

Quality in Health Care 2030

A Challenge for Hospitals

26th EAHM Congress
Sustainable Healthcare: Needs, Responsibility and Competence

Session
"Values and Liability of Professionals"

Bologna, 14.10.2016

M. Schrappe
University of Cologne

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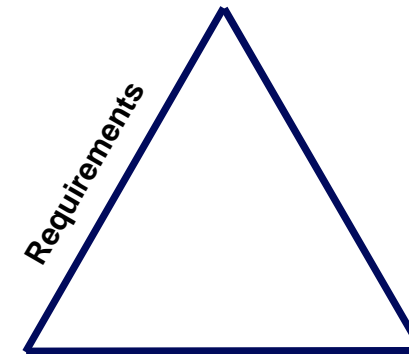
Prof. Dr. med. Matthias Schrappe

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matthias.schrappe.com

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Quality Improvement

= Quality Determination



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Definition of Quality

"The assessment of quality must rest on a conceptual and operationalized definition of what the "quality of medical care" means. (...)

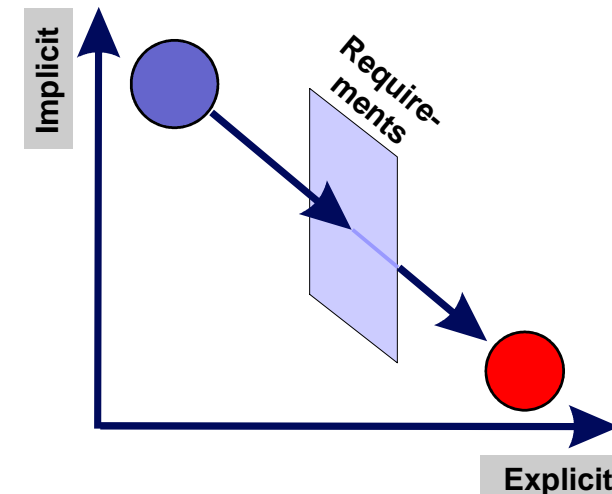
As such, the definition of quality may be almost anything anyone wishes it to be, although it is, ordinarily, a reflection of values and goals current in the medical care system and in the larger society of which it is a part."

Donabedian Milbank Quarterly 44, 1966, 166-203

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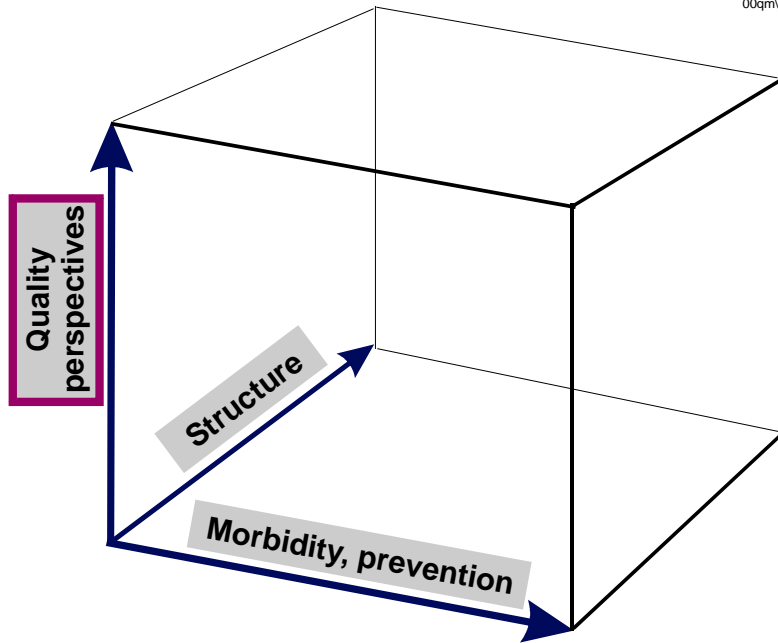
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Definition of quality: requirements



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Quality: 7 Perspectives

- **Society:** Total population
- **Region/population:** Geographic, care-orientated, financing
- **Benefit:** Allocation, efficiency
- **Patients:** Autonomy and self determination
- **Professions:** Autonomy, guarantor position
- **Provider:** Organisation
- **Science:** Description and hypotheses

