



Benchmarking and Performance Management in Health Care

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The Current Scenario for Benchmarking in Health Care

- Current **economic conditions** challenge health care providers globally.
- Healthcare organizations need to deliver optimal **financial, operational, and clinical performance** to sustain quality of service delivery.
- **Benchmarking** is one of the most **potent** and **under-utilized** management tools available.

Benchmarking Defined

- The **continuous measurement and improvement of an organization's performance against the best** in the industry to obtain information about new working methods or practices in other organizations.

Kozak, M. (2004). *Destination Benchmarking: Concepts, Practices and Operations*, CABI Publishing, MA, USA.

- The **three principles of benchmarking** are maintaining quality, customer satisfaction and continuous improvement.

Watson, G. (1993). *Strategic Benchmarking: How to Rate Your Company's Performance Against the World's Best*, John Wiley & Sons, Canada.

The Benchmarking Theory

- Benchmarking is an important concept in **TQM**.

Duggirala, M., Chandrasekharan, R., Anantharaman, R. (2008). "Provider-perceived dimensions of total quality management in healthcare", *Benchmarking: An International Journal*, Vol. 15: 6, pp.693 – 722.

- Is built upon **performance comparison, gap identification** and **changes** in the management **process**.

Kay, J. (2007). "HealthCare Benchmarking", *Medical Bulletin*, Vol. 12: 2, pp. 22-27.

Why Benchmark in Health Care?


Kay, J.(2007). "HealthCare Benchmarking", *Medical Bulletin*, Vol. 12: 2, pp.22-27.

- To understand **strengths** and **weaknesses**
- To realize what **level(s)** of **performance** and **improvement** is **feasible**
- To satisfy **patients'/customers'** **needs** for quality, cost, product and service
- To **promote changes** and to deliver **improvements** in **quality, productivity** and **efficiency**; which in turn bring **innovation** and **competitive advantage**
- Is a **cost effective** and **time efficient** way of establishing a pool of innovative ideas from which the **most applicable practical examples** can be utilized

Benchmarking and Performance Data in Health Care Organizations


Health care organizations measure various dimensions of performance : **Clinical, operational and financial**

- How do health care organizations **use** performance data?
- Is **decision-making** influenced by performance?
- Is health care **organizational vision** driven by performance?
- How does benchmarking **improve performance**?



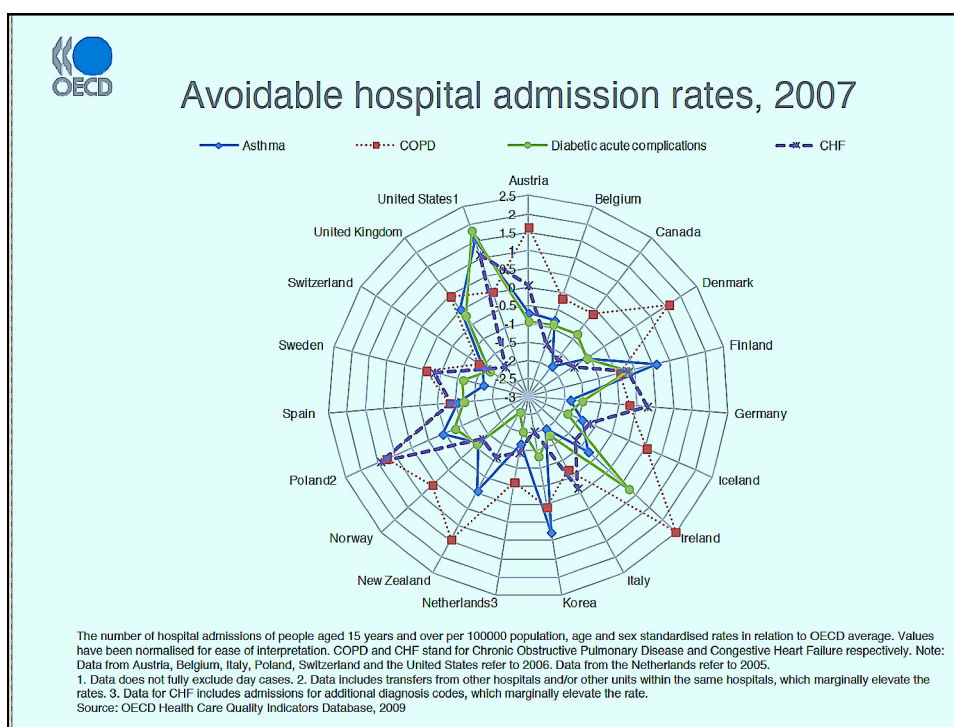
The Limitations of Performance Data

- A thermometer reading would have little value as a measure of your health...
if you didn't know that 98.6 is the "normal" temperature!
- A no-show rate of 25% at out-patients is meaningless as a performance measure of your hospital...*if you don't know how others are performing*
- We are **overwhelmed with data without meaning**
- **Data** without a context are **only numbers!**



Models of Benchmarking

- **Descriptive/Normative:** No formal comparisons with norms; static snapshot e.g. government reports.
- **Comparative:** Formal comparison against a descriptive benchmark; typically reported as percentile rankings or in graph form.
- **Process:** Draws upon benchmarking data to identify potential best practices; achieved by comparing the practices of top performers with others.



