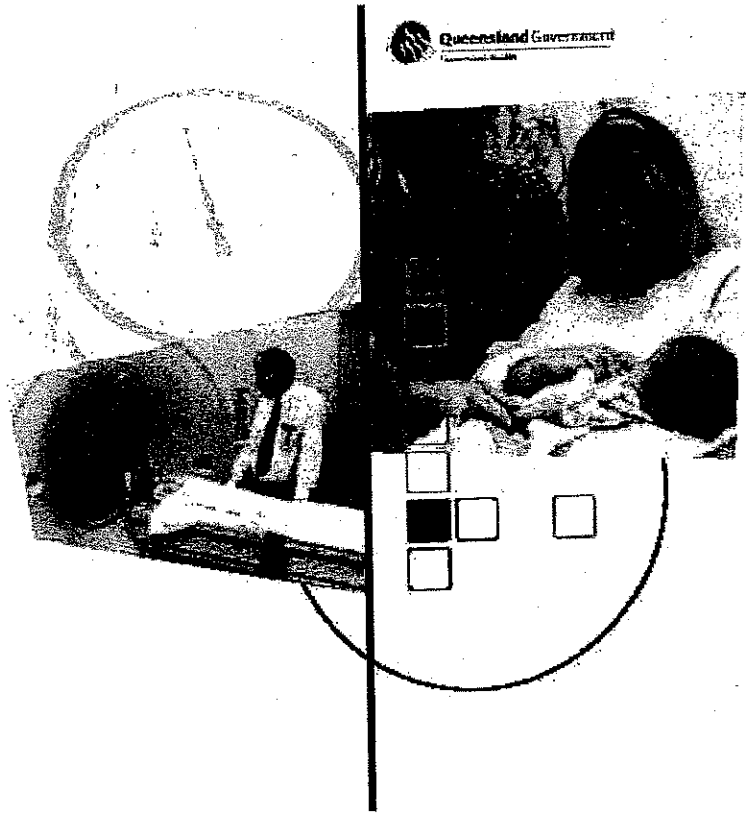
'JEC4'

Measured Quality Service



Report to the Board of Management

December 2004

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Executive Summary

Introduction

Since the first quality indicators were produced, Measured Quality has disseminated, identified key issues, and collected feedback on causes and actions for 2003 and is currently finalising 2004. One of the key messages from this experience is that when the indicators are reviewed organisationally, they do not provide proof in themselves that one hospital provides better overall health care than another. Rather, they identify specific areas for potentia l improvement for each hospital. They also provide useful evidence for Queensland Health to use alongside other sources of insight and information for working to improve the quality of health care provided across the organisation. The purpose of the Measured Quality indicators is to flag variation in performance which will prompt in-depth analysis of particular areas of service provision. Therefore, it is important to remember that there can be a number of reasons for identified variation in performance and focus should remain on determining the reasons for variation prior to judgements being made regarding actual performance, followed by the necessary action/s to be taken for improving performance, where appropriate. This report uses the Measured Quality experience and its lessons to provide a concise set of core organisational recommendations for quality improvements based on specific, measurable outcomes.

Summary of Findings and Recommendations

The body of this report provides a summary of 48 selected indicators from three of the four quadrants which highlight issues that may require further investigation by the organisation. Full details of all 129 indicators are contained in the Measured Quality Reports, which have been disseminated to Health Service Districts and Zonal Management Units. The aim of this report is to create a meaningful summary of Measured Quality indicators for the Board of Management that is deemed significant to the organisation and amenable to change through systematic quality improvement. From this summary, specific prioritised recommendations are made where organisational improvement will bring improved quality outcomes for patients and potential savings to the organisation.

Recommendations have been made by applying the following criteria:

1. **A large volume of patients are affected and/or there are high administrative costs associated with the indicator for the organisation.**
2. **A large variation in performance between facilities has been identified.**
3. **A declining trend in state-wide performance is evident over the last three years.**
4. **Best practice evidence suggests there is potential for improvement or Queensland's performance is below the National average.**

Note: Other factors taken into account when indicators scored evenly include the extent of organisational responsiveness and the organisational strategic importance.

System Integration and Change

The indicators in the System Integration and Change quadrant have been designed to provide measures around the domains of continuity, capability, sustainability and safety. At present, there are no comparable data at a national level for the System Integration and Change indicators. The Measured Quality Reports contain 44 indicators for this quadrant, 11 have been summarised for the purpose of this report. From this summary six have been recommended for further investigation.

Recommendations:

1. **Standardised Approaches to Clinical Management** – Eight separate measures are reported in this indicator. The state-wide medians for these indicators range from 5.4% (collection and management of data for standardised approaches to clinical management) to 80% (standardised approaches to clinical management in selected O & G areas). The indicator measuring overall development and use of standardised approaches to clinical management shows a state-wide median of 48.2%. The use of standardised approaches to clinical management as a system-wide strategy facilitates the development of a consistent standard of high quality care. Queensland Health should look to increasing the percentage of hospitals using standardised clinical protocols.
2. **Timeliness of Information** - The data provided by hospitals to the Health Information Centre, forms the Queensland Health Admitted Patient Data Collection. Timely availability of data on a state-wide basis is critical to minimise the lag time in decision making. Only 20 of the 76 facilities in the Measured Quality scope were able to provide their data on time 9/9 months in 2002/03, leaving significant room for improvement.
3. **Environmental Management** - The state-wide median score (32.5%) indicates some strategies for environmental management are in place, but with significant potential for improvement.