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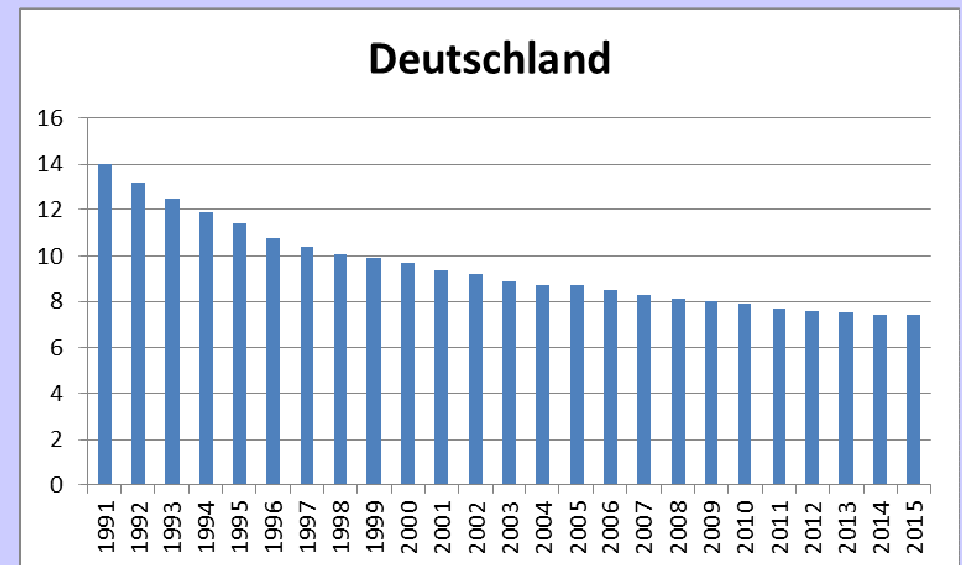
Statist. Bundesamt 16.8.2016

Eckdaten der Krankenhausstatistik

	2015	2014	+/- in %	+/- abs.
Krankenhäuser insgesamt	1.953	1.980	-1,4%	-27
öffentliche Krankenhäuser	578	589	-1,9%	-11
freigemeinnützige Krankenhäuser	679	696	-2,4%	-17
private Krankenhäuser	696	695	0,1%	1
aufgestellte Betten insgesamt	498.006	500.680	-0,5%	-2.674
öffentliche Krankenhäuser	239.339	240.195	-0,4%	-856
freigemeinnützige Krankenhäuser	167.591	169.477	-1,1%	-1.886
private Krankenhäuser	91.076	91.008	0,1%	68
Berechnungs-/Belegungstage insgesamt	141.004.043	141.534.251	-0,4%	-530.208
öffentliche Krankenhäuser	69.398.424	69.598.006	-0,3%	-199.582
freigemeinnützige Krankenhäuser	46.547.320	46.833.730	-0,6%	-286.410
private Krankenhäuser	25.058.299	25.102.515	-0,2%	-44.216
Patienten (Fallzahl) insgesamt	19.183.461	19.148.626	0,2%	34.836
öffentliche Krankenhäuser	9.403.940	9.386.108	0,2%	17.833
freigemeinnützige Krankenhäuser	6.564.094	6.544.720	0,3%	19.374
private Krankenhäuser	3.215.427	3.217.798	-0,1%	-2.371

ALOS (days)

1970: 24 days



Angaben Statist. Bundesamt

Quality: 7 Perspectives

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Die Intervention

Händedesinfektion
mit Chlorkalk-Lösung

Mortalität an Kindbettfieber:

Kreißaal 1	Kreißaal 2
1,2%	1,3%



Aktion Saubere Hände



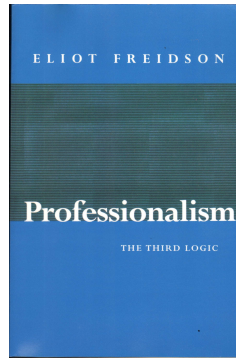
- ➔ Träger APS, NRZ d. RKI, GQMG
- ➔ Verstärkung Händedesinfektion
- ➔ Rückkopplung des Desinfektionsmittelvolumens / Pat.-Tag
- ➔ Integration in KISS
- ➔ Nationale Aktionstage
- ➔ Regionale Aktionen, alle Medien
- ➔ Start 11.12.07 mit Pressekonf. BMG

Change of Behaviour

- ➔ Learning theory
- ➔ Social perception
- ➔ Behavioural engineering
- ➔ Organisational change
- ➔ Context-related concepts

Professionalism

High-grade specialisation
 Specific knowledge and skills
 Certification by profession
 Exclusive jurisdiction
 Protected position in labour market
 High priority of professional values

