The Balance between Quality Healthcare Services and Costs

Council for Medical Schemes Third Indaba

27th November 2013

Health Quality Assessment HQA

TOWERS WATSON

Outline

- What is health quality?
- How can health quality be measured?
- What is important in terms of the measurement of health quality?
- Some extracts from the 2013 HQA Annual Report
- Impact of benefit design and/or cost on quality

What is Health Quality?

"Medical Quality is the degree to which healthcare systems, services and supplies for individuals and populations increase the likelihood for positive health outcomes and are consistent with current professional knowledge"

"Clinical quality improvement is an interdisciplinary process designed to raise the standards of the delivery of preventative, diagnostic, therapeutic, and rehabilitative measures in order to maintain, restore and improve health outcomes of individuals and populations"

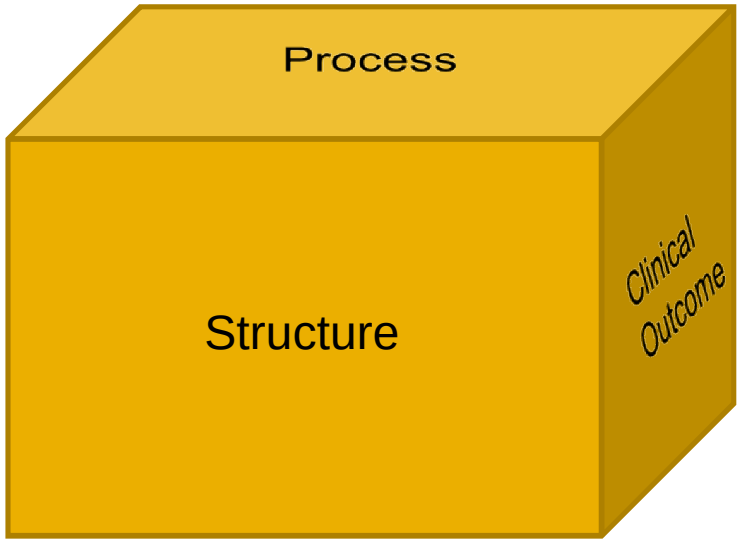
American Medical Association

Health Quality Measurement

- Various quality of care frameworks exist:
  - World Health Organisation – Recommended Quality of Care Framework
  - Bamako Initiative – implementation of strategies designed to increase availability of essential drugs and other healthcare services in Sub-Saharan Africa
  - Donabedian Model remains the dominant paradigm – Avedis Donabedian developed the model in 1966