Clinical Utilisation and Outcomes

Overview

A total of 19 conditions or procedures were analysed across medical, surgical, paediatrics and obstetrics and gynaecology. Outcome indicators were selected on the basis of providing a meaningful measurement of quality of care for the associated condition/procedure and also being readily available from the routine data sources. Outcome indicators include: in-hospital mortality, long stay rates, complications of surgery, readmissions plus outcomes specific to obstetrics and gynaecology indicators. Only indicators showing significant variation or other notable outcomes for the State are summarized in the body of this report.

The graphs on the following pages show the risk adjusted rate per 100 separations for each indicator. The graphs highlight the large variation in hospital performance across the state. However, the graphs omit the confidence intervals around the scores, so care needs to be taken when interpreting the significance of the scores in the graphs, particularly in hospitals were the number of separations and observed outcomes may be small. All hospital scores have been risk adjusted to allow for variation in hospital patient profiles to allow for direct comparison of performance between hospitals.

Table 1. Selected Conditions/Procedures with Associated Outcomes

Condition/Procedure	Outcome Indicators (Rates)										
	In-hospital Mortality	Readmissions	Long Stays	Long Stays Acute	Complications of Surgery	Amputations	Under 35 Years of Age	Blood Transfusion	Caesarean Section	Induced Births	Severe Perineal Tears
Acute Myocardial Infarction	✓		✓								
Heart Failure	✓		✓								
Stroke	✓		✓	✓							
Pneumonia	✓		✓								
Diabetic Foot			✓			✓					
Fractured Neck of Femur	✓		✓	✓	✓						
Knee Replacement – Primary			✓		✓						
Hip Replacement - Primary			✓		✓						
Hysterectomy			✓		✓		✓	✓			
Standard Primiparae									✓	✓	✓
Maternal Postnatal Stay (Vaginal Births)			✓								
Maternal Postnatal Stay (Caesarean Section Births)			✓								
Asthma			✓								
Colorectal Cancer Surgery			✓		✓						
Laparoscopic Cholecystectomy			✓		✓						
Paediatric Bronchiolitis			✓								
Paediatric Gastroenteritis			✓								
Paediatric Asthma		✓	✓								
Paediatric Tonsillectomy/Adenoidectomy		✓	✓								

Outcome Definitions

In-hospital mortality measures the number of deaths that have occurred in hospital within 30 days of admission.

Long stay rates are calculated as the day closest to the point when 90% of all eligible patients have been discharged from hospital, the 10 % remaining are considered long stays. ***It must be noted that rates calculated for length of stay in this report do not reflect the optimal length for stay according to evidence based practice.***

Readmissions were identified using probabilistic matching of identified data to allow inclusion of readmissions to a different facility as well as readmissions to the same facility.

National and State Comparative Data

National comparisons of the Measured Quality indicators have shown that overall Queensland Health is performing above the National average. The only indicator to perform poorly in comparison to the national average is amputation rates for diabetic foot; this also coincides with a 4% increase over the last 3 years for Queensland's amputation rates. Within Queensland public hospital services there have been a number of notable positive outcomes over the past 3 years, they include:

- 5% decrease in the complications of surgery rates for colorectal cancer surgery over the last 3 years.
- 2% decrease in mortality rates across the state for colorectal cancer surgery.

There have also been a number of negative outcomes:

- 5% increase in the caesarean section rates for standard primiparae across the state from 2000 to 2002.
- 2% increase in the induction of births for the same period.
- 4% increase in the amputation rate for diabetic foot.

Measured Quality Hospital Report

The measured quality report only identifies hospitals that are performing significantly different to that of the peer hospitals. It does not measure identified best practice. **It should also be noted that even though hospitals have not been identified as an outlier they still may not be performing at best practice levels and therefore improvement in the quality of care can still be achieved.** Ideally, as a minimum, all hospitals should be aiming to reduce their reported rates to those identified as positive outliers.

Cl01.1-2 Acute Myocardial Infarction

Summary
The long stay point for AMI is 12 days. Queensland Health's in-hospital mortality rates and long stay rates compares favourably with the National average. Over the last three years there has been a slight improvement for Queensland Health in- hospital mortality rates for AMI showing a reduction of 0.7%. However, statistical analysis for potential benefits, as tabled in the Measured Quality Technical Supplement 2004, suggests that there is a potential for reduction in mortality based on data over the last three years.

Outlier Discussion
In-Hospital Mortality: Of the Principal Referral and Large peer groups only **Bundaberg** was identified as a negative outlier. **Bundaberg** mortality rates have been high for the last three years with possible causes at this stage still unconfirmed. Bundaberg has recently joined the cardiac collaborative. A total of four small facilities were identified as negative outliers they are, **Ayr, Nanango, Gatton and Laidley Hospitals**. **TPCH** is the only hospital that has been identified as a positive outlier.

Long Stay Rates: For this indicator **TPCH and Logan** have been identified as positive outliers and **Innisfail hospital** has been identified as a negative outlier.

