


Are Clinical Indicator Reports Used or Useful When Accrediting Australian Hospitals?

R. Gibberd, S. Chuang, H. Stark

Presented by: Sheuwen Chuang, PhD
 Research Fellow,
 Health Services Research Group,
 Centre for Clinical Epidemiology & Biostatistics,
 University of Newcastle, Australia
Sheuwen.chuang@newcastle.edu.au

14th October 2009, Dublin, Ireland

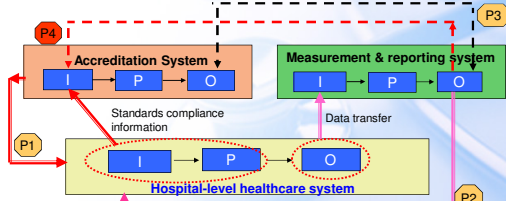


Contents

- Background and Objective
- Research Method
- Results
 - Respondents characteristics
 - Use of CI reports
 - Observation of using CI reports by HCO
 - Perceived utility of CI reports
 - Comments on CI reports
- Conclusions

Objectives

- To determine how surveyors use the clinical indicator reports when accrediting hospitals
- To determine the perceived usefulness of the clinical indicator reports for hospitals, surveyors, staff



(S. Chuang & K. Inder, 2009. An effectiveness analysis of healthcare systems using a systems theoretic approach)

Background

- The Australian Council on HealthCare Standards, ACHS, accredits over **90%** of Australian hospitals
- The majority of hospitals provide clinical indicators (CI) to the ACHS
- Hospitals receive **6-monthly** and 'trend' reports showing their results for the years 2001 onwards

ACHS clinical indicators program- 2007

Clinical Indicator Set	Number of CIs
Adverse Drug Reaction	8
Anesthetics	44
Day Surgery	7
Dermatology	26
Emergency Medicine	9
Gastrointestinal Endoscopy	8
Gynaecology	13
Hospital in the Home	8
Hospital Wide	16
Infection Control	48
Intensive Care	8
Internal Medicine	19
Mental Health Inpatient	27
Mental Health Community	6
Otolithics	15
Ophthalmology	16
Oral Health	21
Paediatric	10
Pathology	10
Radiation Oncology	10
Radiology	5
Rehabilitation Medicine	7
Surgical	19
Total	360

- 341 public health care organisations
- 348 private health care organisations
- total 689 HCOs
- 23 clinical indicator sets, 360 CIs

ACHS Clinical Indicator Six-monthly Report

General Comparison - Hospital Wide Clinical Indicators Version 9 - By CI set

ACHS Organisation Code: First Half 2005 Category: All
 Total number of organisations for the selected category submitting data for this set for First Half 2005: 361

Indicator Number/Description	Your Numerator	Your Denominator	Your Rate	95% Confidence Interval for your rate	Your expected number of events	Your observed minus expected (excess events)	No. of Organisations submitting data (HCO05)	Aggregate rate for these organisations (HCO05)
1.1 Medication Incidents	298	119043	0.25	(0.21-0.29)	541.15	-243.15	125	0.45
1.2 Medication Incidents resulting in an adverse event	15	119043	0.01	(0.00-0.02)	13.73	1.27	98	0.01
3.1 Number of patients having an unplanned return to the operating room during the same admission	77	8562	0.90	(0.64-1.16)	36.03	40.97	243	0.42
4.1 Inpatients who developed one pressure ulcer	98	106901	0.09	(0.07-0.12)	66.05	31.95	119	0.06
4.2 Inpatients who developed more than one pressure ulcer	7	106901	0.01	(0.00-0.01)	15.89	-8.89	90	0.01
4.3 Inpatients who are admitted with one or more pressure ulcer	14	106901	0.01	(0.00-0.02)	82.50	-68.50	91	0.08
4.4 The number of inpatients who develop a Stage 1 pressure ulcer during their admission	49	98	50.00	(37.02-62.98)	15.34	33.66	81	15.65

ACHS Clinical Indicator Trend Report

Three tables and One trend plot

1. Indicators of Interest – By CI set
 Day Surgery Indicators Version 4

Indicator	Overall rate	Trend	First year	Last year	Best 20%	Poorest 20%	All
1.1 Failure to arrive (L)	Ha	↑	2001	2008	0	14	14
1.4 Cancellation after arrival due to administrative/organisational reasons (L)	Ha	↓	2001	2008	0	13	13
3.1 Unplanned overnight admission (L)	Ha	↓	2001	2008	0	7	14
4.1 Unplanned delay in discharge of a patient following operation/procedure (L)	Lv	↑	2001	2008	7	0	14