Most Commonly-Used Benchmarks in Hospitals

- **Clinical**
 - Clinical Outcomes
 - Patient Satisfaction
 - Re-Admission Rate
- **Operational**
 - Physicians and Nurses to Patient Ratios
 - Utilization (e.g. length of stay, turnaround time)
 - Waiting Time (Days from Request to First Appointment)
 - Waiting Lists (Patients Waiting for Operation)
 - No-Show Rate
- **Organizational Climate**
 - Staff Turnover
 - Job Satisfaction/Engagement
- **Financial**
 - Cost per Unit of Service
 - Administrative Costs

Quality Indicator Attributes and Descriptions



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Nolte, E. (2010). *International benchmarking of healthcare quality: A review of the literature*.
Rand Corporation, CA, USA.

Benchmarking Initiatives that Mater Dei Hospital, Malta has been involved

in:

- 1. PATH WHO**
- 2. Benchmarking
Clinicians**

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PATH
National Center
for Quality Assessment
in Health Care
WHO Collaborating Centre for Development
of Quality and Safety in Health Systems

Performance Assessment Tool for Quality Improvement in Hospitals

What is the project about

PATH is a performance assessment system designed by the World Health Organization Regional Office for Europe to support hospitals in defining quality improvement strategies by 1) identifying areas for further scrutiny and 2) sharing best practices. This is done by providing tools for performance assessment, supporting hospitals questioning their own results and translating them into actions for improvement and by enabling collegial support and networking. PATH was not developed for internal evaluations that result in punitive actions or for external

[Read more](#)

Join the PATH Newsletter

The Newsletter provides information about the activities of the **PATH Network**, future plans and the platform to share solutions and experience.

[Read Newsletter](#)

News & highlights

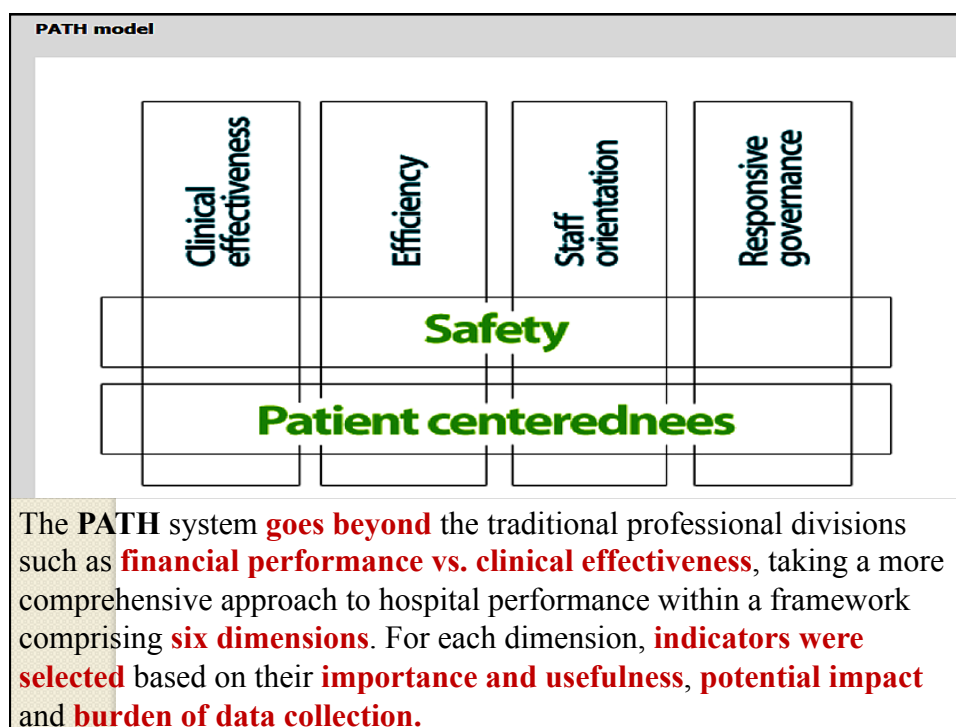
PATH Budapest Workshop, 18 - 19 June 2012 (05-04-2012)

Krakow PCC meeting minutes and materials (22.06.2011)

[Read more](#)

Performance Assessment Tool for QUALITY IMPROVEMENT in Hospitals

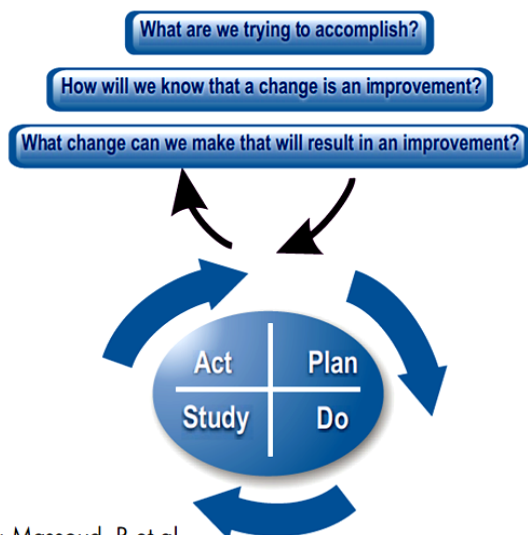
PATH is a performance assessment system designed by the **World Health Organization** to support hospitals in defining **quality improvement strategies**, **questioning their own results** and translating them into **actions for improvement**.