Figure 1. Acute Myocardial Infarction – In-Hospital Mortality

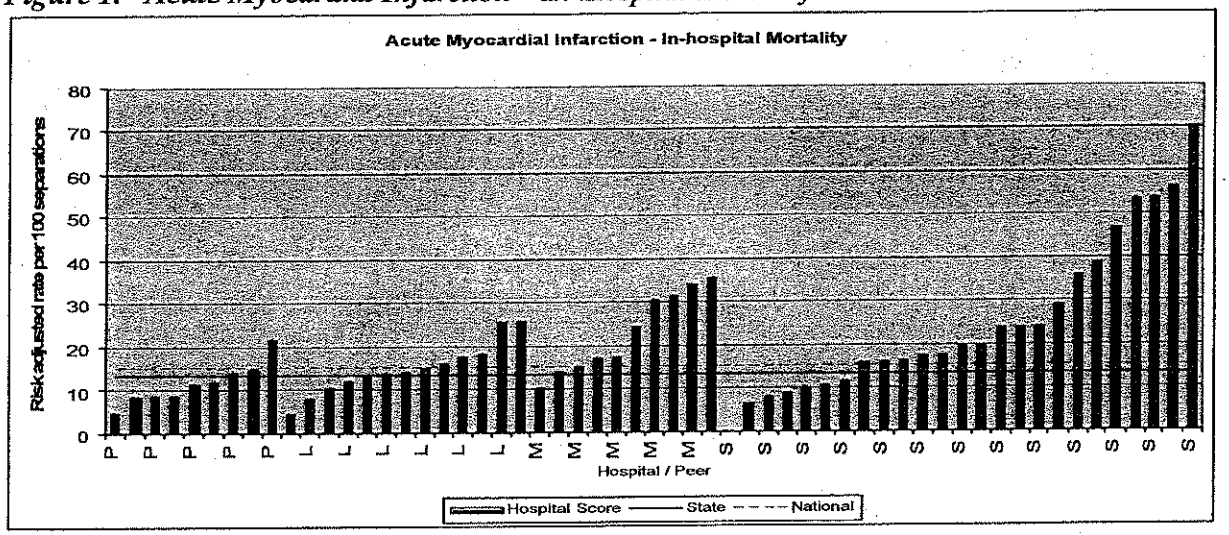
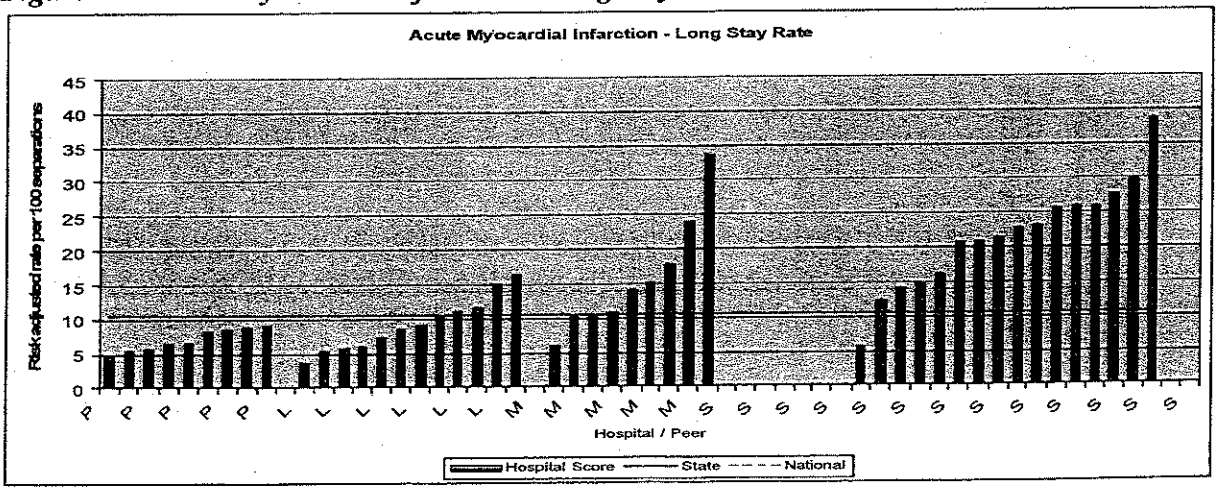


Figure 2. Acute Myocardial Infarction – Long Stay Rates



CI02.1 – 2 Heart Failure

Summary
The long stay point for Heart Failure is 14 days. Queensland Health's in-hospital mortality rates are equivalent to the National average; the long stay rates are slightly below the National average.

Outlier Discussion
In-Hospital Mortality: There are no positive outliers for in-hospital mortality for heart failure across the state. The Townsville Hospital was the only negative outlier for mortality.
Long Stay Rates: Innisfail Hospital was the only negative outlier for long stays for the state. There were no positive outliers for long stays.