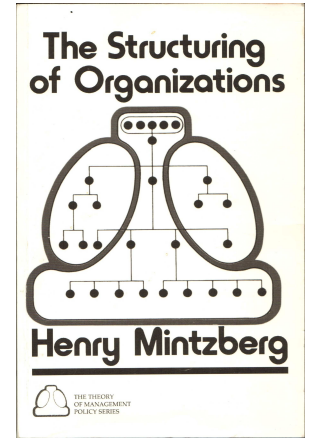


Freidson 2001, s. also Relman JAMA 298, 2007, 2668

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Professional Bureaucracy

- Functional organization
- Autonomy of experts
- Direct relation to customers
- Coordination by standardisation
- Career organized by profession
- Pigeon-Holing
- Tolerance of uncertainty
- Innovation-Paradoxon
- Management poorly differentiated
- Weak points: resistance to innovation, overstressing of market power, loss of acceptability



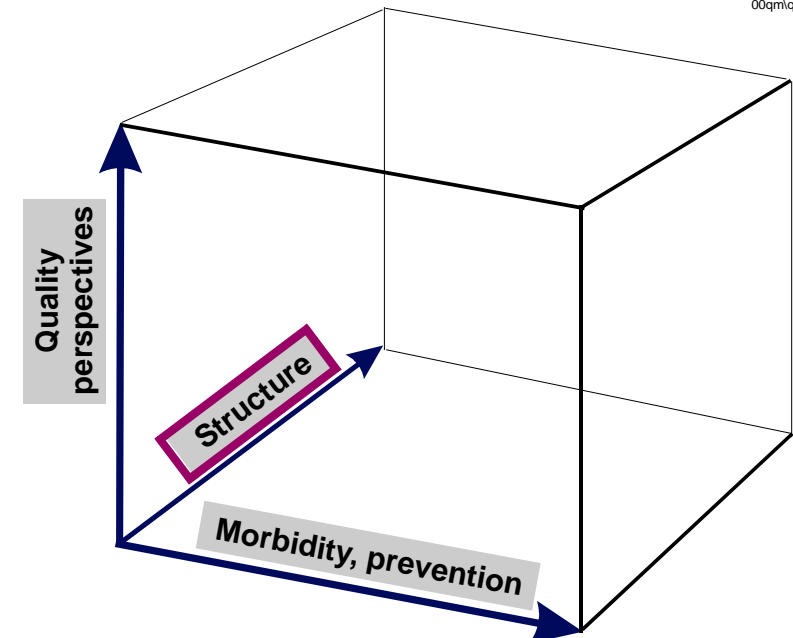
n. Mintzberg, H.: The Structuring of Organizations, 1979

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Effects of DRGs

Hospitals

- ➔ Decreasing ALOS
- ➔ Increasing volume
- ➔ Differentiation of in-house specialities
- ➔ Decreasing quality ?

System

- ➔ Major improvement of internal and external transparency
- ➔ Change in responsibility between sectors
- ➔ Transition to population-based care (trend)