RATIONALE FOR PERFORMANCE MEASUREMENT WHO PATH PROJECT

- PATH is a tool to measure and manage hospital performance, and to foster and support a culture of measurement and continuous improvement.
- It means an agreement of hospital leaders to the principles of performance measurement presented in the [Tallinn Charter](#) and in the [Vienna Statement on Hospital Performance Assessment](#).
- **The Tallinn Charter** was unanimously adopted by the WHO European Ministerial Conference that was held in Tallinn on June 25-27, 2008: to strengthen health systems in Europe, while acknowledging social, cultural and economic diversity in the region.
- **Vienna Statement** has been adopted by the 2nd International WHO Conference on PATH held in Vienna on July 4th, 2008.

Model for Improvement



Source: Massoud, R et al.

International Journal for Quality in Health Care 2005; Volume 17, Number 6: pp. 487–496
Advance Access Publication: 9 September 2005

10.1093/intqhc/mzi072

A performance assessment framework for hospitals: the WHO regional office for Europe PATH project

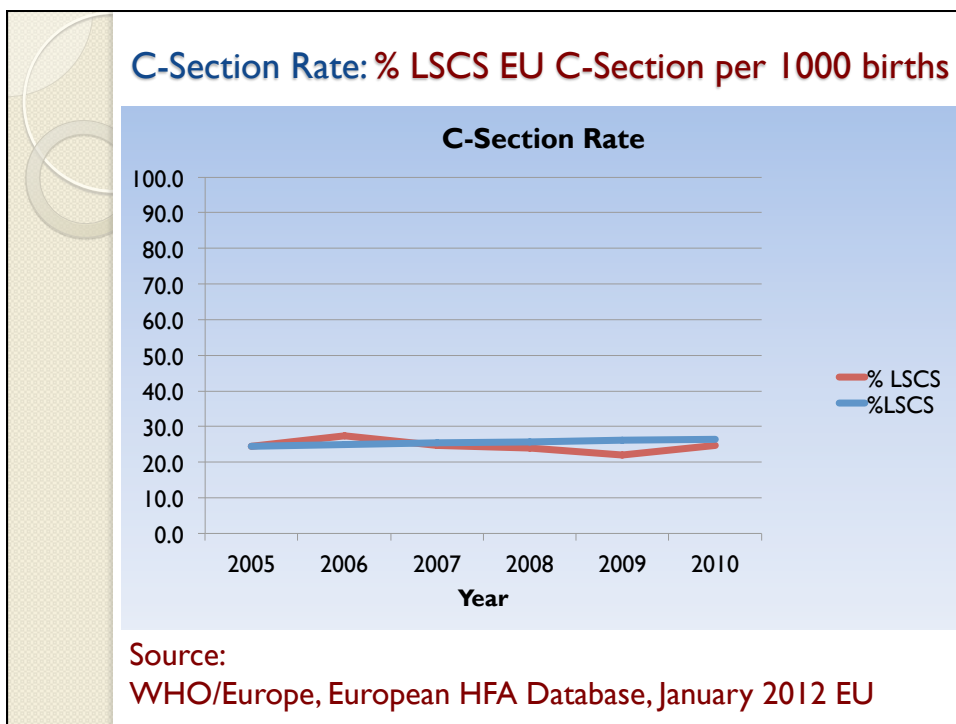
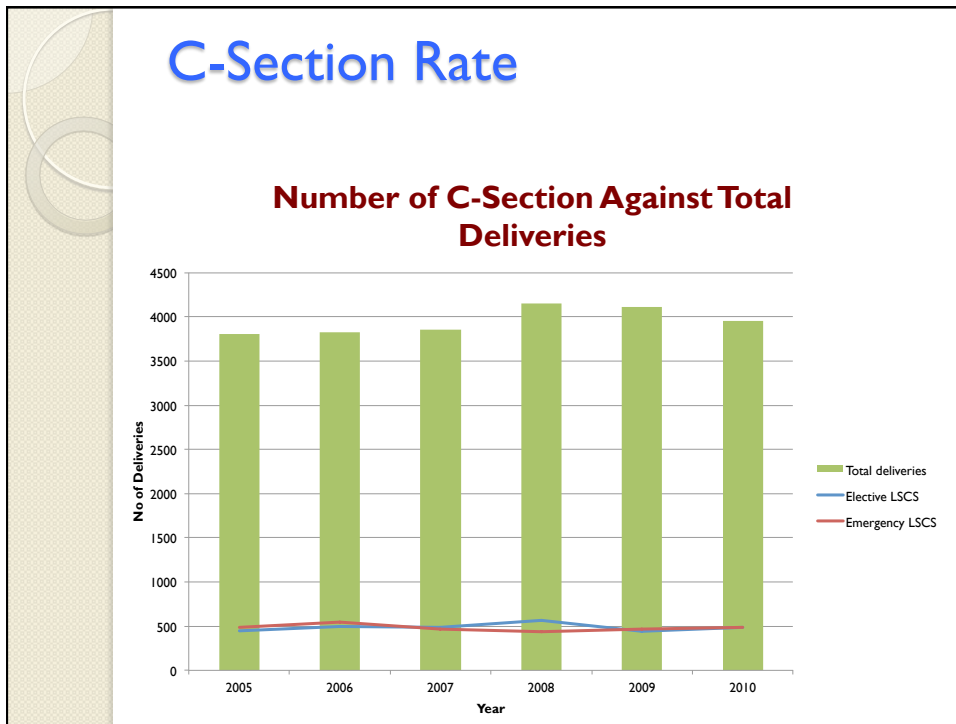
J. VEILLARD¹, F. CHAMPAGNE², N. KLAZINGA³, V. KAZANDJIAN⁴, O. A. ARAH³ AND A.-L. GUISETT¹

