Applying Performance Indicators to Health Systems Improvement

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Outline of Remarks

- A conceptual framework
- The role of public reporting
- Use of performance indicators for change
- The way forward: “what to do” considerations
Performance Measurement and Reporting Cycle

- Establish goals
- Adopt specific measures/indicators
- Performance analysis

- Reporting of data (publicly and confidentially)

- Systematic implementation/improvement interventions

- Monitoring and feedback
Organizing and Integrating Performance

Policy Formulation & Infrastructure

Performance Monitoring Macromanagement

Operations Management Governance

Clinical Service Provision Individual Accountability

Institutional

Regional

National

Individual
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United Kingdom

United States
Performance Domains

Individual and Population Level
- Effectiveness
- Efficiency
- Equity
- Responsiveness
- Appropriateness
- Safety

Quality
Quality

“the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge”

IOM Definition
Applying Performance Indicators to Improve Health Systems

- Systemic standardized **measurement** of performance
- Public **reporting** of data
- Use of performance data to catalyze positive **change**
Performance Reporting: Why?

- Performance monitoring for regulation
- “The Information Age”
- Media coverage
- Public confidence eroding
- Accountability a growing movement
Concerns Regarding Quality

**Physician Perceptions** (1999-2000)
- 5 country survey (Australia, NZ, UK, Canada, and USA)
- % saying ability to provide quality care worsened over 5 years
  - Australia  38%
  - Canada    50%
  - New Zealand 53%
  - United Kingdom 46%
  - United States 57%
Concerns Regarding Quality

Nurses Perceptions (1998-1999)

- Five country survey (Canada, Germany, Scotland, England, and USA)
- 17 - 44% reported quality had deteriorated in last year
Concerns Regarding Quality

Public Perception (1998)
• Five country survey (Australia, Canada, New Zealand, United Kingdom and USA)
• Overwhelmingly stated that health care systems needed “fundamental change or complete overhaul”
Theoretical Purposes: Public Reporting

- Regulation
- Purchasing or commissioning decisions
- Facilitation of consumer selection/choice
- Provider/systems behavior change
- Accountability
# Accountability: Models

<table>
<thead>
<tr>
<th>Concept</th>
<th>Methods of accountability</th>
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<tr>
<td><strong>Professional</strong></td>
<td>Licensure, Certification Malpractice suit</td>
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<td>Patient receives services from professional</td>
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<tr>
<td><strong>Economic</strong></td>
<td>Choice and “exit”</td>
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<td>Consumer of health care commodity in regulated market</td>
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<tr>
<td><strong>Political</strong></td>
<td>“Voice” and government pressure for reforms</td>
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<tr>
<td>Citizen receiving public good provided by government</td>
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Performance Reporting

- National Quality Reports
- “Report Cards”
- League Tables
- Provider profiling
- Popular press: mass media
- Commercial initiatives
Current Status

- Measurement and public reporting inevitable
- Inadequate evaluation research - what works?
- Challenge: How to move ahead responsibly?
### Purposes for Public Disclosure

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<tr>
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<th>Regulation</th>
<th>Purchasing</th>
<th>Facilitation of consumer choice</th>
<th>Provider/Systems behavior change</th>
<th>Accountability</th>
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<tr>
<td>Public</td>
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<td>Providers</td>
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<td>Policymakers</td>
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Evidence of Effectiveness of Performance Reporting: USA

- Public
- Provider
- Purchaser/payers
- Policymakers
The Public
Evidence from the USA

• Performance data used minimally
• Most data designed for other purposes
• Not easily comprehended or actionable
• Not salient (ex: CABG mortality rates)
• Unmotivated-believe individual care is good
The Providers

*Evidence from the USA*

- Institutions (hospitals, systems) do pay attention and use:
  - To improve appropriateness of care
  - To identify poor performers
  - To alter processes responsive to complaints

- Individual providers less responsive to data
Case Study: New York Reporting of Performance Data