German Health Care System

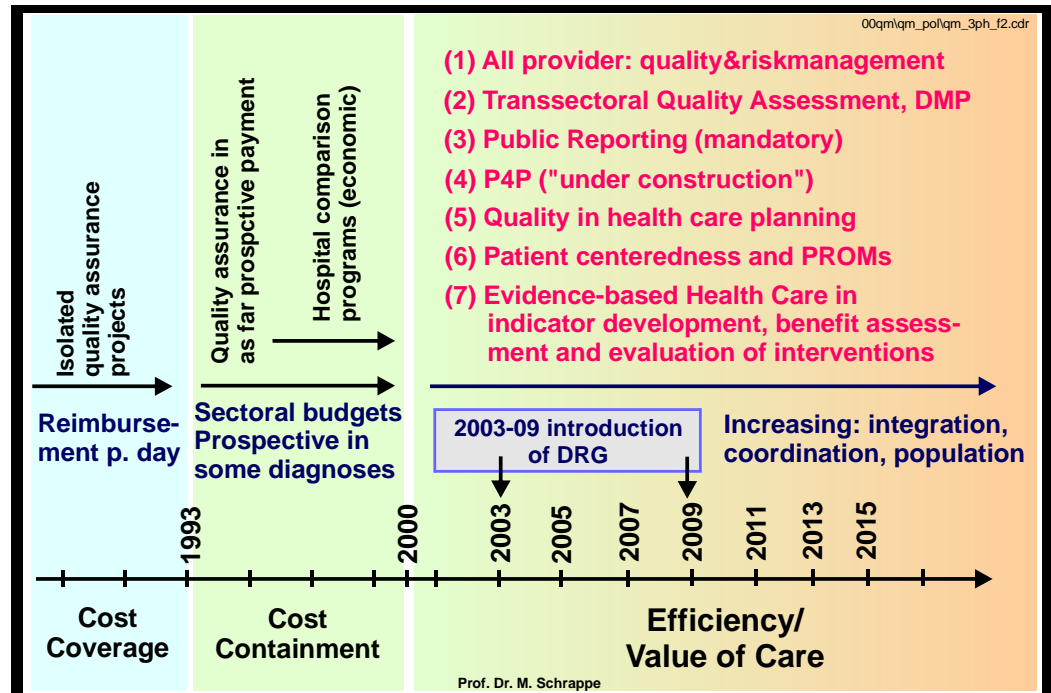
- Characteristics -

- ➔ Acute operative procedures
- ➔ Disease in favour of prevention
- ➔ Increasing sectoral segmentation
- ➔ Volume-orientated
- ➔ Provider-orientated

German Health Care System

- Major Challenges -

- ➔ **Morbidity** Chronic and multiple diseases
Prevention of disease and episodes
- ➔ **Structure** Integration and Coordination of care
Quality instead of volume
- ➔ **Perspective** Patient- instead of provider-centeredness



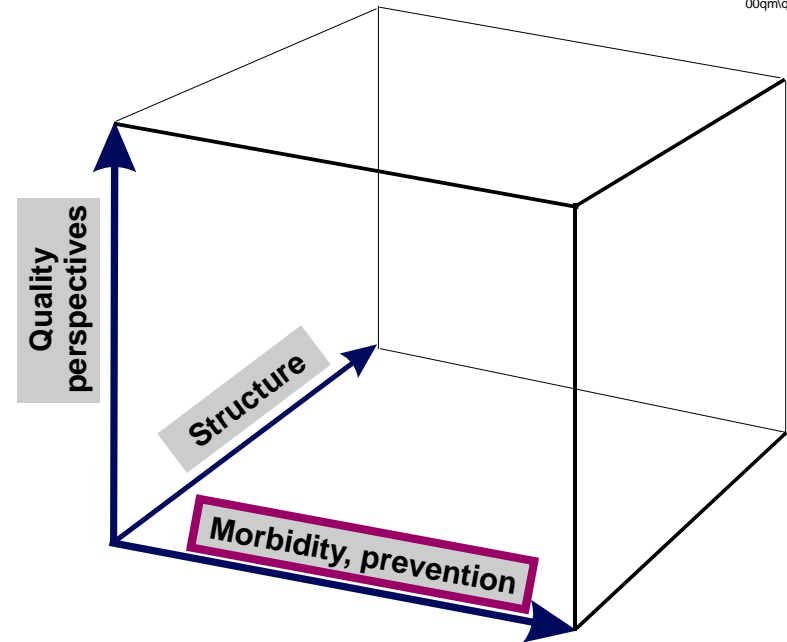
Funds for Health Care Reorganization

Hospital Restructuring Fund

- 1 bill. €, 1:1 Insurancefund / states

Innovation Fund

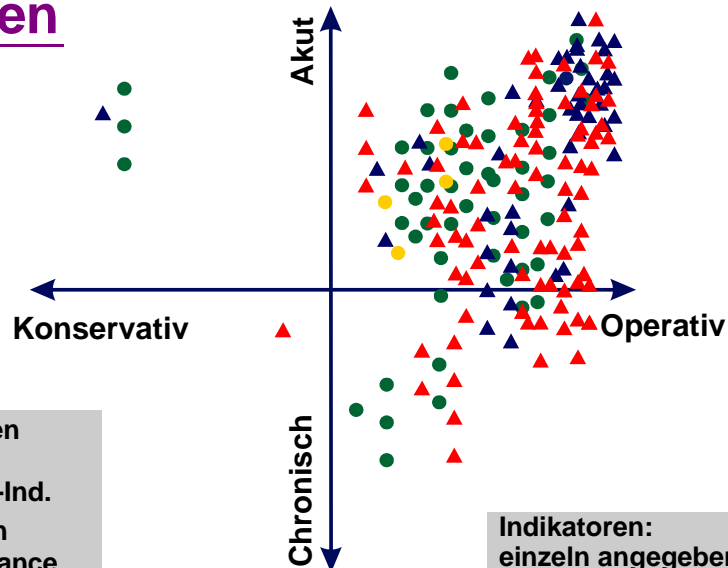
- 4 years à 300 mill. €, 1:1 Insurancefund / statutory health insurances