¹World Health Organization Regional Office for Europe, Barcelona, Spain, ²Université de Montreal, Département d'administration de la santé et GRIS, Montreal, Québec, Canada, ³University of Amsterdam Academic Medical Centre, Department of Social Medicine, Amsterdam, The Netherlands, ⁴Centre for Performance Sciences, Elkridge, Maryland, USA.

WHO PATH Performance Indicators

- C-Section Rate
- Patient Based stroke 30 day in-hospital
- Patient based AMI 30 day in-hospital
- Use of blood components
- Day surgery rate
- Exclusive Breast Feeding

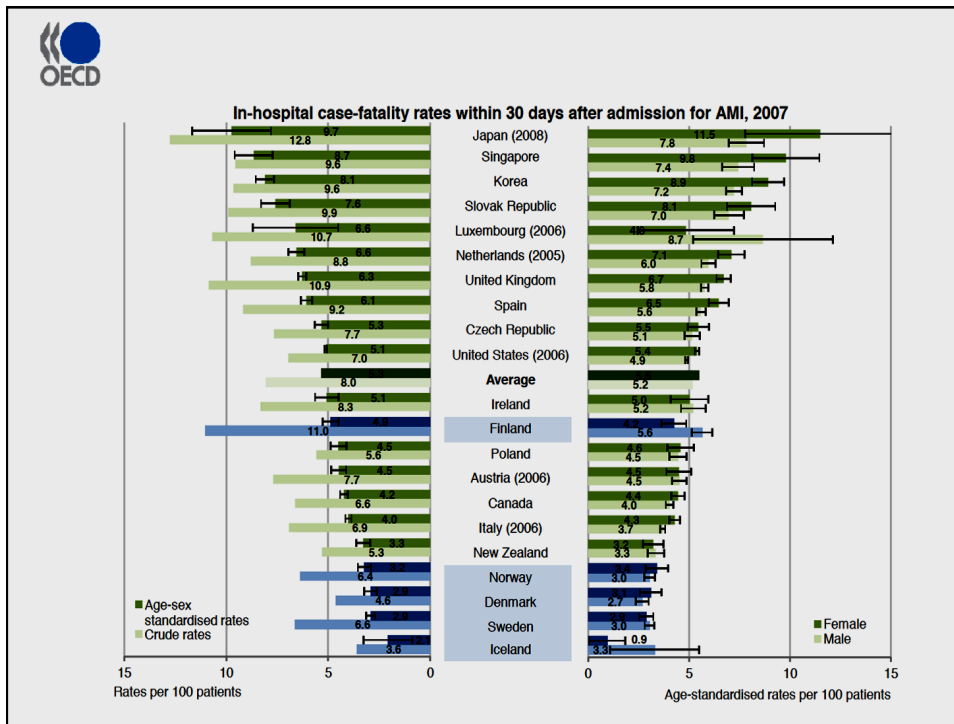
• C-SECTION RATE