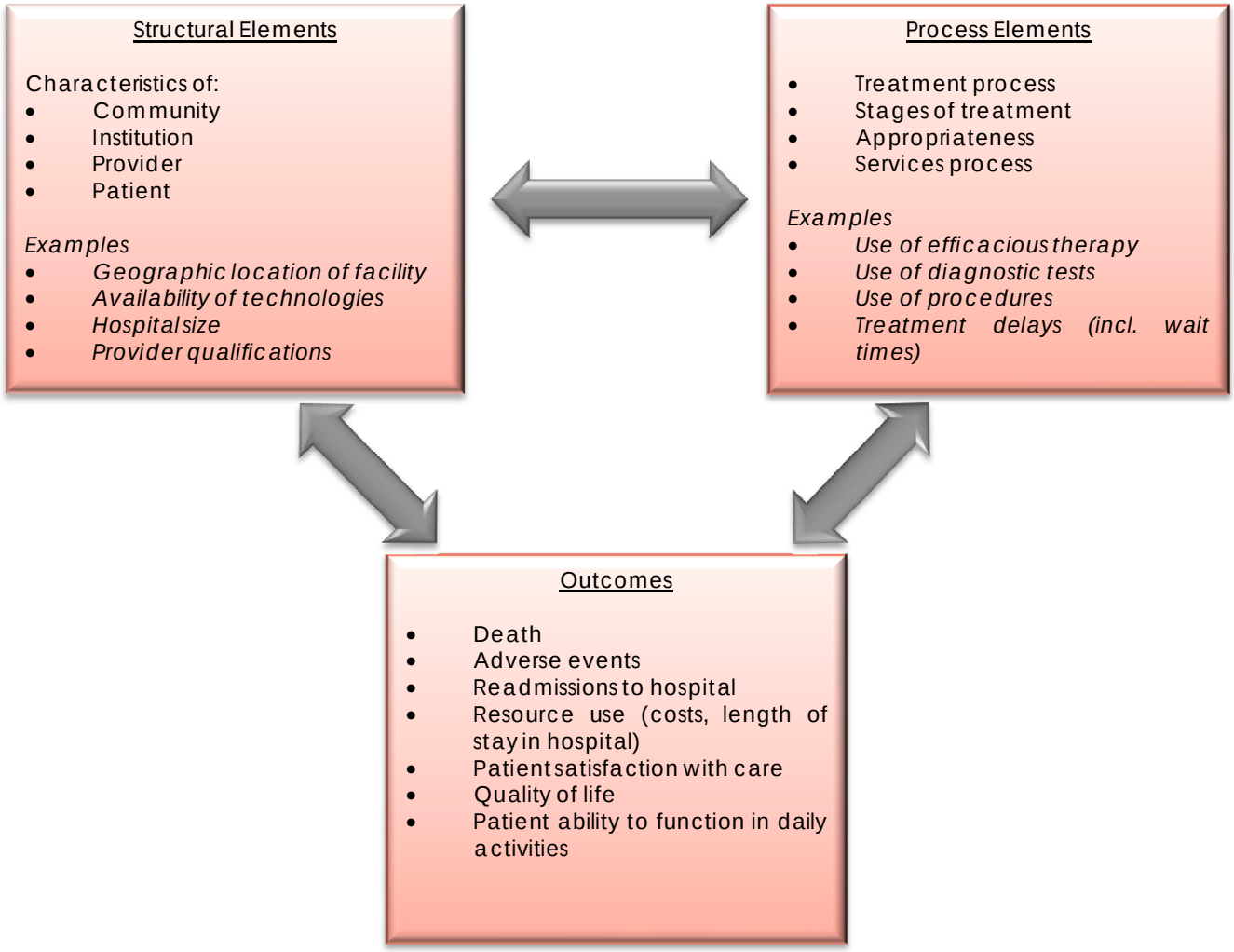
Health Quality Measurement

Donabedian Model



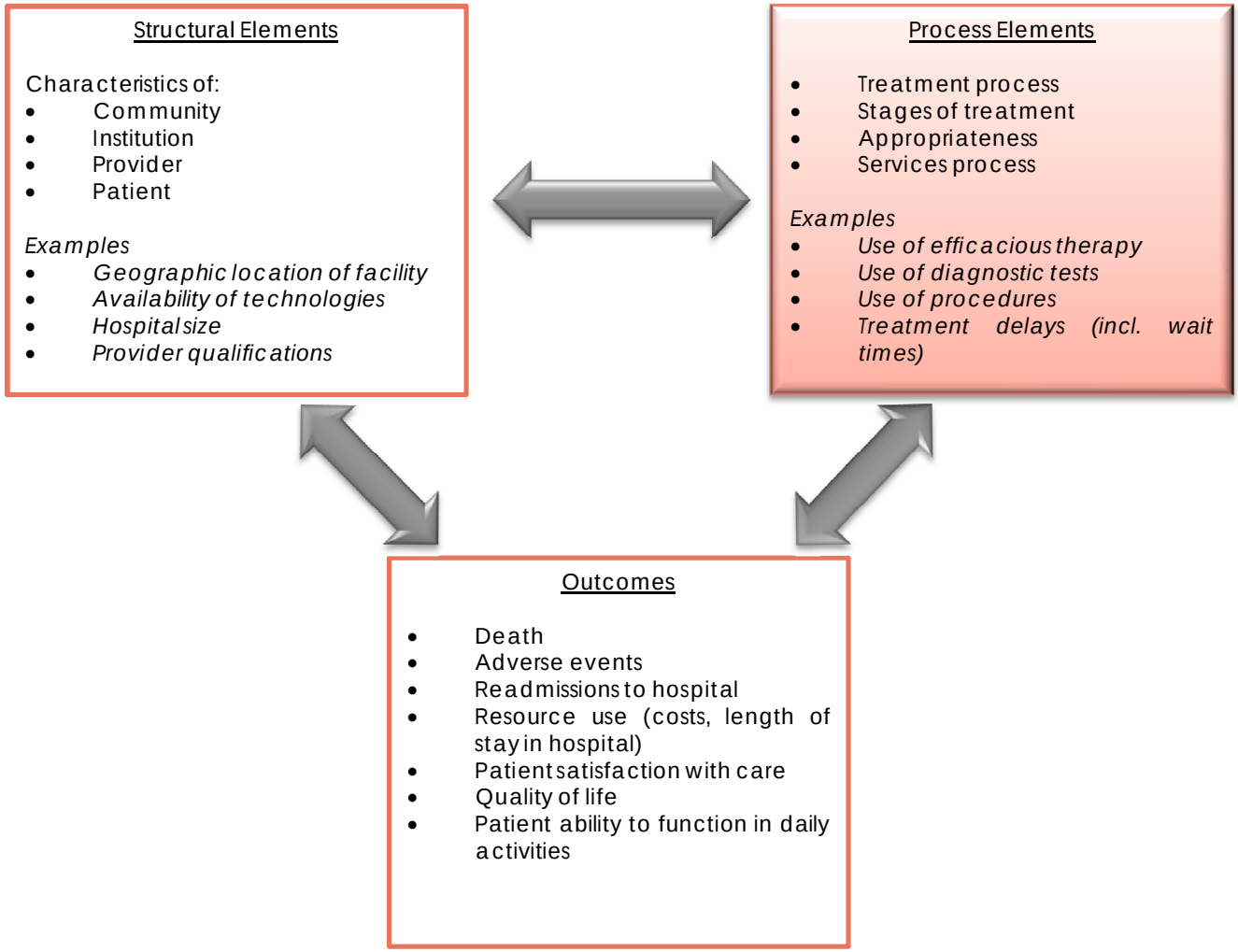
Health Quality Measurement

Donabedian Model



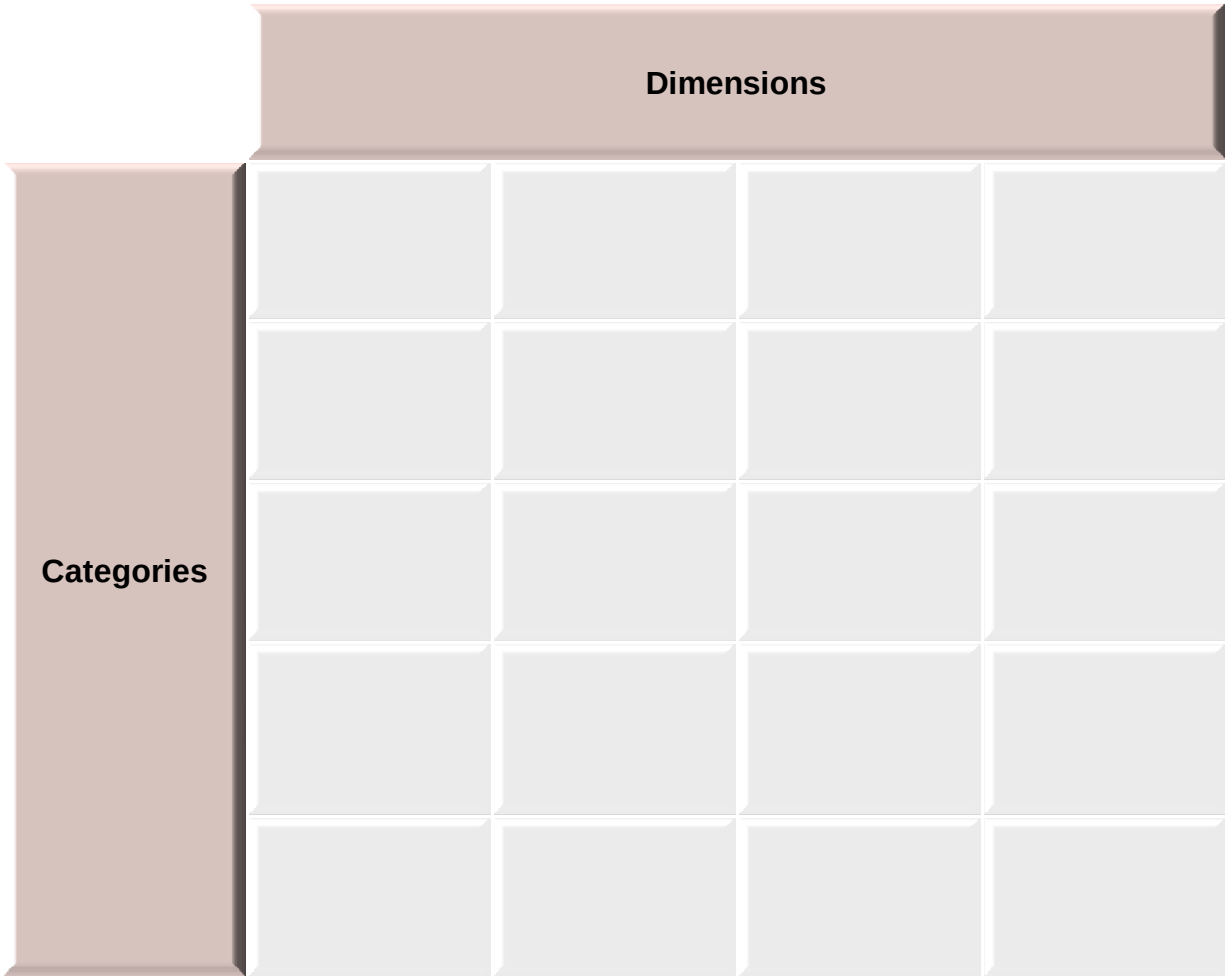
Health Quality Measurement

Donabedian Model



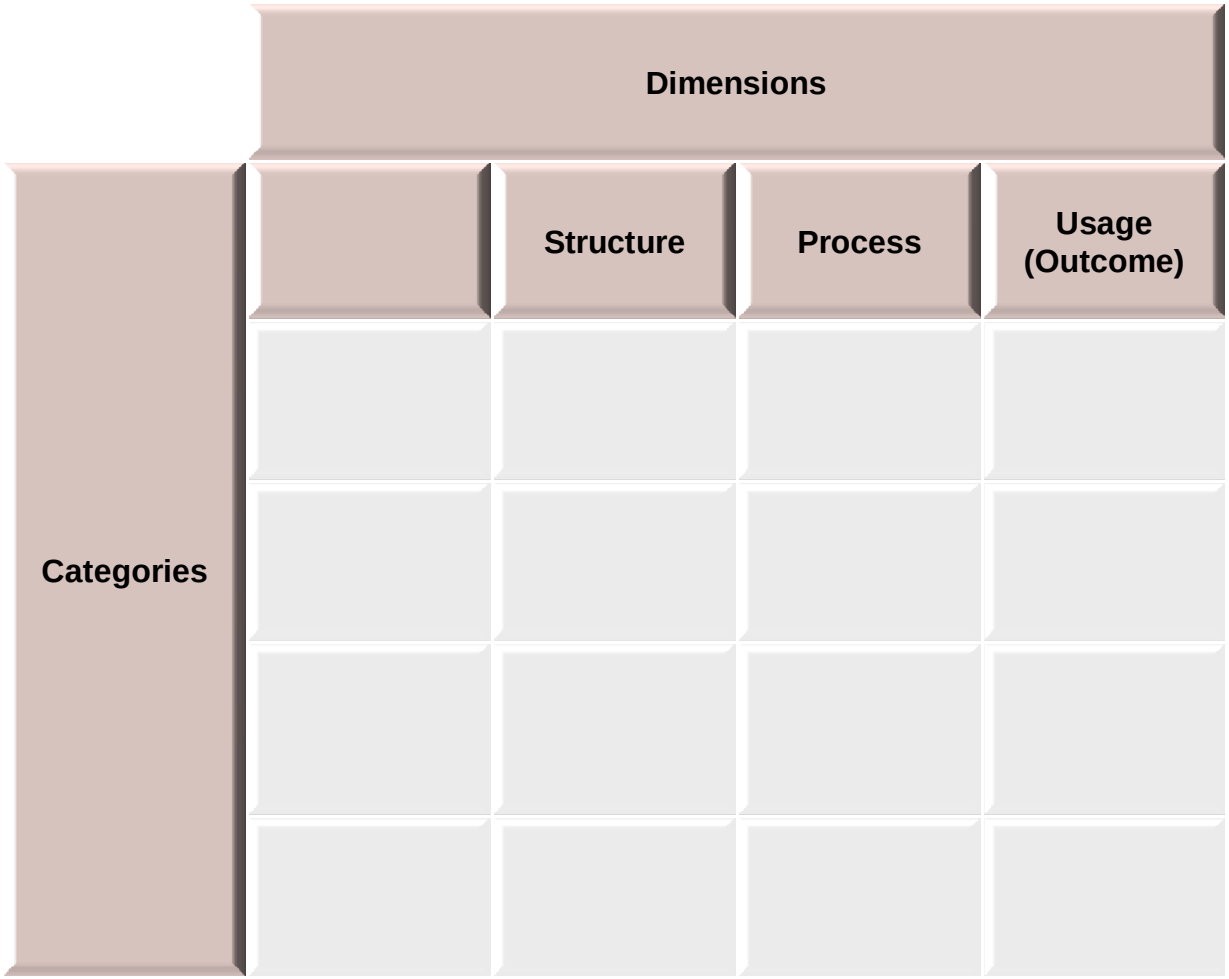
Health Quality Measurement

HQA Model



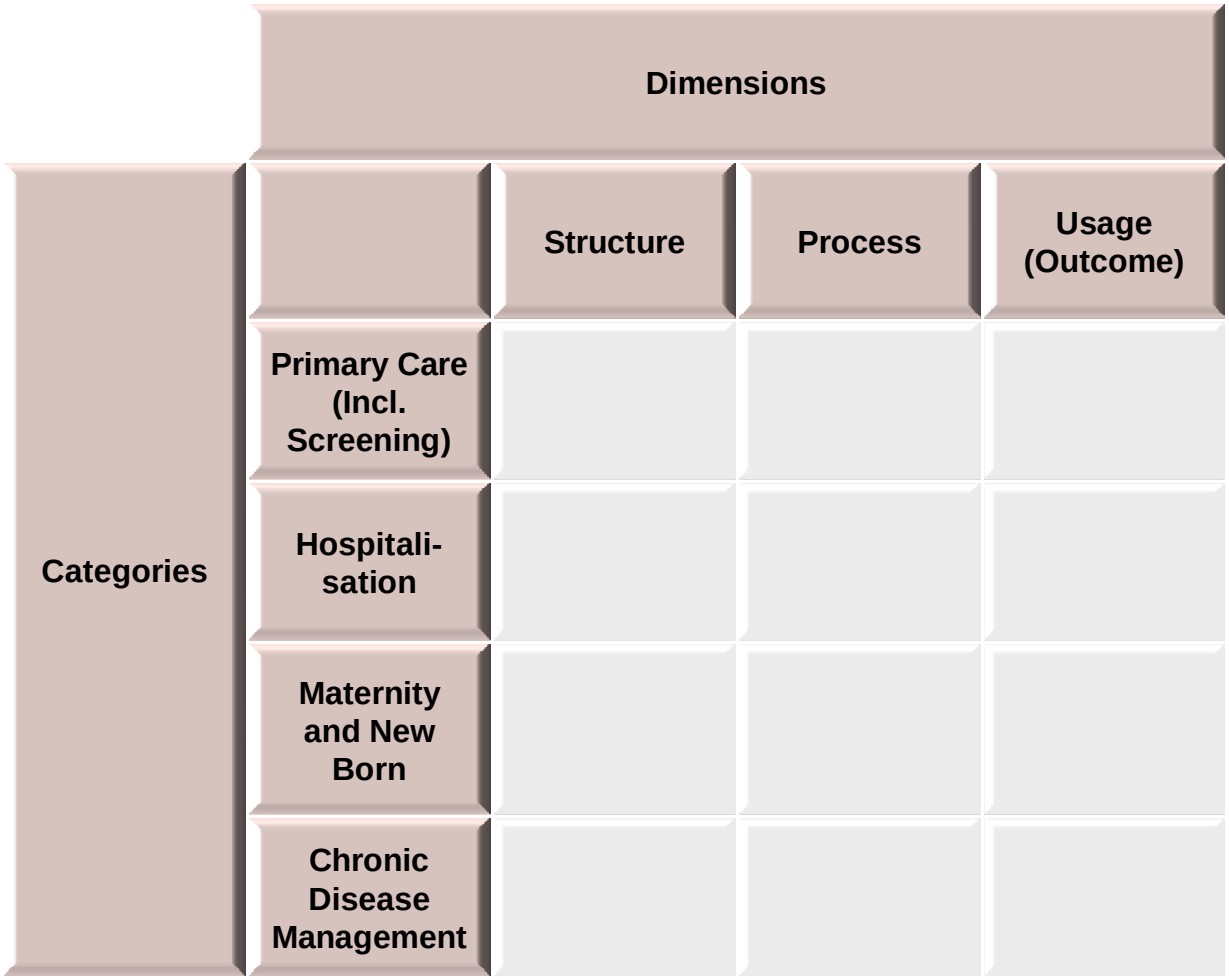
Health Quality Measurement

HQA Model



Health Quality Measurement

HQA Model



Health Quality Measurement

HQA Model

		Dimensions		
		Structure	Process	Usage (Outcome)