- Publicly reported risk-adjusted mortality past CABG
- New York had the lowest risk-adjusted mortality rate in the USA after 4 years.
- First 3 years mortality rate fell 41%
- Rate of decline 2x national rate of decline in 5 years
Case Study: New York

- Improvement driven through actions taken by hospital staff
  - Changes in leadership
  - Curtailment of operating privileges
  - Intensive peer review
- Consumer or market force: minimal action

BUT .... WAS PUBLIC DISCLOSURE THE DRIVER?
Purchasers/Payers/Commissioners

Evidence from the USA

• Little evidence of performance to exercise “market clout”
• Two large studies (15,000 employers nation wide)
  – Data used minimally
  – Price still main selection factor
  – Data suffers as not designed for buyer decision-makers
• Reliance on purchasers and payers to use performance data not a reliable strategy
Policymakers

- Some evidence that policymakers do use comparative performance indicators
- New national initiatives in Canada, Australia, United Kingdom and United States for national performance reporting
The Way Forward: Considerations

• Performance reporting has unrealized potential
• Public reporting has risks
  – Manipulation of data
  – Tunnel vision
  – Unintended effects on access
  – (Further) erode patient confidence
  – Commercialization
  – Jeopardize professional QI efforts
• Public reporting is one tactic in overall strategy
Knowing is not enough, we must apply.....

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Apply Indicators to Interventions for Change

- External oversight
- Patient engagement/empowering consumers
- Regulations
- Knowledge/skill enhancement of providers
- Incentives
External Oversight

- External review/inspection
- Accreditation, licensing and certification

- Setting performance targets
External Oversights: Setting Performance Targets

WHY?
- To make policy priorities explicit
- Define responsibilities/expectations
- Facilitate accountability
- Focus resources
External Oversights: Setting Performance Targets

Case Study: Safety/adverse events in the NHS

• Priority; quality of care problem
• Resource problem; outstanding claims for alleged clinical negligence of £3.9 billion (5.6 million US$)
• Government White Paper established policy in Spring 2001
• Identified 4 areas measurable targets/reporting (40% reduction of prescribing errors by 2005)
Knowledge/Skill Enhancement

- Peer review and data feedback
- Use of guidelines and protocols
Knowledge/Skill Enhancement

• Both WILL and SKILL problems
  – Impossibility to assimilate new knowledge
  – Numbers of articles published from RCTs
    • 1960 1,000 annually
    • 1990 10,000 annually
  – 15-20 year time lapse: research >>> practice
Knowledge/Skill Enhancement

- Evidence that multiple interventions needed:
  - Explicit performance indicators agreed
  - Publish guidelines/protocols and indicators embedded
  - Peer review
    - Adherence to “gold standard”
    - Peer practice comparisons
  - Public reporting
  - Computer assisted decision-support
  - Incentives
Patient Engagement/Empowering Consumers

• Two applications of performance indicators at level of individual
  – Role of consumer of services
  – Role of patient
    • Co-producer of health
Patient Engagement/ Empowering Consumers

Still relatively little use of published data.

Patient use of information; evidence

- Use of health information - better health outcomes
- Shared decision making - choose less risky procedures
- Informed of errors - less litigation/claims filed
Incentives

• Performance targets set
• Standardized measurement and reporting
• “Pay-for-performance”
  – Example UK and Australia:
    Financial incentives for immunization
• Non-financial incentives
  – Example UK:
    “Earned autonomy” and “traffic lighting”
What is Needed for Capacity Building?

• “Will” to address problems
• Articulated national policy
• Priority setting
• Performance monitoring capability
  • “Essential infrastructure”
    – New organizations
    – Legal network
    – IT
• Knowledge aids (protocols, DSS)
• Incentives
Organizing and Integrating Performance

- National priority setting
- National performance framework
- Legal framework

- Professionalism
- Patient engagement

- Clinical Service Provision
  Individual Accountability

- Operations Management
  Governance

- Performance Monitoring
  Macromanagement

- Design measures
- Design reporting formats

- Incentives
- IT Support
- Knowledge aids

- Policy Formulation & Infrastructure
Knowing is not enough, we must apply
Willing is not enough, we must do.

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