PATIENT BASED AMI & STROKE 30 DAY IN- HOSPITAL MORTALITY RATE

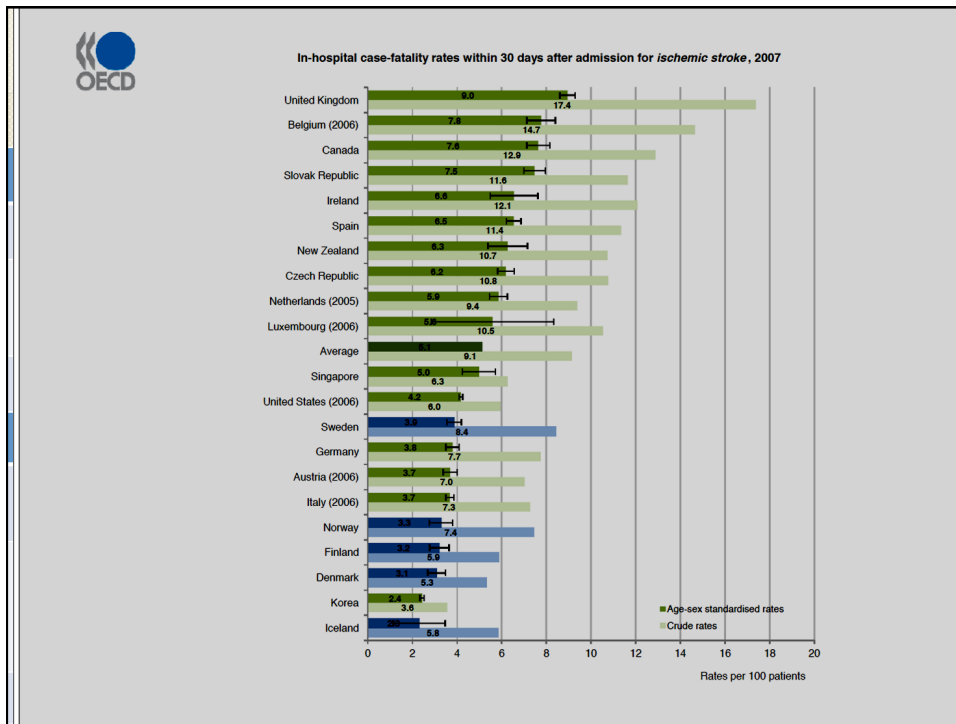
Results

AMI 2011	
Denominator	881
Numerator LOS 0-30	83 Patients deceased
Mortality rate	9.40%



Results

CVA 2011	
Denominator	557
Numerator LOS 0-30	138 Patients deceased
Mortality rate	24.70%



USE OF BLOOD COMPONENTS

Period of Data Collection

Procedure	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12
CABG					
Transurethral prostatectomy					
Total Knee Replacement					
Total Hip Replacement					

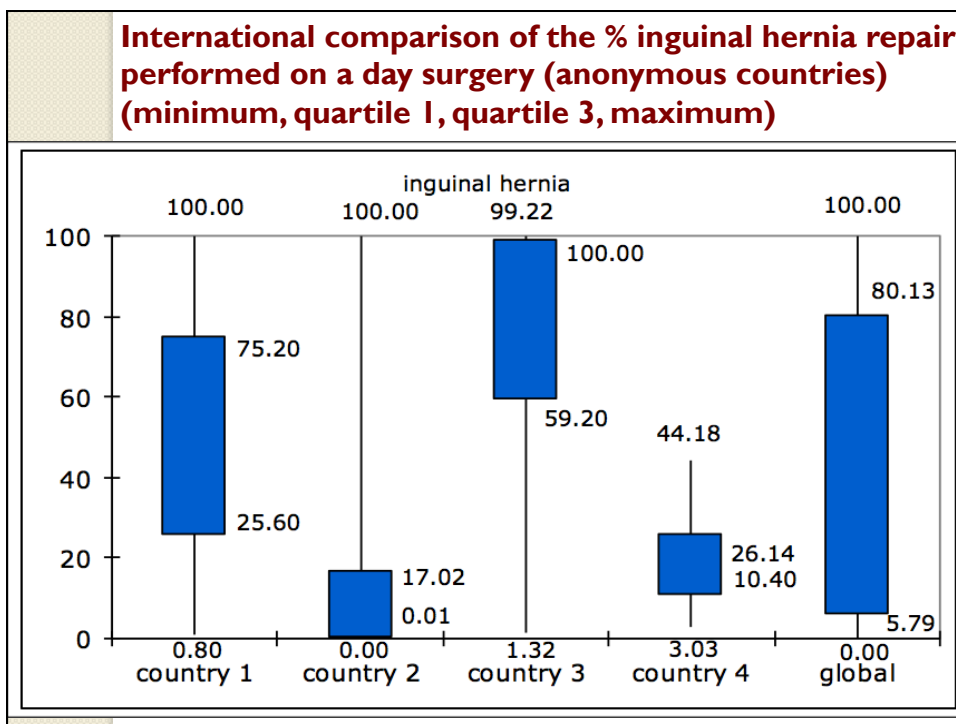
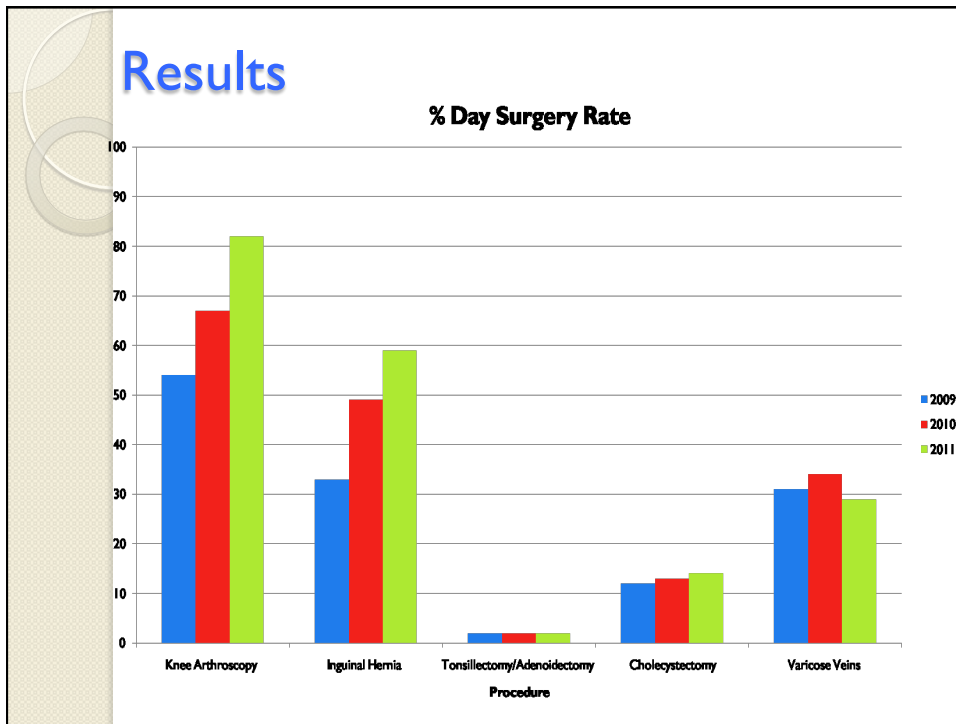
Results- Use of Blood Components