Figure 3. Heart Failure – In-House Mortality

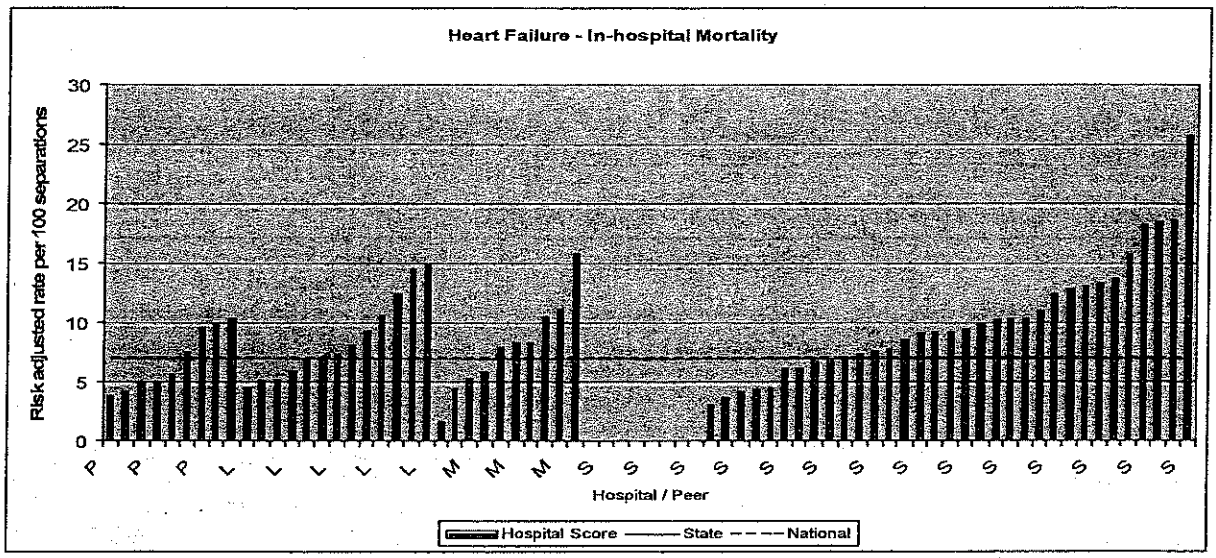
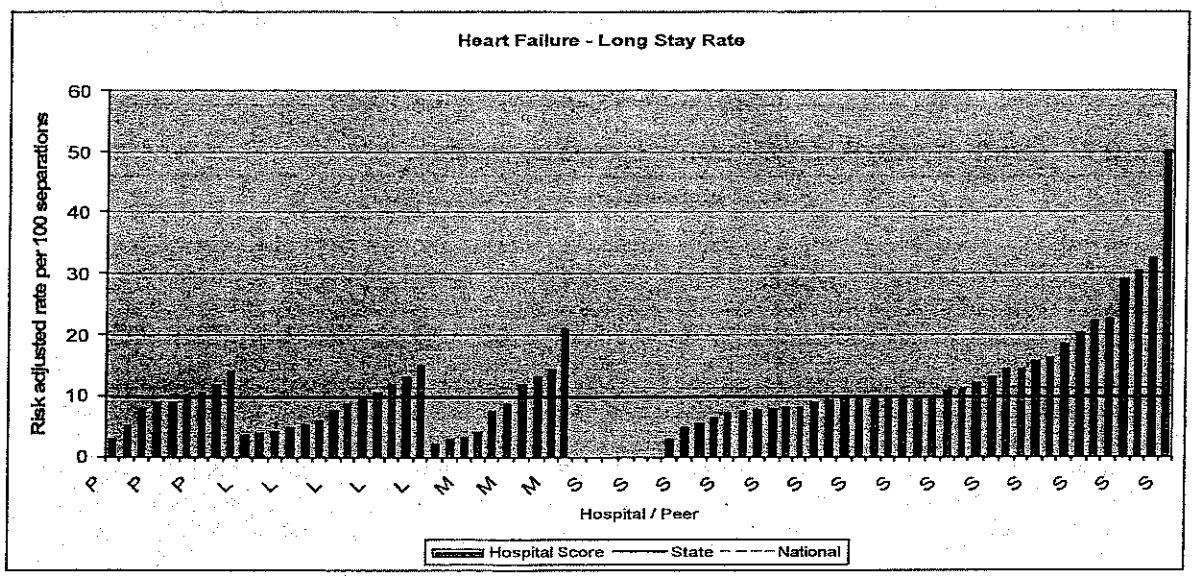


Figure 4. Heart Failure – Long Stay Rate



CI03.1 -3 Stroke

Summary
The long stay point for stroke has been identified as 66 days. Queensland Health's in-hospital mortality rates for stroke are approximately the same as the National average; and long stay rates are slightly below the national average. The state mortality rates for stroke have not moved significantly over the last 3 years from 23.5% in 2001 to 23.2% in 2003. However, many hospitals have been working to reduce the length of stay for stroke patients, in particular Ipswich and RBH hospitals have seen significant improvements over the last 3 years and the rest of the organisation would benefit from quality improvement initiatives introduced at these hospitals.

Outlier Discussion
In-Hospital Mortality: There are no positive outliers for this indicator. In the Principal Referral and Large peer groups for mortality, **PAH and Bundaberg** are negative outliers. **Bundaberg** has been a negative outlier for this indicator for the last 3 years, and recently joined the CHI stroke collaborative. **Warwick and Dalby** hospitals are also negative outliers for mortality in the medium peer group.

Long Stay Rates: In the Principal Referral and Large peer groups for long stays, **PAH, QE11, and Mackay** are all negative outliers. **Innisfail** has been identified as a negative outlier in the medium peer group. **Logan hospital** is the only positive outlier for this indicator.

