information and decision support systems that have been customised to meet the institution's culture and needs
- El Camino Hospital (Mountain View, CA) – Success the result of two factors: internal environment focussed on quality and a set of tools to promote quality →

# Example - #1- cont'd

- Mission Hospitals (Asheville, NC) – Integration of physician into the leadership culture and reliance on consultants who have a blend of clinical and analytical skills
- Jefferson Regional Medical Center, Pittsburgh, PA) – Strong leadership and culture that emphasises quality. Use of performance monitoring tools, committee structures and aggressive case management programme



## 2. IOM Quality Domain Innovations

- Safety
- Effectiveness
- Patient centredness
- Timeliness
- Efficiency
- Equity



# Example #2

- **Case Study: A transformational Change Process to Improve Patient safety at Ascension Health. Commonwealth Fund Website, Jan 2006.**
- **Developed best practices to support clinical excellence and patient safety in 8 priority areas:**
  - **Preventable deaths**
  - **Adverse drug reactions**
  - **Joint Commission on Accreditation of Healthcare Organisations (JACHO) core measures**
  - **Pressure ulcers**
  - **Nocosomial infections**
  - **Perioperative complications**
  - **Perinatal safety, and**
  - **Falls and fall injuries**

# 3. Incentive Related Innovations

## Pay for performance programmes

- UK – National Health Service -- UK
- Veteran Health Administration -- US
- Medicaid -- US



# Example #3A

- Craig TJ, Perlin JB, Fleming. Self-Reported Performance Improvement Strategies of Highly Successful Veterans Health Administration Facilities. *Am J Medical Quality* 2007; 22:438-444
- Study design: Facilities that scored highest in any of 24 clinical performance measures were queried as to what strategies they used to achieve their level of performance →



# Example - #3A cont'd

- The most cited strategies across all performance categories were:
  - Organisational change (55.6%)
  - Clinical reminders (41.4%)
  - Audit and feedback to providers (39.6%)
  - Staff education (32.5%)
- Certain strategies were more likely to be cited for 1 or more specific performance categories (e.g. clinical reminders for immunisation (61.1%), screening (60.6%))
- Use of clinical champions rarely cited

# Example - #3B

- **Creating Incentives for Quality: General Practitioners in Britain's NHS. Commonwealth Fund Website. Aug 2004**
- For patients served through the NHS, care is managed by general practitioners; GPs are independent contractors whose payments are a mix of fee-for-service, salary, and capitation.
- Under a new standard contract negotiated by the NHS and physicians, 18% of total GP spending will be distributed on the basis of individual performance on measures of clinical quality, patient experience, and service improvements.

# Example - #3B cont'd

- Practices can earn up to 1050 “quality points” for 146 different indicators, and will receive extra money for each point. The scoring system emphasises care for coronary heart disease, hypertension, and diabetes, but providers can also score points for such factors as better record-keeping and shortened waiting times.
- For more information see Quality Incentives: The Case of UK. General Practitioners in the May/June 2004 issue of *Health Affairs*

# 4. Provider and patient educational strategies

- Behavioural change
- Quality focus



# Example - #4

- Solberg LI et al. Crossing the Quality Chasm for Diabetes Care: The Power of One Physician, His Team, and Systems Thinking. J Am Board Fam Med 2007;20:299-306.
- Methodology: Working with a mentor and with his clinic and medical group leaders, he established a clear goal, focussed on a repeatable and important performance measure, and used repeated rapid cycle trials to make systems changes in care, with extensive task delegation →

# Example - #4 cont'd

- to team members and emphasis on repeated testing and treatment intensification.
- Results: The largest improvement were for smoking documentation, aspirin use, and LDL control, with little change in HbA1c levels. Change from occurred from pre-intervention figure of 2.3% to 46.5% of patients post-intervention.



# 5. Others

- Clinical practice guidelines
- Clinical pathways
- Toolkits
- Databases



# Example - #5

- Database Showcases “Pay for Performance” and Incentive Initiatives. Commonwealth Fund Website Jul 2004.
- The Leapfrog Group, a coalition of more than 150 public and private organisations that provide health care benefits, was founded to address patient safety and quality issues in the American health care system. As such, it has started collecting data on innovative incentive reward programmes and posting this information on its Web site.

# DISCUSSION

- Classifying innovations by categories allow some way of keeping together studies for comparison, reference, and implementation
- Innovation in quality -- still in early stages of development – good to have a system to keep track of good papers
- Toolkits, databases, case studies of best practice are useful tools quality practice – based on the philosophy of giving the patient the best value service i.e., getting the patient well



# FOOD FOR THOUGHT

- A 5 category classification of innovations in quality is suggested:
  1. Health system & health service innovations
  2. IOM Quality domain innovations
  3. Incentive related innovations
  4. Provider and patient education strategies
  5. Others: CPGs, Pathways, Toolkits, Databases
- The purpose is to have a way for archiving similar articles together for future use