Procedure	No of Pts Type & Screened	No of Pts with Blood Allocated	No of Pts Transfused	No of Blood Units Transfused	No of Blood Units Allocated	Total No of Patients in Dataset
CABG	49	49	29	64	191	49
Transurethral prostatectomy	54	4	1	2	10	56
Total Knee Replacement	111	11	6	13	27	111
Total Hip Replacement	51	11	7	12	22	51

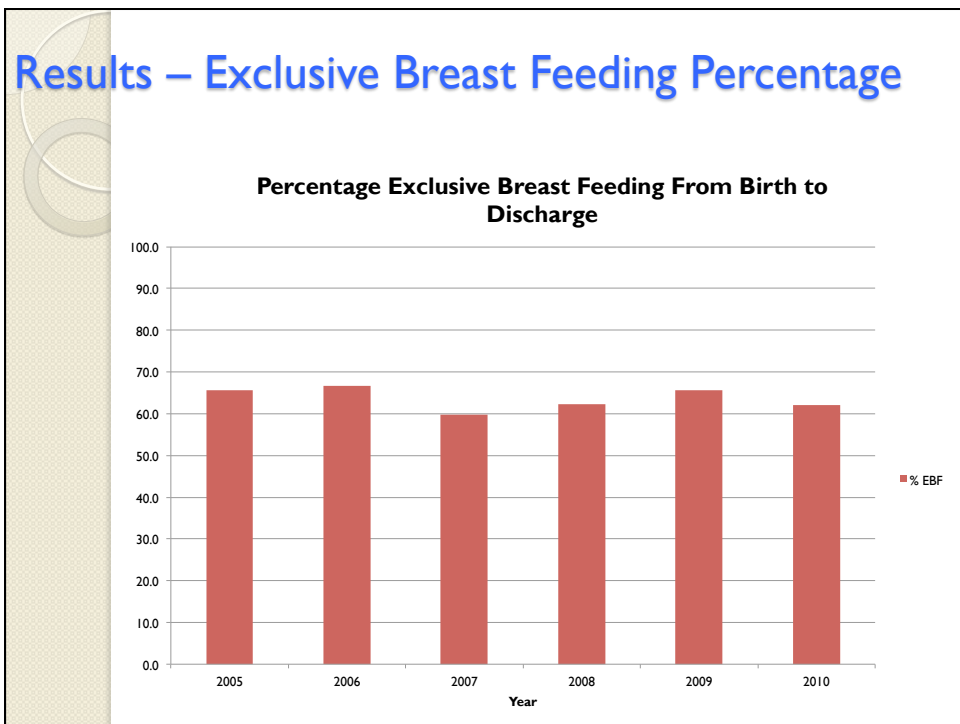
Results- Use of Blood Components

Procedure	C/T Ratio	Transfusion Probability	Transfusion Index
CABG	3.0	59	0.3
Transurethral prostatectomy	5.0	25	0.2
Total Knee Replacement	2.0	55	1.2
Total Hip Replacement	1.8	63	0.5

DAY SURGERY RATE



EXCLUSIVE BREAST FEEDING



Benchmarking Clinicians

In benchmarking, a clinician's performance is compared to an expected value.

How should we compare clinicians?