Categories	Primary Care (Incl. Screening)	X	√	√
	Hospitali-sation	X	X	√
	Maternity and New Born	X	√	√
	Chronic Disease Management	X	√	√

Health Quality Measurement

HQA Model

	Dimensions			
Categories		Structure	Process	Usage (Outcome)
	Primary Care (Incl. Screening)	X	10	5
	Hospitali-sation	X	0	38
	Maternity and New Born	X	5	6
	Chronic Disease Management	X	54	40

158 Indicators plus 24 Prevalence Measures

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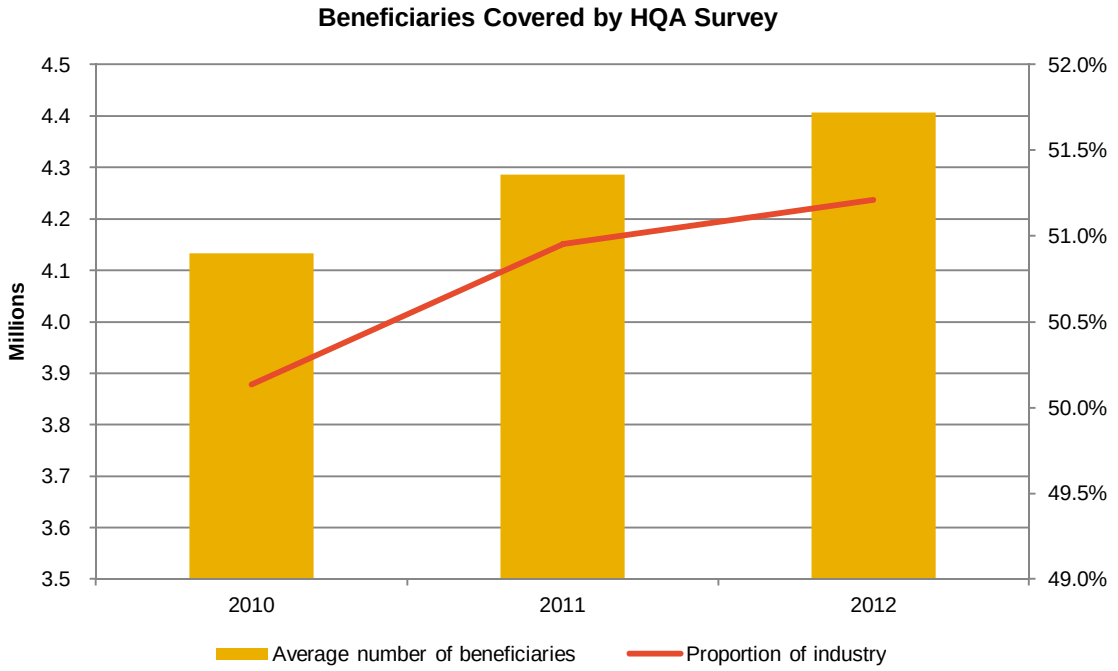
Health Quality Measurement

HQA Dataset



- 4.25 million lives (51.2% of covered lives)
- 15 Medical schemes
- Line and beneficiary level data from 2008

What is important?

- Understanding the determinants of results that have been achieved
  - Benefit design
  - Patient attitude, education and behaviour
  - Provider attitude, education and behaviour
- Benchmarking
  - Scheme vs option level benchmarking
  - Local benchmarks
  - International benchmarks
- Trends over time
  - Indicator definitions and the on-going refinement of the definitions
  - Results over time