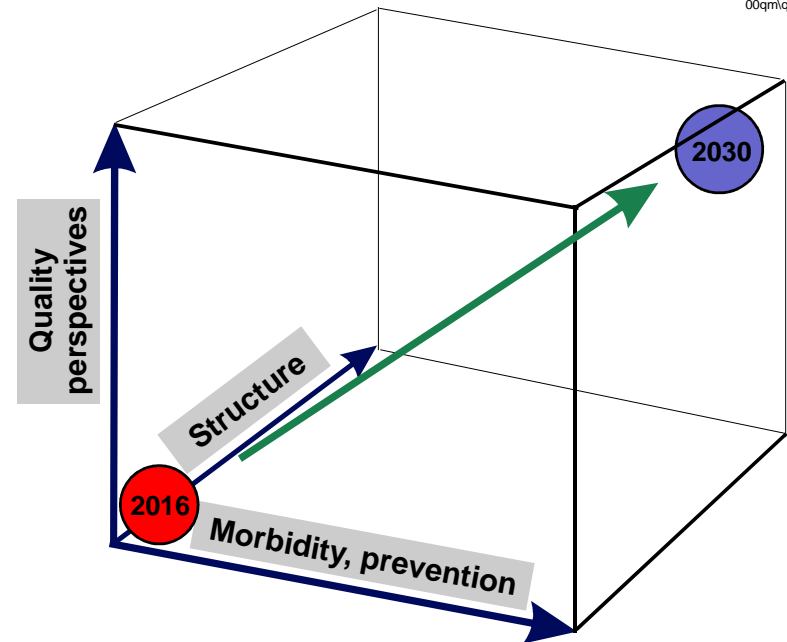
Für den AQUA-Qualitätsreport 2013:

Indikatoren

www.sgg.de

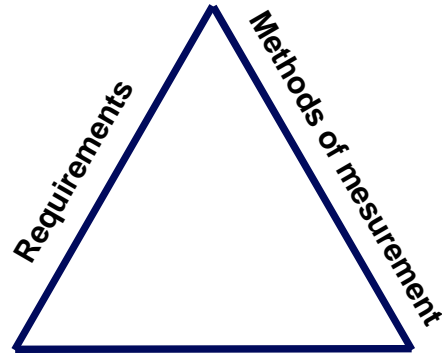


Indikatoren:
einzeln angegeben
Indikatorengruppen

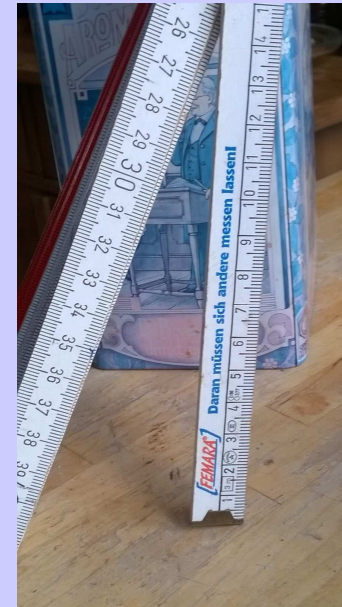


Quality Improvement

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Evaluating the Quality of Medical Care

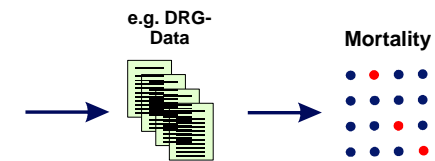
AVEDIS DONABEDIAN

Validity

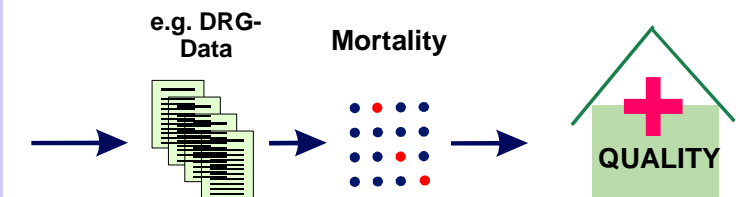
The effectiveness of care as has been stated, in achieving or producing health and satisfaction, as defined for its individual members by a particular society or subculture, is the ultimate validator of the quality of care. The validity of all other phenomena as indicators of quality depends, ultimately, on the relationship between these phenomena and the achievement of health and satisfaction. Nevertheless, conformity of practice to accepted standards has a kind of conditional or interim validity which may be more relevant to the purposes of assessment in specific instances.

