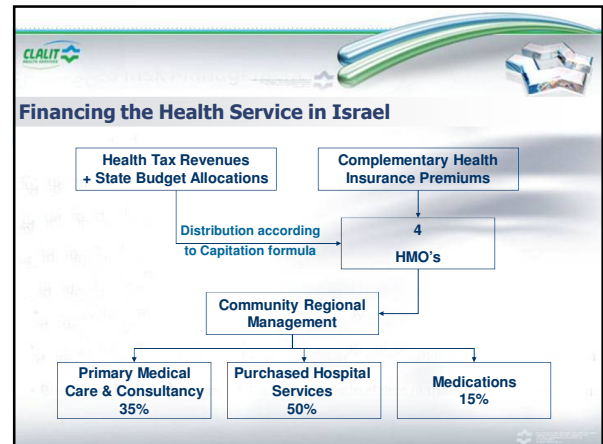




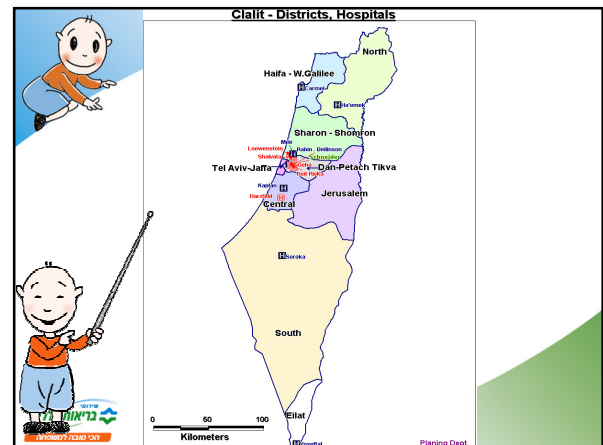

A Four-Year Project for Implementing Hospital Quality Indicators in Israel

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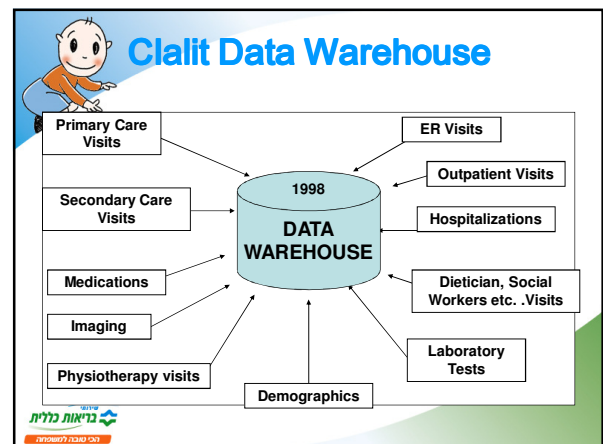

Clalit Health Services

- Established in 1911
- Largest healthcare provider organization
- Members ~ 3,800,000 (53% market share of ~ 7,000,000)
- Annual budget ~ 4 billion dollars
- 8 districts/14 hospitals
- 1400 community primary care clinics
- 4000 primary care physicians
- 550 secondary care clinics
- Elderly (65+) - 70% market share , 0.5 million
- Arab population - 73% market share, 1 million

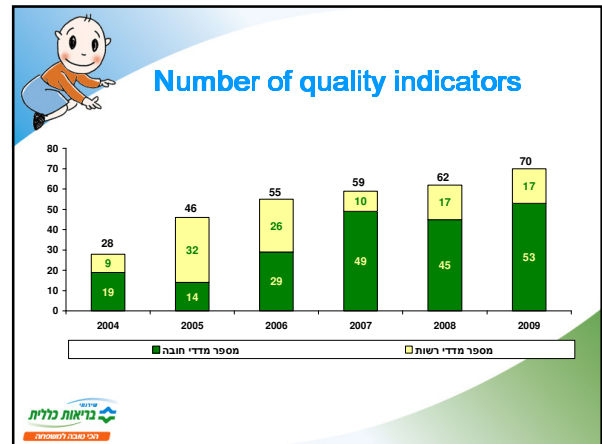
Clalit Quality Measurement System

- Started 1998
- Community based
- Hospital based
- National quality measures program (Community)