Figure 5. Stroke – In- Hospital Mortality

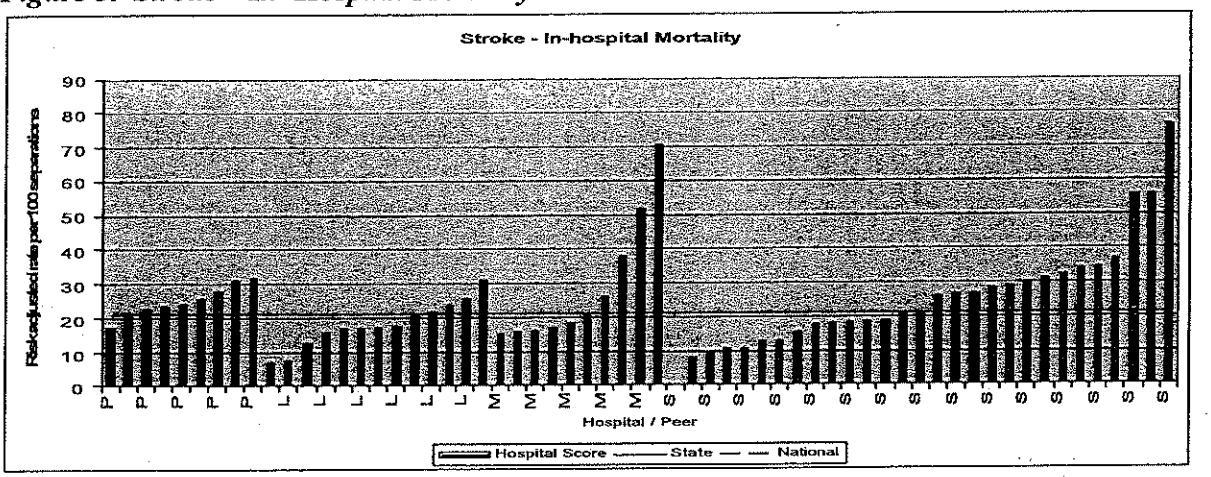
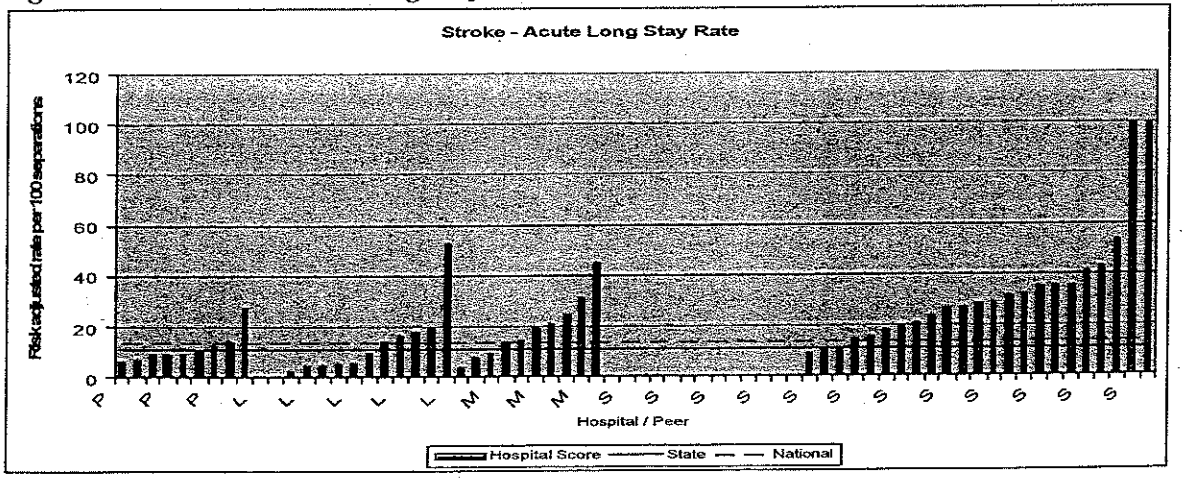


Figure 6. Stroke – Acute Long Stay Rates



CI04.1 -2 Pneumonia

Summary
The long stay point for pneumonia is 12 days. Queensland Health's state rate falls just under the national rate for both in-hospital mortality and long stay rates for pneumonia. Approximately 4100 patients per year are admitted for pneumonia.

Outlier Discussion
In–Hospital Mortality: There are no negative outliers for the principal referral, large or medium peer groups for this indicator. **Bowen and Longreach hospitals** are negative indicators for the small peer group. The **RBH, Gold Coast and Logan hospitals** are all positive outliers for this indicator.

Long Stay Rates: The **Gold Coast hospital** has been a positive outlier for the last 3 years. **Stanthorpe, Wynnum and Maleny Hospitals** are all negative outliers for pneumonia long stays.

Gold Coast hospital has implemented a variety of strategies within the medical division to reduce the length of stay and improve the quality of care for medical patients. Specifically, the GCH has developed clinical practice guidelines and discharge criteria for patients with pneumonia. The guidelines are referred to and implemented in the Emergency Department and discharge planning also begins at this early stage. The improved clinical practice has resulted in increased efficiency, simplification of practices and processes, effective discharge planning, informed patients, and early follow up of patients post discharge which assists in preventing readmission.