The Milbank Q 44, 1966, 166-203

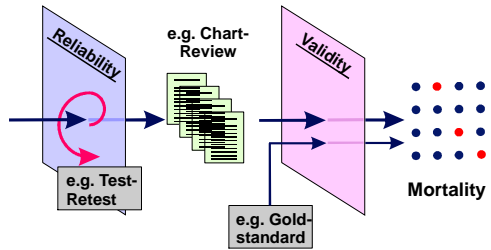
Determination of Mortality



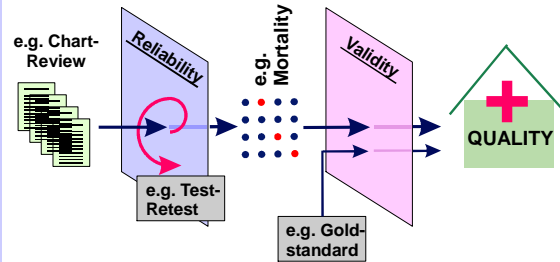
Indicator Mortality



"Counting"

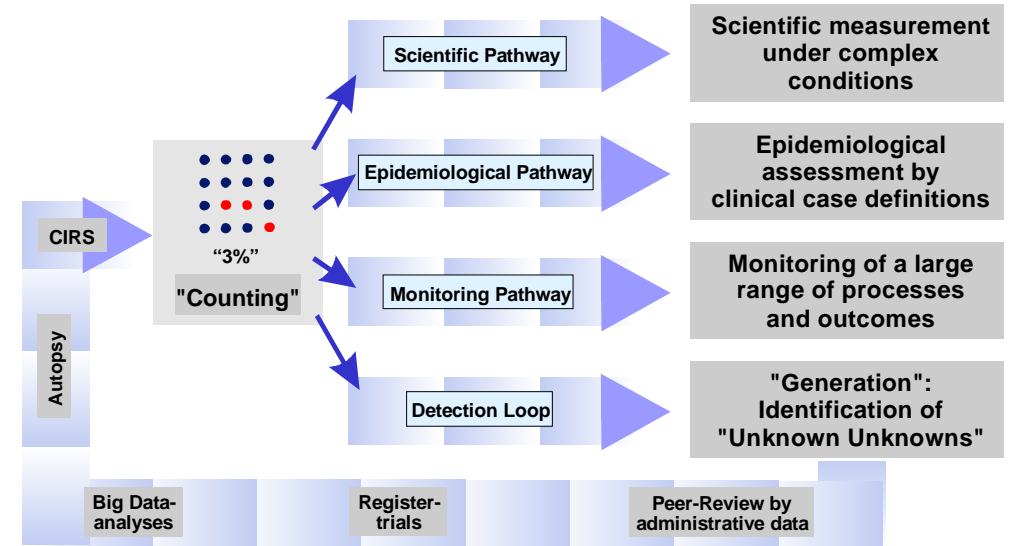


Indicator



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Determination of Quality: Methods

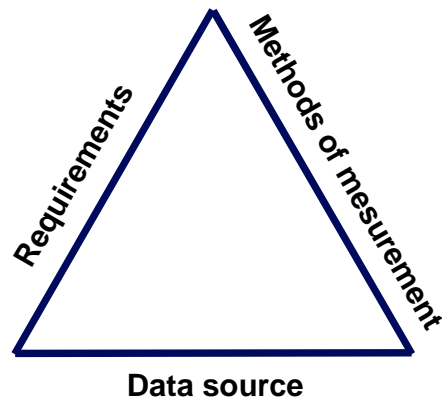


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Quality Improvement

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AE: Epidemiology and Measurement

- 795 rx pts admitted 10/2004 (LOS>24h) in 3 tertiary hospitals
- 33,2% (29-36) of pts. had AE (91/1000 pts.-days)
- IHI* 'Global Trigger Tool' more sensitive (354/393 AE) than AHRQ-PSI (35) and anonymous reporting (only 4 AE detected)

(E temporary harm => I death)	IHI Global Trigger Tool	AHRQ Patient Safety Indicators	Hospital voluntary reporting system
SEVERITY LEVEL			
E	204	23	0
F	124	7	2
G	8 ●	1	2
H	14 ●	0	0
I	4	4	0
Total	354	35	4
HOSPITAL			
Hospital A	161	13	0
Hospital B	92	13	3
Hospital C	101	9	1
Total	354	35 ●	4 ●

Classen et al. Health Aff. 30, 2011, 581

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*Inst. of Healthcare Improvement

00qmrmessen/globaltrigg.cdr

A National Profile Of Patient Safety In U.S. Hospitals

A low-cost, universally available **administrative data set** allows tracking of patient safety indicators in hospitals across the country.

by **Patrick S. Romano**, Jeffrey J. Geppert, Sheryl Davies, Marlene R. Miller, Anne Elixhauser, and Kathryn M. McDonald

ABSTRACT: Measures based on routinely collected data would be useful to examine the epidemiology of patient safety. Extending previous work, we established the face and consensual validity of **twenty Patient Safety Indicators (PSIs)**. We generated a national profile of patient safety by applying these PSIs to the **HCUP Nationwide Inpatient Sample**. The incidence of most nonobstetric PSIs increased with age and was higher among African Americans than among whites. The adjusted incidence of most PSIs was highest at urban teaching hospitals. The **PSIs may be used in AHRQ's National Quality Report**, while providers may use them to screen for preventable complications, target opportunities for improvement, and benchmark performance.