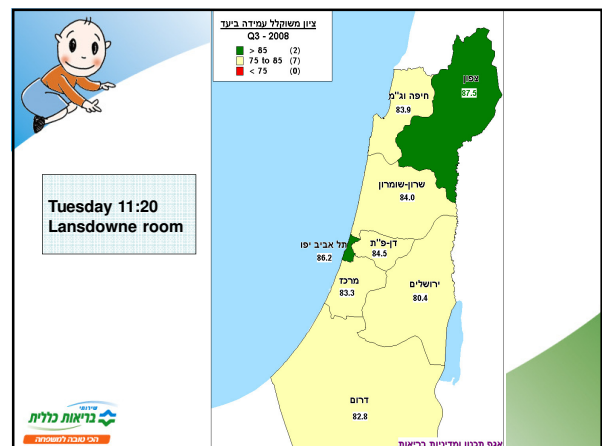
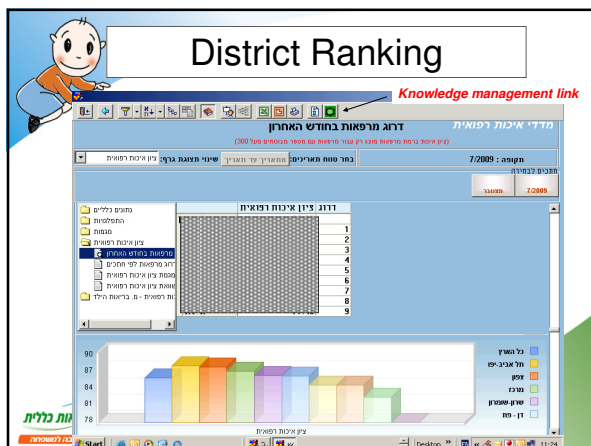
Community Quality Indicator System

- 77 Active Indicators in 14 Areas of Interest
 - Ophthalmology 1
 - Cardiology 5
 - Pediatrics 9
 - CHF 5
 - Asthma 1
 - Hyperlipidemia 3
 - Hypertension 6
 - Diabetes 22
 - Pulmonology 1
 - Preventive Nephrology 1
 - The Elderly 2
 - Preventive Medicine 16
 - Medication Usage 3
 - Laboratory Usage 2



Compound Quality Score

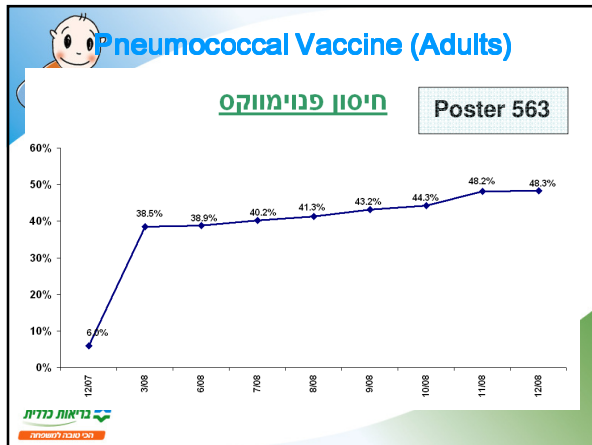
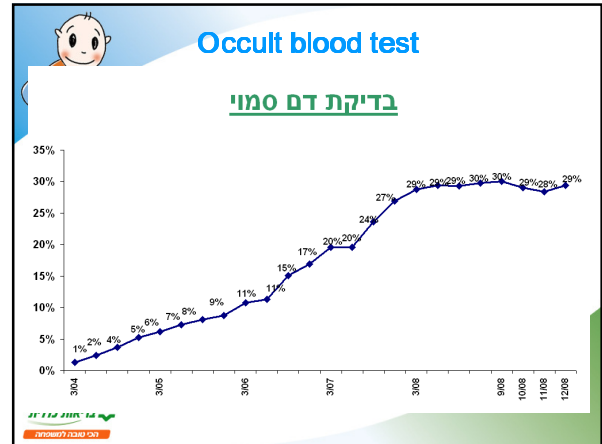
- A result is calculated (e.g. 50%)
- A target goal is set (e.g. 75%)
- A score of achievement in proportion to target goal is calculated (50/75=66.7%)
- A weight is assigned (e.g. 3.5%)
- A score for the individual indicator is calculated (e.g. 0.035*66.7=2.33)
- A quality score is calculated for each one of Clalit 1400 community clinics

$$\text{Quality Score} = \sum \left(\frac{\text{result}}{\text{target}} \times \text{weight} \right)$$