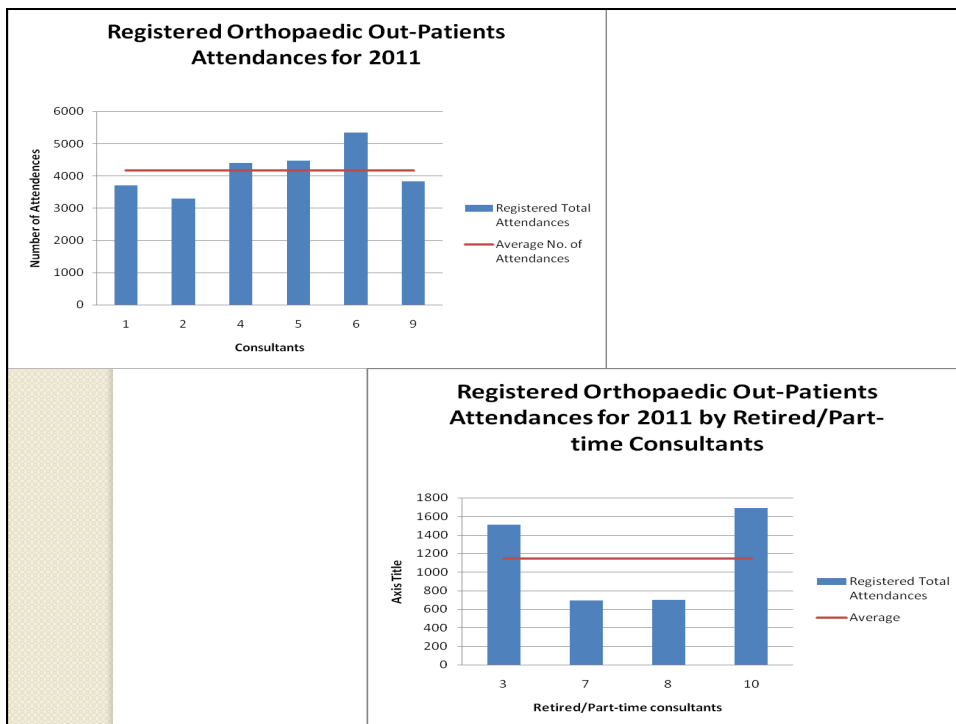
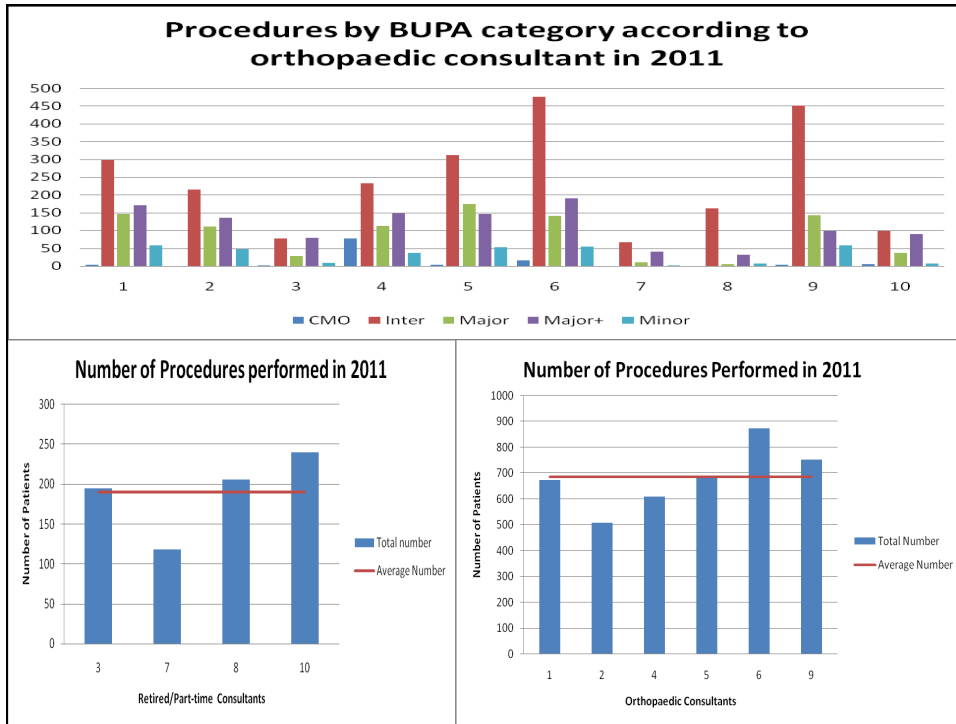
- Clinician to average peer
- Clinician to average peer taking care of same kinds of patients
- Clinician to expectations on admission
- Clinician and peers on patients matched on certain features