⇨ Continuous learning and improvement process

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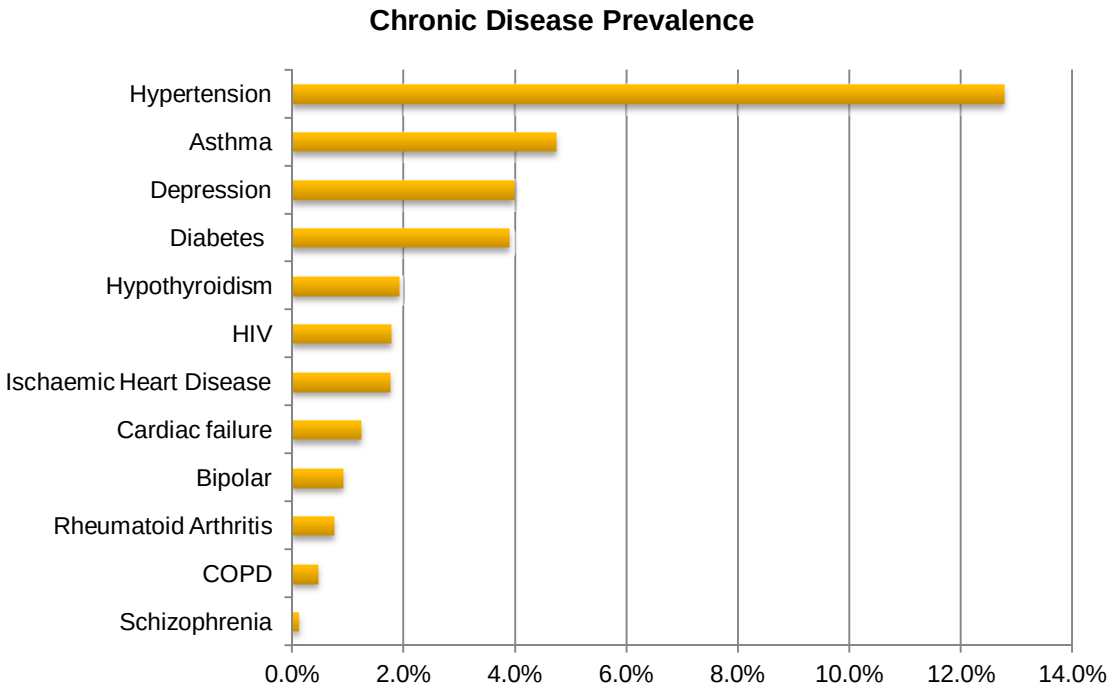
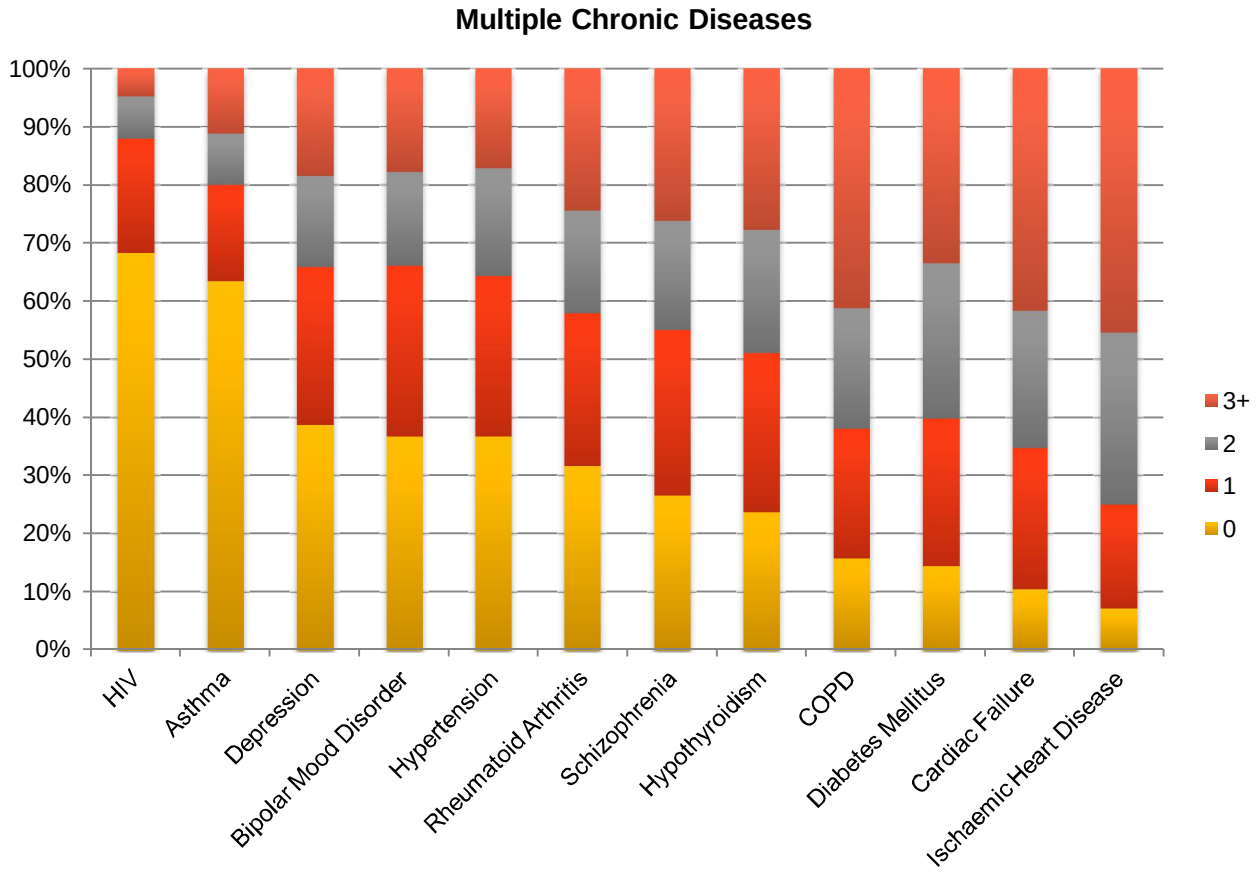
Trends



- The prevalence of hypertension is estimated to be between 55% and 59% (SADHS)
- About 6% of the general South African population are estimated to be Diabetic (CDE)