Patient Focused Lists "Indicator Passport"

אנלוגיית לטיפול Knowledge management link

The screenshot shows a software interface for 'Indicator Passport'. It features a navigation menu on the left with categories like 'מספר אדם עם', 'מספר', 'מספר ימי', 'מספר חולים', etc. The main window displays a 'View Report' for 'דרכון מדדי איכות' (Quality Indicator Passport) for the date 15/09/2009. It includes fields for 'מספר חולים', 'מספר ימי', and 'מספר אדם עם'. Below the report, there is a table with columns for 'מספר', 'שם', 'מספר חולים', 'מספר ימי', and 'מספר אדם עם'.



Hospital Quality Measure System

- Process initiated in 2005 for all of Clalit hospitals
- The project focuses on 5 domains
 - Clinical quality of care
 - Quality of service
 - Costs
 - Patients' experience
 - Academic excellence

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QIs in Clalit's Hospitals

- Clinical QIs were chosen by expert groups
- Based on feasibility (data warehouse)
- QIs are used at the department level

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Departments Involved

- 39 internal medicine departments
- 14 general surgery departments
- 13 pediatrics departments
- 13 OB/GYN departments
- 8 orthopedics departments
- 9 emergency departments

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Sample Clinical Qis

- Internal medicine
 - CT/MRI in stroke
 - Planned discharge for dependent patients
 - Primary PCI within 90 minutes
- General surgery
 - LOS following colectomy for colorectal cancer
 - Laparoscopic cholecystectomy converted to an open procedure
- Pediatrics
 - Amoxicillin/clvulanate for pediatric infections
 - Readmissions following hospitalization for asthma

Sample Clinical Qis

- OB/GYN
 - High grade perineal laceration
 - ICU admission following vaginal delivery
- Orthopedics
 - Femoral neck fracture operated within 48h
 - Reoperations following total hip replacement
- Emergency departments
 - Waiting time in the ED
 - Readmissions within 24 hours