Figure 7. Pneumonia – In-Hospital Mortality

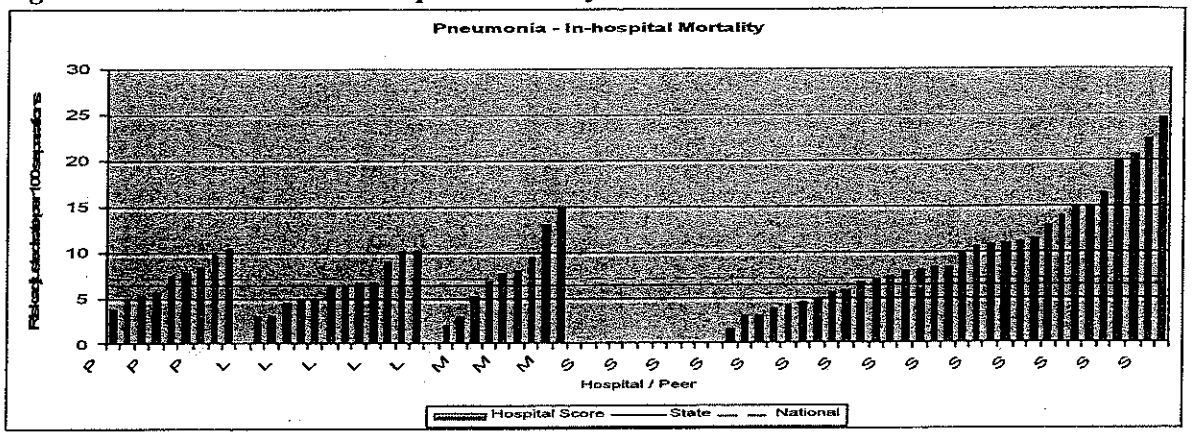
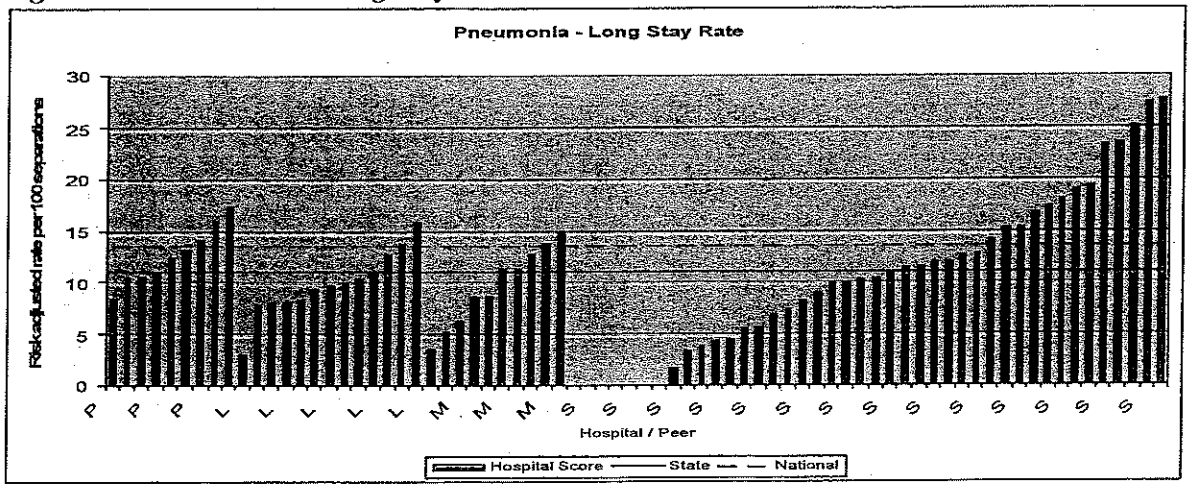


Figure 8. Pneumonia – Long Stay Rates

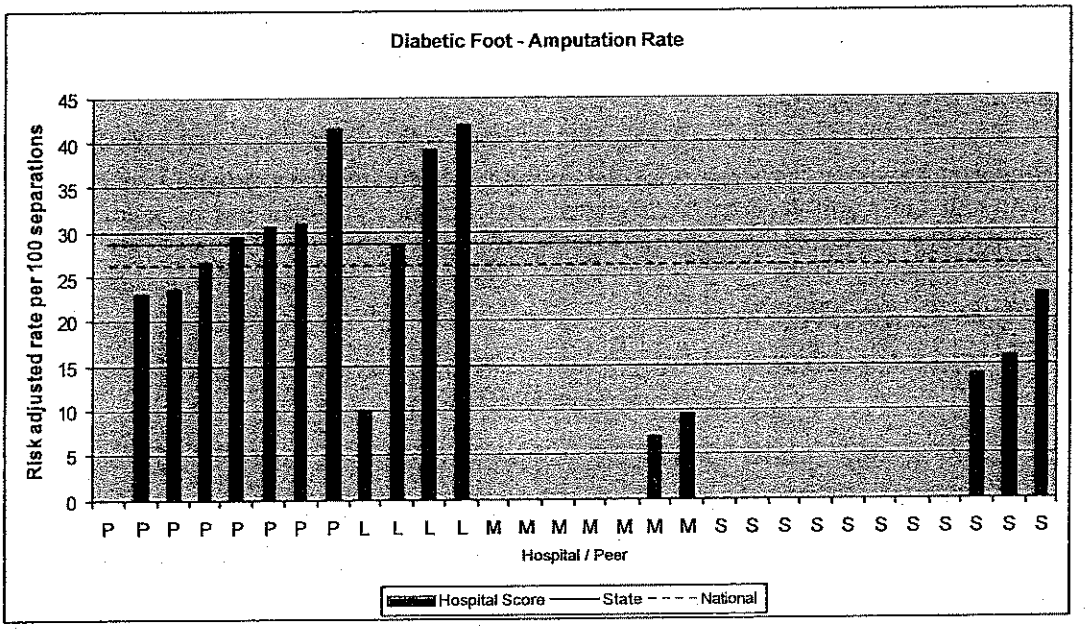


Cl05.4 Diabetic Foot Amputations

Summary
Queensland has performed poorly compared to the national average for this indicator. Further, Queensland has seen a 4% increase in amputation rates over the last 3 years. This increase is not contributable to any one hospital within the State.

Outlier discussion
There were no positive or negative outliers for this indicator, however Cairns and Thursday Island Hospitals flagged at the negative 90% confidence interval for this year.