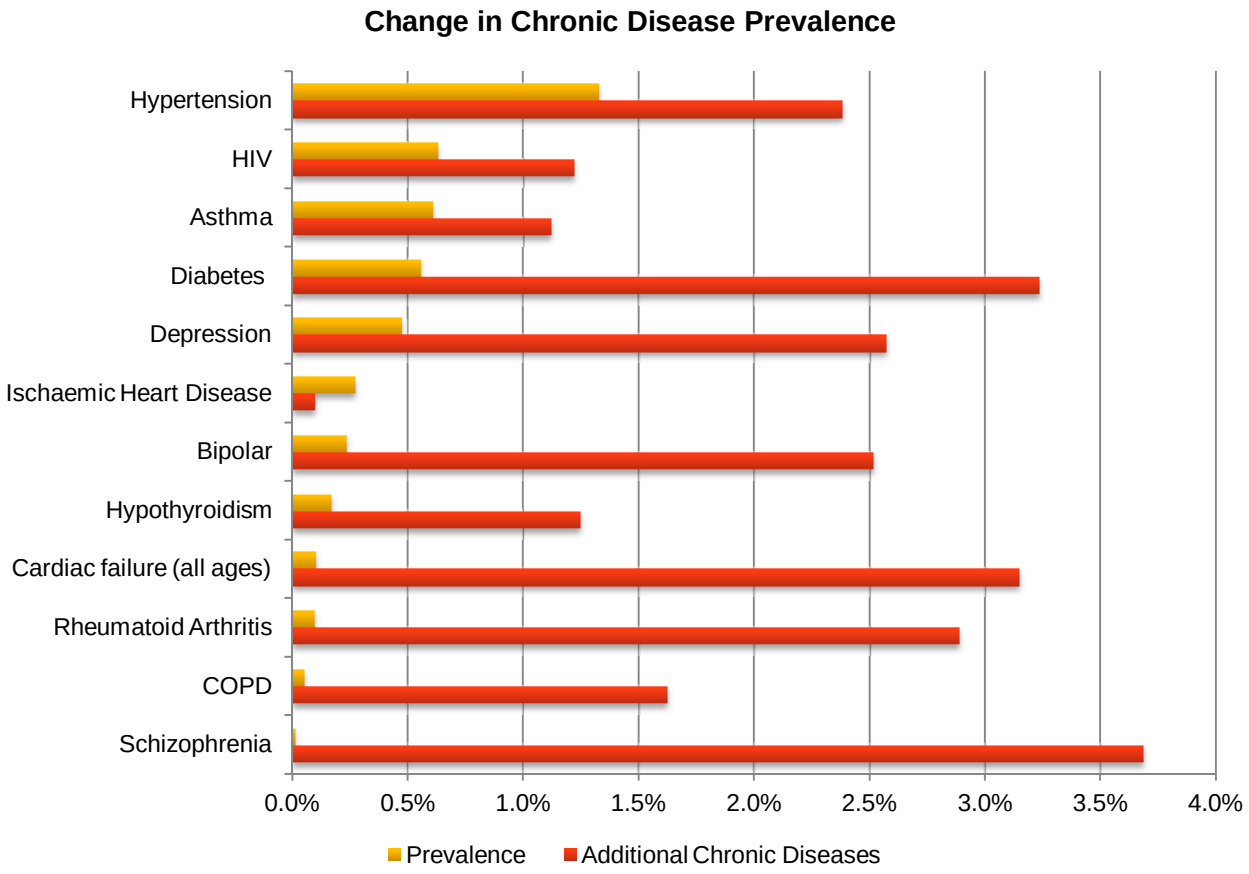
2013 HQA Report

Trends



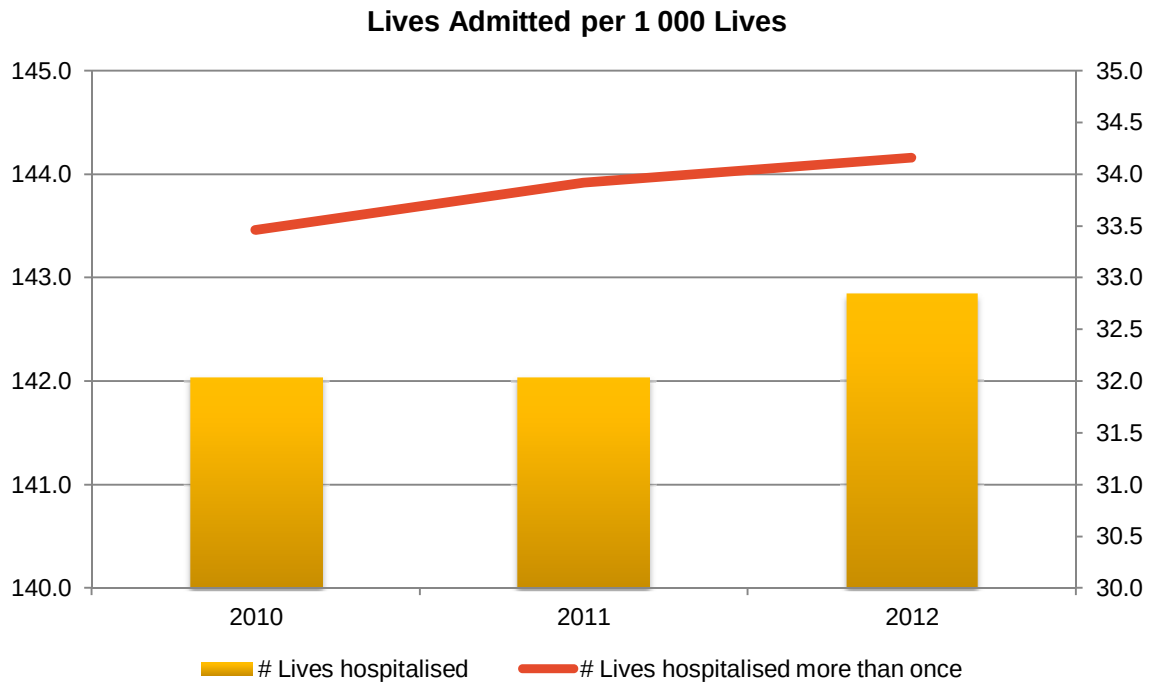
2013 HQA Report

Trends



2013 HQA Report

Trends



- Only overnight stay admissions have been counted
- 24.20% of lives that are admitted to hospital will be admitted a second time or more in the same calendar year

2013 HQA Report

Primary Care

Screening	Industry	75th Percentile	Min	Max	Standard Deviation	NCQA 75th Percentile Benchmark
Flu vaccine coverage >= 65years(%)	16.95%	19.60%	3.77%	21.67%	6.03%	57.00%
Mammogram coverage (ages 50-74 years in previous 2 years)(%)	26.84%	24.11%	7.11%	39.63%	9.85%	59.00%
Cervical Cytology coverage (previous 3 years)(%)	37.94%	34.57%	19.45%	45.52%	8.41%	74.00%
Bone densitometry coverage for all females aged 65 years or older (%)	5.06%	5.05%	1.03%	11.64%	3.04%	
Colorectal cancer screening ≥ 50 yrs in previous year (%)	2.92%	2.15%	0.39%	4.89%	1.29%	63.00%
HIV Screening (VCT) (All beneficiaries older than 12 years)	4.05%	4.78%	1.77%	7.97%	1.83%	

Screening	2010	2011	2012	Change
Flu vaccine coverage >= 65years(%)	8.27%	15.72%	16.95%	8.68%
Mammogram coverage (ages 50-74 years in previous 2 years)(%)	21.20%	25.92%	26.84%	5.64%
Cervical Cytology coverage (previous 3 years)(%)	28.51%	36.11%	37.94%	9.43%
Bone densitometry coverage for all females aged 65 years or older (%)	5.06%	5.08%	5.03%	-0.02%
Colorectal cancer screening ≥ 50 yrs in previous year (%)	2.92%	3.09%	3.22%	0.30%
HIV Screening (VCT) (All beneficiaries older than 12 years)	4.05%	4.56%	4.56%	0.50%

