

Experience of medical outcomes as the guiding principle for healthcare



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Best healthcare in the world?

	Healthcare Access and Quality Index																													
	Tuberculosis	Diarrhoeal diseases	Lower respiratory infections	Upper respiratory infections	Diphtheria	Whooping cough	Tetanus	Measles	Maternal disorders	Neonatal disorders	Non-melanoma skin cancer	Cervical cancer	Uterine cancer	Testicular cancer	Hodgkin's lymphoma	Leukaemia	Rheumatic heart disease	Ischaemic heart disease	Cerebrovascular disease	Hypertensive heart disease	Chronic respiratory disease	Peptic ulcer disease	Appendicitis	Inguinal, femoral, and abdominal hernia	Gallbladder and biliary diseases	Epilepsy	Diabetes mellitus	Chronic kidney disease	Congenital heart anomalies	
Andorra	95	98	99	85	100	100	98	99	100	100	99	82	93	96	81	70	73	96	84	96	95	97	95	99	93	91	92	96	95	96
Iceland	94	95	97	72	99	100	100	100	100	100	99	90	87	91	67	63	75	94	75	95	93	98	93	99	99	84	92	100	100	98
Switzerland	92	99	91	87	99	100	100	100	100	97	80	76	90	94	75	72	72	96	86	100	85	97	92	96	92	86	89	94	93	85
Sweden	90	98	96	80	99	100	100	100	100	98	90	78	76	95	83	76	67	91	73	88	94	95	79	98	92	86	85	78	95	95
Norway	90	95	92	78	99	100	100	100	100	99	90	81	81	91	65	70	76	93	78	87	99	95	80	98	92	86	80	78	92	93
Australia	90	100	94	82	99	100	100	100	99	96	81	52	84	95	86	74	70	86	78	93	98	90	93	98	89	84	83	83	88	90
Finland	90	93	99	89	99	100	100	100	99	95	84	95	92	78	69	72	96	67	80	75	98	75	96	84	79	76	79	99	87	
Spain	90	92	96	80	99	100	98	100	100	99	85	74	83	90	82	64	66	76	86	91	93	95	96	94	84	74	97	98	86	88
Netherlands	90	99	94	71	99	100	100	100	96	79	80	83	96	74	65	78	93	79	85	97	94	90	95	87	79	82	84	89	88	
Luxembourg	89	99	87	85	99	100	98	100	92	93	74	84	96	82	73	65	81	83	88	91	97	91	93	85	78	79	90	86	100	

Ryan M Barber et al. Healthcare Access and Quality Index based on mortality from causes amenable to personal health care in 195 countries and territories, 1990–2015: a novel analysis from the Global Burden of Disease Study 2015, *The Lancet* (2017).

"I am considered eccentric, because I say publicly that if the hospitals want to be sure of getting better, they need to find out what results they have. They must analyze their results to find strong and weak points. They have to compare their results with others. Such opinions will not be eccentric in a few years."

Dr Amory Codman, 1917

First Swedish quality register (Knee and Hip Registry) was started by professor Göran Bauer, 1975



Sahlgrenska University hospital (SU) is one of the largest university hospitals in Northern Europe

The Sahlgrenska University hospital

- 2 000 beds, 16,500 employees, 5 sites
- 1,2 million outpatient visits
- 110 000 hospital cases
- 220 000 A&E cases
- Comprehensive services: provides 50 % of the regional hospital care volume (1,6 million people)
- 70 % of nationally commissioned high specialty health care services, e.g., pediatric heart surgery, malformations and transplantations
- > 1 200 scientific publications and ~ 1800 students annually
- Turnover approx. 16 billion SEK (approx € 1.8 billion) 2016



How did we initiate the change?

- Mapping out the hospital's performance – get facts
- Starting small with pilots
- Create working groups consisting of patient(s) and all relevant professions – give the groups great deal of autonomy
- Strong local support at the department level
- Expert guides the first 12 weeks of training for pilot groups – get understanding and commitment
- Train the trainers – educate so everyone knows what VBHC is
- The medical and nursing professions know what and how and management support, create trust and follow up
- Reporting results every month including to executive board
- Evolutionary process with increasing knowledge

Power of measuring outcomes

- Outcomes define **success** for clinicians and the organization
- Outcomes makes it necessary to **collaborate** around a condition
- Outcomes highlight value-enhancing **cost reductions**
- Outcomes makes it necessary to follow the **full cycle of care** and integrate care paths



Results came fast...after a year:



Total hip replacement

Volume

- **36% increase** in number of orthopedic surgeries (total use of time at OR +16%) and 18% reduction in adverse events

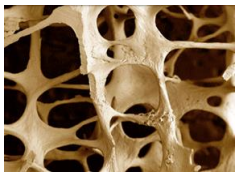


Bipolar disorder

Patient safety

Outcomes

- **30% reduction** of LOS for bipolar disorder and 10% reduction of relapses



Osteoporosis

Prevention

- **85% coverage** of treatment for osteoporosis (from 25%)



Normal birth

Risk reduction

- From 10% to **6% acute c-section** at normal birth (Robson 1)



Prostate Cancer

Outcomes

- From 51 to **75% patients continent** 3 months after prostate cancer surgery
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Summary – measuring outcomes

- Focus on what is important
- Patients are involved in the care and their needs become the center
- Reduces outcome variation and costs due to poor quality
- Engages clinicians
- Raises new hypotheses for innovation and research
- Creates a sustainable health economy
- Makes a very effective steering principle for a large healthcare organization