Figure 9. Diabetic Foot – Amputation Rates



Cl14.1 Asthma

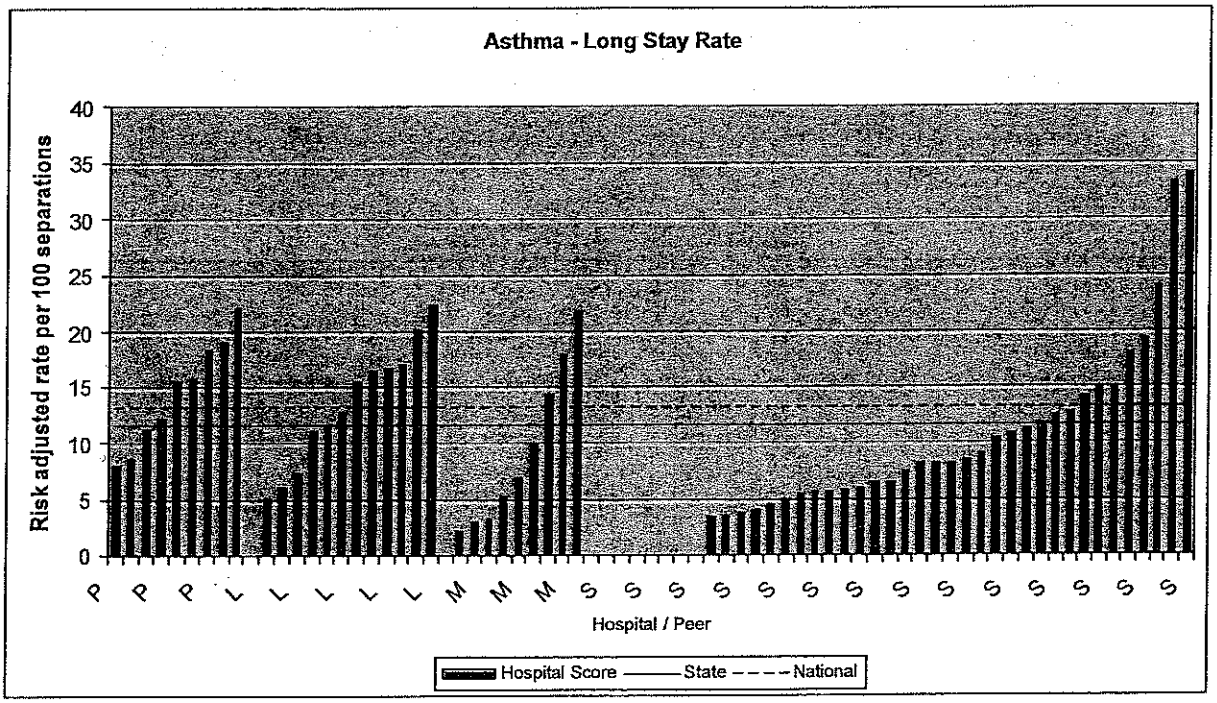
Summary
The asthma long stay point is 7 days or longer. There is no significant difference to Queensland Health's state rate compared to the National average for long stays.

Outlier Discussion
Long Stay Rates: The **RBH, Bamaga and Boonah** are all negative outliers for this indicator. Although there are no positive outliers for asthma long stays for this year of data, **Gold Coast and Gladstone hospitals** have been identified as a positive outlier for the for the previous two years and their rate still remains low this year.

Gold Coast Hospital credits their favourable length of stay rates for asthma on a variety of strategies developed and implemented over the past few years. The clinical practice guidelines and criteria for admission were developed in collaboration with physicians, emergency department director and other key stakeholders.

Gladstone hospital has been involved with the Asthma Foundation in a program of community education including GP's and hospital staff and a local asthma care plan has been implemented. Gladstone has had consistently low length of stay rates for asthma.

Figure 10. Asthma – Long Stay Rates



Cl06.2 Fractured Neck of Femur

Summary
The long stay point for this indicator is 47 days. Queensland Health's mortality and long stay rates are slightly below the national average for fractured neck of femur.

Outlier Discussion
In Hospital Mortality: There are no positive or negative outliers for mortality or complications of surgery for fractured NOF. The **Mater and Logan** hospitals have been a positive outlier for long stays for the past 3 years and **Hervey Bay** for the previous two years.
Long Stay Rates: **PAH** is a negative outlier for long stays for the last 3 years.