2013 HQA Report

Maternity

Maternity	Industry	75th Percentile	Min	Max	Standard Deviation
Hepatitis B serology coverage during pregnancy	25.77%	29.96%	16.82%	40.88%	6.45%
HIV Screening during pregnancy	35.62%	38.76%	20.65%	50.88%	8.42%
TSH coverage in newborns (≤ 6 weeks old) (%)	22.18%	45.21%	9.73%	69.09%	20.55%

Maternity	2010	2011	2012	Change
Hepatitis B serology coverage during pregnancy	23.73%	25.33%	25.77%	2.04%
HIV Screening during pregnancy	33.46%	35.39%	35.62%	2.16%
TSH coverage in newborns (≤ 6 weeks old) (%)	17.73%	19.40%	22.18%	4.45%

2013 HQA Report

Hospitalisation

Coronary Artery Disease	Industry	75th Percentile	Min	Max	Standard Deviation
Coronary Artery Stents	1.13	0.91	0.36	1.46	0.32
Coronary Artery Bypass Grafts	0.42	0.36	0.16	0.71	0.16

Readmission within 30 days	Industry	75th Percentile	Min	Max	Standard Deviation
Coronary Artery Stents	9.15%	8.54%	0.00%	17.80%	4.33%
Coronary Artery Bypass Grafts	12.16%	9.64%	0.00%	17.80%	5.93%

Readmission within 1 year	Industry	75th Percentile	Min	Max	Standard Deviation
Coronary Artery Stents	18.07%	19.84%	10.79%	28.81%	5.80%
Coronary Artery Bypass Grafts	16.63%	16.98%	0.00%	31.25%	7.83%

2013 HQA Report

Hospitalisation (2)

Spinal Surgery	Industry	75th Percentile	Min	Max	Standard Deviation
Spinal fusion	1.65	1.46	0.62	2.43	0.47

Readmission within 30 days	Industry	75th Percentile	Min	Max	Standard Deviation
Spinal fusion	6.81%	4.82%	1.41%	8.16%	1.97%

Readmission within 1 year	Industry	75th Percentile	Min	Max	Standard Deviation
Spinal fusion	8.67%	7.93%	2.82%	12.73%	2.59%

2013 HQA Report

Chronic Disease Management

Chronic Disease Management		Industry	75th Percentile	Min	Max	Standard Deviation	NCQA 75th Percentile Benchmark
COPD	Flu coverage for COPD beneficiaries(%)	17.35%	20.60%	3.04%	27.80%	7.15%	
	Number of GP consultations per beneficiary p.a	4.59	5.04	2.03	6.35	1.32	
	Number of specialist consultations per beneficiary p.a	1.26	1.70	0.59	2.36	0.50	
	Percentage of COPD registered beneficiaries admitted for a respiratory condition	18.56%	19.98%	7.07%	26.62%	5.39%	
	Percentage of COPD registered beneficiaries admitted for any reason	39.57%	40.58%	15.51%	58.88%	10.89%	
	COPD multiple admissions for a respiratory admission	5.15%	5.22%	1.43%	8.33%	1.92%	
	COPD multiple admissions for any reason	16.73%	17.18%	5.51%	29.96%	6.42%	
IHD	Aspirin coverage for IHD beneficiaries(%)	61.34%	58.94%	26.33%	69.00%	10.30%	
	Number of GP consultations per beneficiary p.a	3.88	4.78	1.98	6.58	1.39	
	Number of specialist consultations per beneficiary p.a	1.38	1.86	0.84	2.32	0.45	
	Percentage of IHD registered beneficiaries admitted for a cardiac condition	26.48%	28.95%	15.26%	34.88%	5.28%	
	Percentage of IHD registered beneficiaries admitted for any reason	42.03%	42.43%	20.55%	63.20%	9.56%	
	IHD multiple admissions for a cardiac condition	6.77%	6.75%	2.97%	9.20%	1.69%	
	IHD multiple admissions for any reason	16.69%	16.13%	6.07%	31.06%	5.81%	

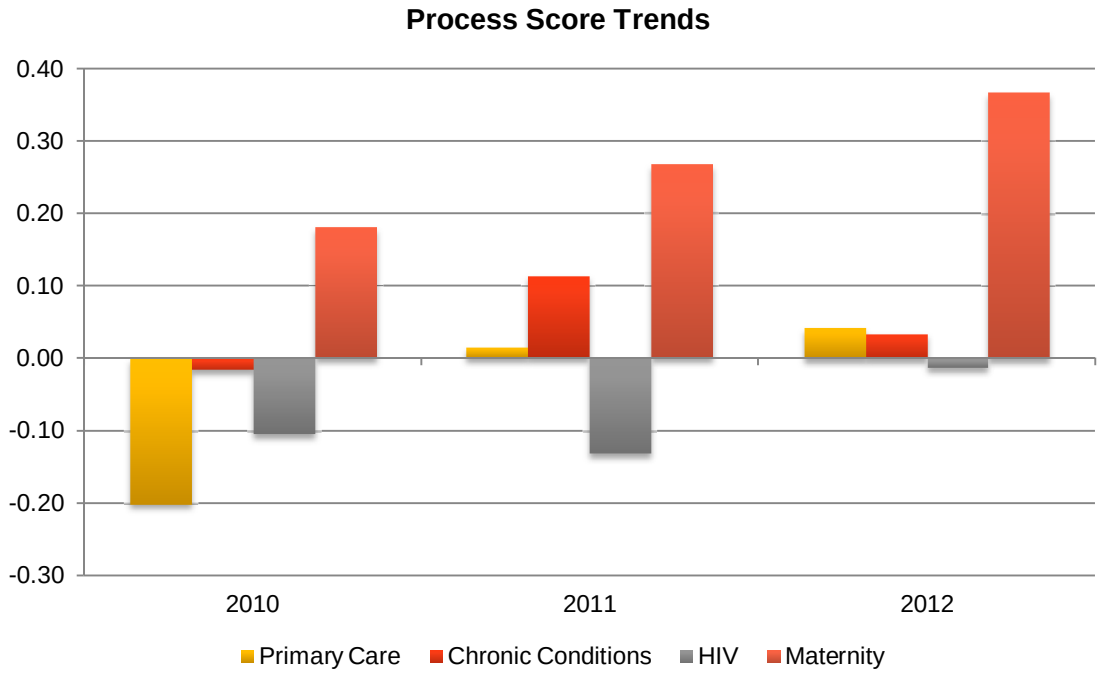
2013 HQA Report

Chronic Disease Management (2)