2. Summary of indicator submission – By CI set

DAY SURGERY Indicator V4	2001	2002	2003	2004	2005	2006	2007	2008	All	
1.1 Failure to arrive (L)	Ha	↑	2	1	2	2	2	1	2	14
1.2 Cancellation after arrival due to pre-existing medical conditions (L)	↑	1	1	2	2	2	1	2	2	13
1.3 Cancellation after arrival due to an acute medical condition (L)		1	1	2	2	2	1	2	2	13
1.4 Cancellation after arrival due to administrative/organisational reasons (L)	Ha	↓	1	1	2	2	2	1	2	13
2.1 Unplanned return to the operating room during the same admission (L)		2	1	2	2	2	1	2	2	14
3.1 Unplanned overnight admission (L)	Ha	↓	2	1	2	2	2	1	2	14
4.1 Unplanned delay in discharge of a patient following operation/procedure (L)	Lv	↑	2	1	2	2	2	1	2	14

ACHS Clinical Indicator Trend Report

3. Individual Indicator Results – By year
 1.2 Cancellation after arrival due to pre-existing medical conditions (L)

Year	S	Number	Denom	HCO Rate*	Rate* (20)	Rate* All	Rate* (80)	Excess	Cum Excess
2001	2	0	3,250	0	0.046	0.30	0.43	10	-10
2002	1	8	3,477	0.23	0.048	0.28	0.39	-2	-12
2003	1	6	3,747	0.16	0.054	0.23	0.34	-3	-14
2004	2	5	3,859	0.13	0.054	0.23	0.34	-4	-19
2004	1	8	4,916	0.16	0.049	0.19	0.31	-1	-20
2005	2	19	6,649	0.29	0.049	0.19	0.31	6	-14
2005	1	32	8,606	0.48	0.069	0.18	0.29	20	6
2006	2	17	9,834	0.29	0.069	0.18	0.29	8	13
2006	1	7	4,147	0.17	0.056	0.17	0.27	13	13
2007	1	6	3,981	0.19	0.052	0.17	0.30	1	13
2007	2	16	3,138	0.51	0.052	0.17	0.30	11	24
2008	1	12	2,952	0.41	0.047	0.17	0.27	7	31
2008	2	10	1,888	0.53	0.047	0.17	0.27	7	38

- Trend Plot – By CI

Research method

- Semi-structured open and closed questionnaire
- A questionnaire was emailed to 306 ACHS surveyors in January 2009 and responses were collected through an internet survey tool
- The survey asked how the six-monthly and trend reports were used and understood by surveyors, hospitals and clinical staff

Results

- 73 respondents out of 306 surveyors, response rate 24%
- Categories of Results
 - Respondents characteristics
 - use of CI reports
 - Observation of using CI reports in HCO
 - Perceived utility of CI reports
 - Comments on CI reports

Respondents' characteristics

- **Current employment**
 - . 44 worked full time and 12 were retired
 - . 41 employer sponsored and 31 honorarium surveyors, with one full-time surveyor
- **Number of surveys carried out in the last year**
 - . ranged from 1 to over 10, with an average of 4.5
- **Years surveying for ACHS**
 - . 34 (47%) surveyors had > 5 years experience,
 - . 24 (33%) surveyors had > 10 years experience,
 - . 15 (20%) had < 2 years experience

Respondents' characteristics

- **Number of organization types surveyed**
 - . 62 reported that they had surveyed acute general hospitals.
- **Surveyors' profession**
 - . professional backgrounds were nursing (33), medicine / dentistry (21), administration / management (12). Others(5)
- **Knowledge of CIs**
 - . 53 (73%) surveyors said that looking at indicators was part of their job
 - . 41 (61%) claim that CIs were included in their surveyor training program
 - . 34 (51%) took CI data collection is/has been part of their job

Use of CI reports

- Surveyors used the 6-monthly report (51%) and trend report (46%) always or most of the time
- The most useful CIs were the hospital wide and infection control CIs
- The indicator reports were discussed with the hospital always or mostly by 48% of surveyors.