Romano et al. Health Aff. 22, 2003, 154

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Romano et al. Health Aff. 22, 2003, 154

Patient safety indicator	Total		Surgical		Medical/obstetric ^a	
	Number (95% CI)	Rate	Number	Rate	Number	Rate
Anesthesia reactions and complications	5,305 (±455)	0.056%	5,305	0.056%		
Death in low-mortality DRGs	5,912(±433)	0.043	1,075	0.040	4,835	0.068%
Decubitus ulcer	201,459 (±10,104)	2.130	55,139	1.755	146,321	2.316
Failure to rescue	267,541 (±5,056)	17.424	68,671	17.497	196,823	17.579
Foreign body left during procedure	2,710 (±204)	0.008	2,284	0.024	431	0.002
Iatrogenic pneumothorax	19,397 (±1,025)	0.067	8,847	0.117	10,547	0.050
Infection due to medical care	54,490 (±2,658)	0.193	24,898	0.037	29,585	0.147
Postop hip fracture	5,207 (±327)	0.080	5,207	0.080		
Postop hemorrhage/hematoma	17,014 (±968)	0.206	17,014	0.206		
Postop physiologic or metabolic derangement	4,003 (±419)	0.089	4,003	0.089		
Postop respiratory failure	12,842 (±938)	0.359	12,842	0.359		
Postop thromboembolism	75,811 (±4,156)	0.919	75,811	0.919		
Postop septicemia	14,055 (±1,060)	1.091	14,055	1.091		
Postop abdominopelvic wound dehiscence	3,858 (±289)	0.193	3,857	0.193		
Accidental puncture or laceration	89,348 (±5,669)	0.324	82,931	1.002	6,417	0.033
Transfusion reaction	138 (±49)	0.0004	85	0.0009	45	0.0002
Birth trauma	27,035 (±5,674)	0.667			27,035 ^b	0.667 ^b
Obstetric trauma—vaginal with instrumentation	60,622 (±3,104)	24.408			60,622 ^b	24.408 ^b
Obstetric trauma—vaginal without instrumentation	249,243 (±12,570)	8.659			249,243 ^b	8.659 ^b
Obstetric trauma—cesarean	5,523 (±597)	0.593			5,523 ^b	0.593 ^b



International Journal for Quality in Health Care, 2015, 1–9
doi: 10.1093/intqhc/mzv045
Article

OXFORD

Article

Are administrative data valid when measuring patient safety in hospitals? A comparison of data collection methods using a chart review and administrative data

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¹Institute for Patient Safety, 53111 Bonn, Germany, ²Public Health Unit, Faculty of Medicine, Heinrich-Heine-University Düsseldorf, 40225 Düsseldorf, Germany, and ³University of Cologne, 50923 Cologne, Germany

Table 4 Caseloads of PSIs based on DRG-administrative data and chart review

PSI	Population at risk	Patients with adverse events		
		Chart	DRG	Agreement
1 Pressure Ulcer	2,374	71	47	46
2 Catheter Related Infections	2,090	32	2	2
3 Postoperative Respiratory Failure	221	3	4	3
4 Postoperative DVT	1,498	8	6	2
5 Hospital acquired Pneumonia	2,876	90	23	21
6 Acute Renal Failure	2,907	170	53	30
7 Acute Myocardial Infarction	2,917	24	5	5
8 Wound Infection	1,413	58	31	26