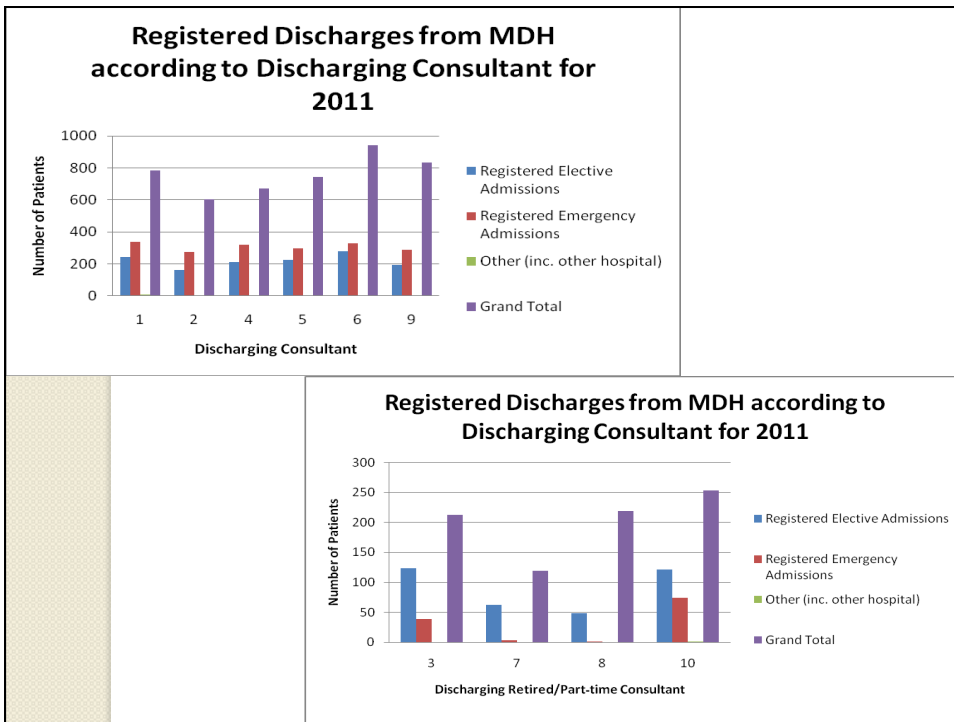
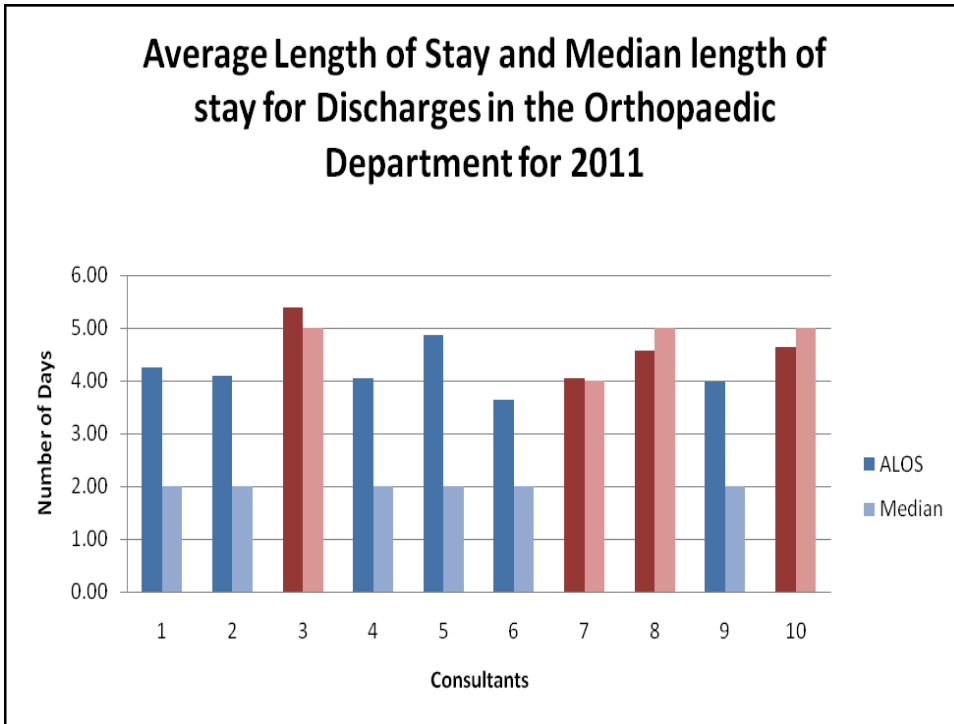
Problems with Benchmarking Clinicians

- Measurement may not achieve all objectives of quality of care
- Defensive Medicine
- Variability in patient variables
- Measurement takes time off real improvement

Benchmarking Orthopaedic Surgeons

- Surgical orthopaedic procedures according to BUPA category
- New cases out-patient appointments per consultant and according to clinic code
- Total patients on waiting list
- Waiting list for arthroscopies
- Waiting list for arthroplasties
- Ward attenders
- Outpatient activity
- Length of Stay
- Registered discharges from MDH according to discharging consultant





Conclusions

- Benchmarking is an analytic tool to understand organizational performance
- Is needed for financial survival and organizational excellence