Were the CI reports used by hospitals?

- 48 respondents (49%) thought that hospitals used the 6-monthly report to monitor or improve care
- 41 respondents (53%) thought that the trend report was used
- There were 38 open ended responses and half reported that hospitals attitude to the CI reports were generally positive
- The remainder reported there were "worries", "questions", "difficult to understand"

Were the CI reports used by hospitals? Surveyors' observation

No comments		24	24
Positive attitude	Generally positive, feedback, usually	19	19
Puzzle or negative attitude	Requirement, tool	1	19
	worries, question	6	
	Depends on, some are, varies attitude	9	
	difficult, unwieldy, ignore	3	

Useful data in six-monthly report

Useful data	count	Response %/	A	B	C
A	16	21.9	16		
AC	15	20.5	15		15
ABC	14	19.2	14	14	14
C	13	17.8			13
No answer	7	9.6			
B	4	5.5		4	
BC	3	4.1		3	3
AB	1	1.4	1	1	
Respondent	73		46	22	45
Response %			63.0	30.1	61.6

A: Indicator rates, B: Observed minus expected rate (the excess), C: Statistical significance (outliers)

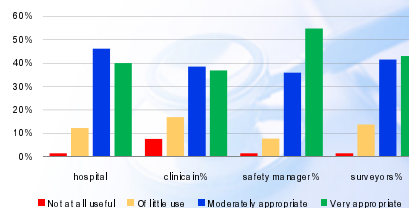
Useful data in trend report

Useful data	count	Response %/	A	B	C
C	14	19.2			14
ABC	13	17.8	13	13	13
A	11	15.1	11		
AC	11	15.1	11		11
No answer	9	12.3			
AB	6	8.2	6	6	
B	5	6.8		5	
BC	4	5.5		4	4
Respondent	73	100.0	41	28	42
Response %/			56.2	38.4	57.5

A: the trend in rates, B: evidence of outliers, C: the summary pages

Perceived utility of CIs reports

- The CI reports were judged to be very or moderately appropriate for
 - quality managers (89%), hospitals (86%), surveyors (85%), clinicians (75%)



Comments regarding usefulness of CI reports

- identifies **areas of concern**, leading to improvement opportunities
- the comparative performance and benchmarking plus trending of performance
- comparison** with other institutions
- trend analyses** are most useful
- identifies **outlier** results
- essential tool: comprehensive and relevant to hospital over time
- language of CI is established and not hard to follow

Comments regarding problems of CI reports

- some CIs collected just because they can, but interpretation is obscure
- Some CIs need updating
- as a surveyor, we don't need the detail and we don't have time to micro manage
- long & wordy, need more concise presentation of data, not reader friendly
- unsure if data reflects actual practice
- have difficulty understanding what the numbers actually mean
- the CIs are not interpreted in the same way by all organisations
- not useful in small facilities

Discussion

Issues arising from survey

- Simplicity or Sophistication
 - controversy between surveyors
- To use or being useful
 - concerns about report format and contents

Conclusion

- These results relate to accreditations in 2008 and reflect the **increasing role** of using quantitative data as a screening tool to identify areas for review by surveyors
- The "Trend Report" has been modified based on the result of survey for better understanding
- In the long term
 - **Increase the interaction** between accreditation systems and clinical indicator reports

New format of trend report – 2009 September

Emergency Medicine Indicators Version 4

Indicator	Overall rate	2007 2008 rate	Trend	First year	Last year	Best 20%	Poorest 20%	All	Comment
1.2 ATS Category 2 patients attended to within 10 minutes (H)	H✓		↓*	2001	2008	1	3	13	Overall rate high but deteriorating.
1.3 ATS Category 3 patients attended to within 30 minutes (H)	H✓	H✓	↓*	2001	2008	5	3	13	Overall rate high but deteriorating. Rate high in 2008.
1.4 ATS Category 4 patients attended to within 60 minutes (H)	H✓	H✓	↓*	2001	2008	5	3	13	Overall rate high but deteriorating. Rate high in 2008.
1.5 ATS Category 5 patients attended to within 120 minutes (H)	H✓	H✓	↓*	2001	2008	5	3	13	Overall rate high but deteriorating. Rate high in 2008.

Thank you