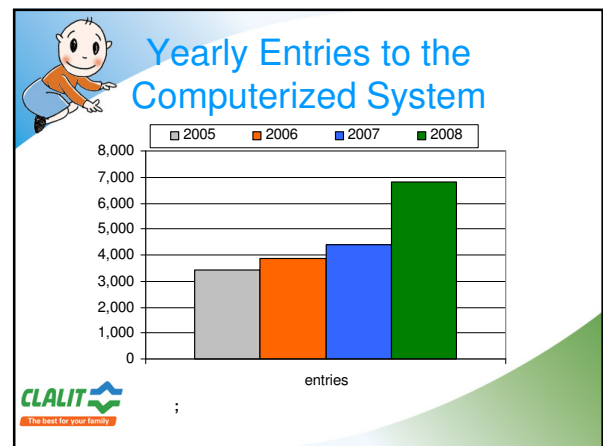


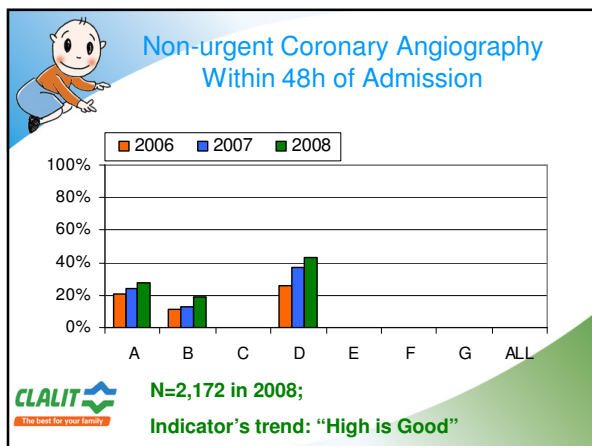
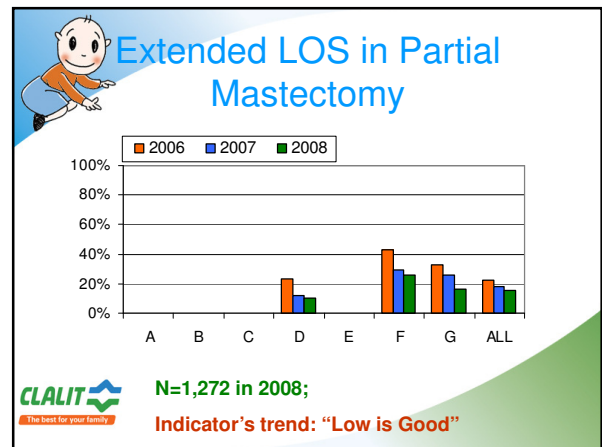
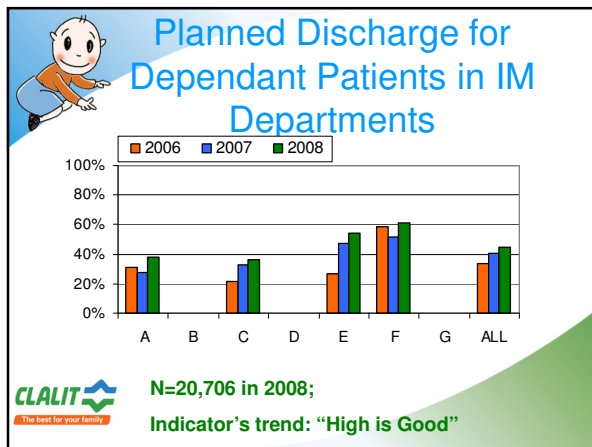
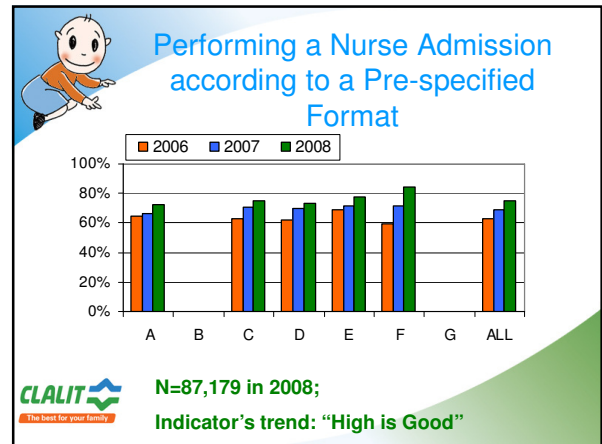
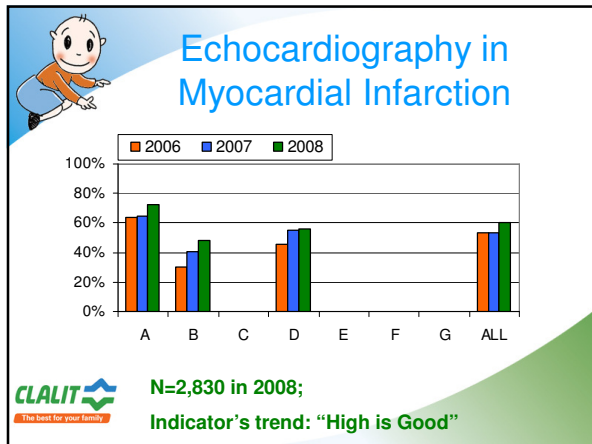
View Report

Export Select a Format Next | Find | 100% | F4 | of 2

Detailed report: Excessive LOS following laparoscopic cholecystectomy

Excess LOS?	Proc.	Admission Number	ID	Ward	Month	Indicator	Indicator Code	Hospital
p	3	2008002112	200900	85	1	8	K10025	1
p	4	2008002497	20090	8	1	1	K10025	2
p	8	2008002212	200900	4	1	1	K10025	3
p	79	2008002945	20090	1	4		K10025	4






Conclusions


Indicator	A	B	C	D	E	F	G
Echocardiogram in MI	+13%	+66%		+32%			
Planned Discharge	+20%		+88%		+105%	+6%	
Detailed Nurse Admission			+18%	+17%	+13%	+42%	
Non-elective coronary angiography within 48h	+62%	+78%		+63%			
↑ LOS in partial mastectomy				-54%		-41%	-49%

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Conclusions

- A 4 year project led to improvement in major clinical issues
- A revision of QI is planned for 2010
- Weights and compound score are planned for 2010
- Additional departments – urology ENT, psychiatry, ophthalmology




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Thank you!

Jacob Dreier, MD, MPH,
Eytan Wirtheim, MD, MHA,
Amit Nachman, MHA,
Ehud Davidson, MD, MHA,
Arnon D. Cohen, MD, MPH, PhD
Itamar Shalit, MD, MHA



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