Chronic Disease Management		Industry	75th Percentile	Min	Max	Standard Deviation	NCQA 75th Percentile Benchmark
Diabetes	HbA1c coverage for Diabetic patients (%)	46.02%	51.88%	30.34%	62.65%	8.57%	94.00%
	Number of GP consultations per beneficiary p.a	4.45	4.70	2.30	6.62	1.26	
	Number of specialist consultations per beneficiary p.a	0.96	1.35	0.57	1.91	0.39	
	Percentage of Diabetes registered beneficiaries admitted for a short-term complication of diabetes (excl. Hypoglycaemia)	6.43%	6.48%	1.99%	12.07%	2.26%	
	Percentage of Diabetes registered beneficiaries admitted for any reason	26.84%	25.79%	9.76%	49.82%	9.02%	
Depression	10 day post discharge follow up (%)	1.91%	2.17%	0.00%	2.99%	0.85%	56.00%
	30 day post discharge follow up (%)	4.94%	5.03%	1.08%	6.78%	1.73%	
	Number of specialist consultations per beneficiary p.a	0.93	1.24	0.41	1.51	0.33	
	Number of GP consultations per beneficiary p.a	4.83	5.04	2.42	7.30	1.42	
	Percentage of Depression registered beneficiaries admitted for Depression	8.24%	9.40%	5.98%	17.34%	3.21%	
	Percentage of Depression registered beneficiaries admitted for any reason	28.56%	28.84%	12.61%	56.27%	10.05%	
	Depression multiple admissions for Depression	1.00%	1.00%	0.48%	1.63%	0.33%	
	Depression multiple admissions for any reason	9.06%	9.57%	2.96%	24.76%	5.16%	

Process Indicators

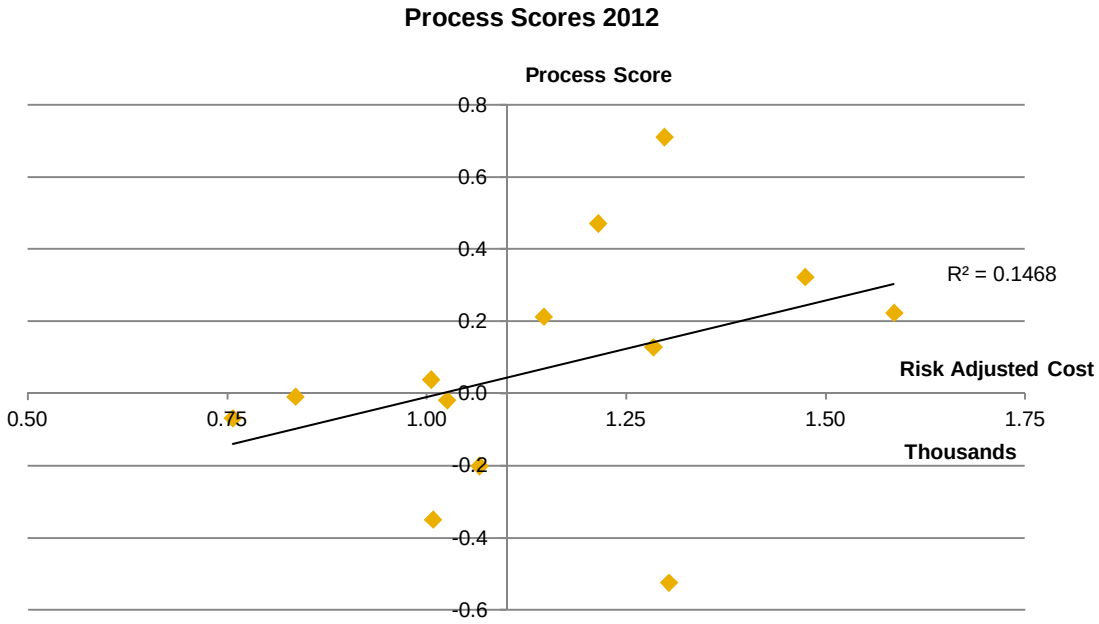
Scores



- Progress has been made in all Process Indicator dimensions, except chronic disease management
- However, the scores are calculated relative to an industry benchmark (which is low)

Process Indicators

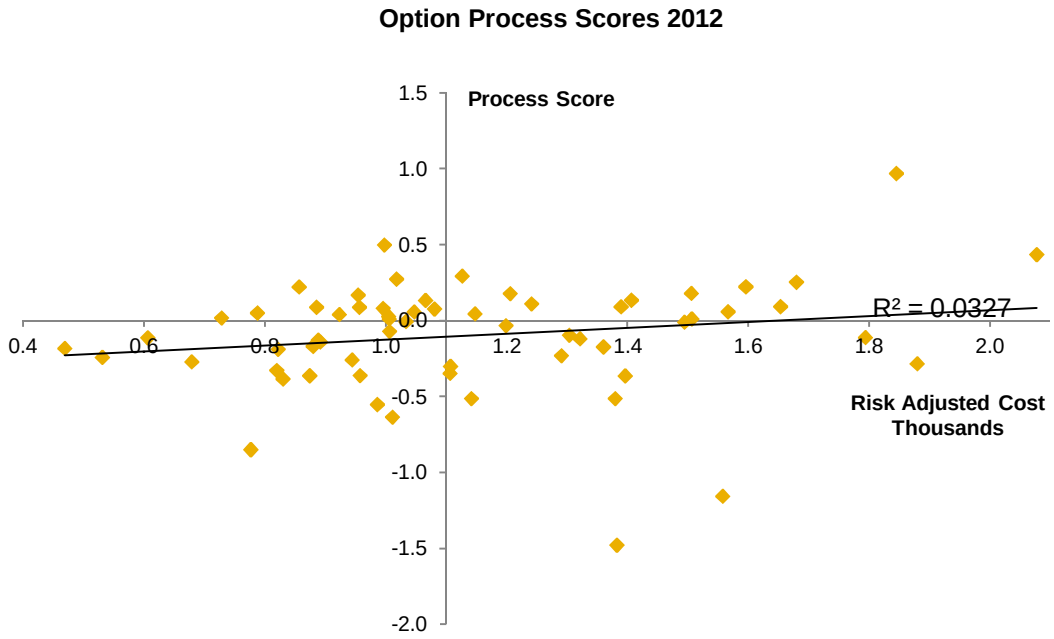
Correlations



- A correlation exists between cost and Process scores (Quality)
- Some schemes have other funding priorities

Process Indicators

Correlations



- The correlation is weaker at an option level
- Some options with relatively low risk adjusted costs have above average Process scores (Got it right?)
- Many options have low risk scores despite the availability of benefits
- Are low cost options compromising on quality?

Conclusion

- Health quality is multi-factorial and complex
- It is not only about money and/or benefits
- It is also about attitudes, mind-sets, education and acceptance of responsibilities
- It is a process