P4P und VBP* in den USA

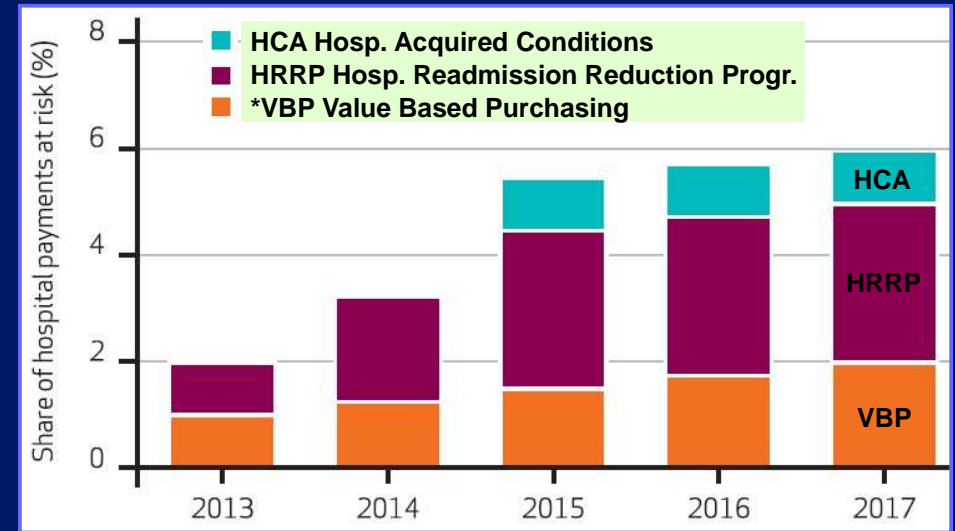
- Balanced Budget Act 1997
- Medicare Prescription Drug, Improvement and Modernization Act (MMA) 2003
 - Hospital Inpatient Quality Reporting (IQR)-Program
- Deficit Reduction Act (2005)
- Tax Relief and Health Care Act (2006)
- Patient Protection and Affordable Care Act (2010)
 - Value Based Purchasing Program
 - Hospital Readmission Reduction Program
 - Hospital-Acquired Condition Reduction Program

Kahn et al. 2015

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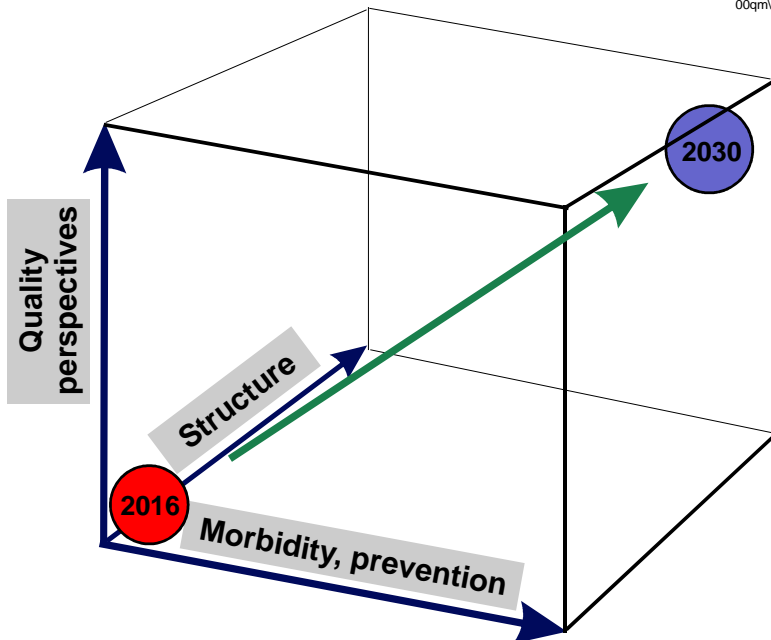
*VBP Value Based Purchasing

P4P und VBP* in den USA



Kahn et al. 2015

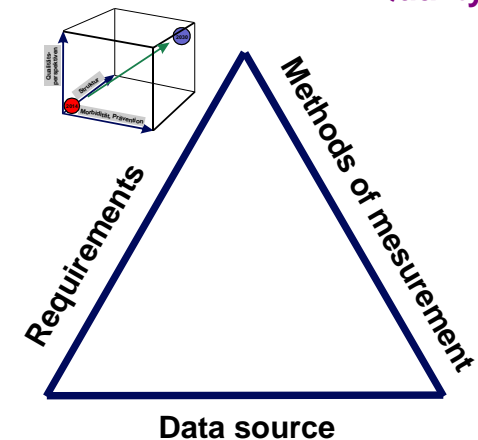
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Quality Improvement

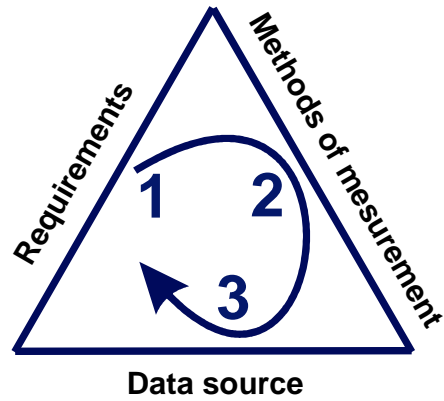
= Quality Determination



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Quality Improvement

= Quality Determination



Schluß

Vielen Dank für Ihre Aufmerksamkeit !

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