Figure 11. Fractured Neck of Femur – In Hospital Mortality

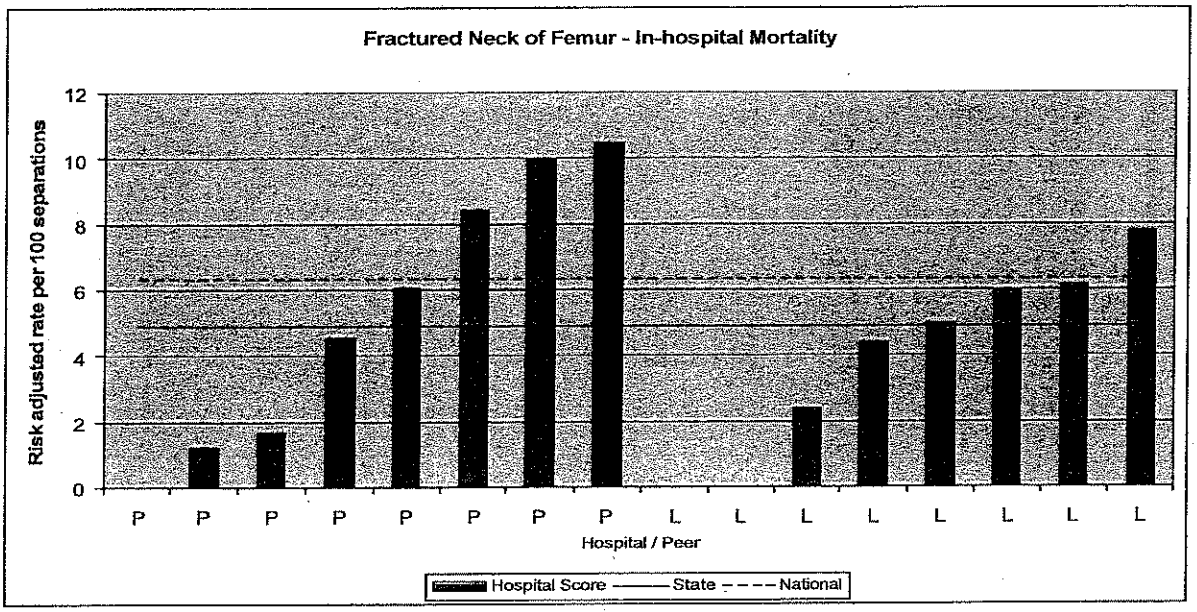
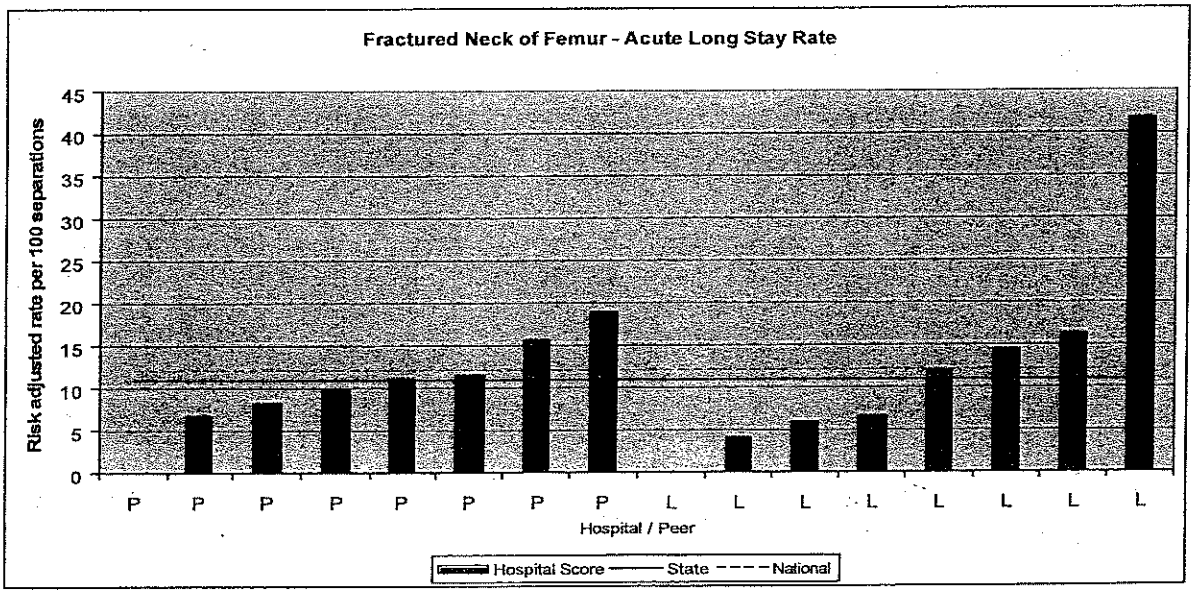


Figure 12. Fractured Neck of Femur – Acute Long Stays



CI07.1a – 3a Primary Knee Replacement

Summary
The long stay point for this indicator is 13 days. Queensland's long stay rates and complications of surgery are both below the national average.

Outlier Discussion
Long Stay Rates: **Toowoomba** is a negative outlier for long stay rates at the 99.9% confidence interval, and RBH is an outlier at the 90% confidence interval. There are no positive outliers for long stays. ***Complications of Surgery:*** **QE11** was the only negative outlier for complications of surgery.

Figure 13. Primary Knee Replacement – Long Stay Rates

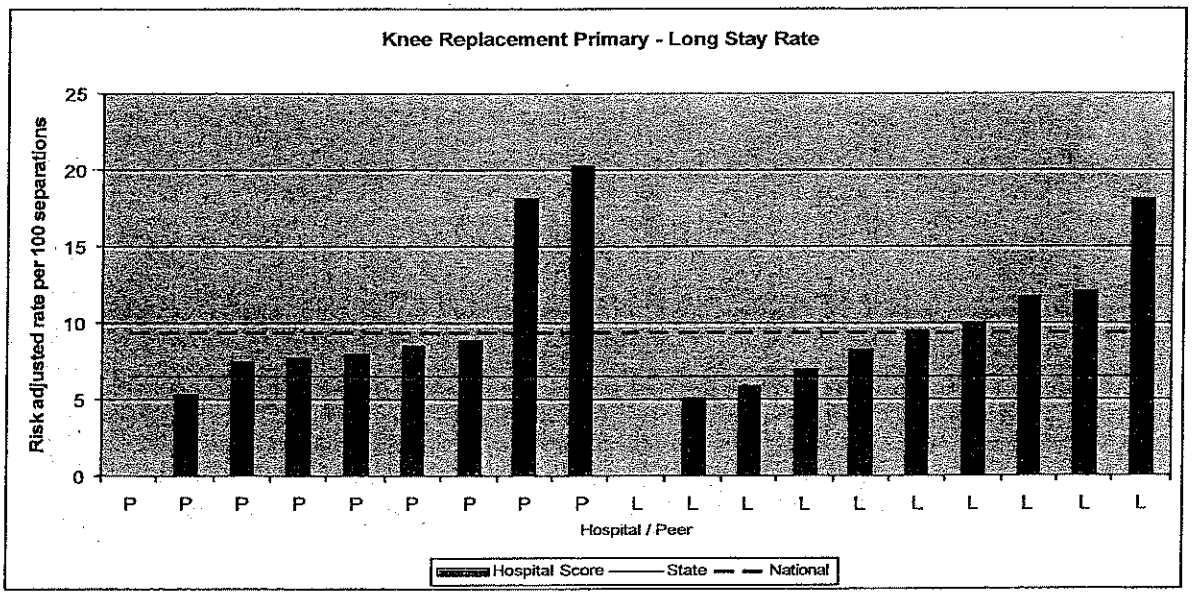
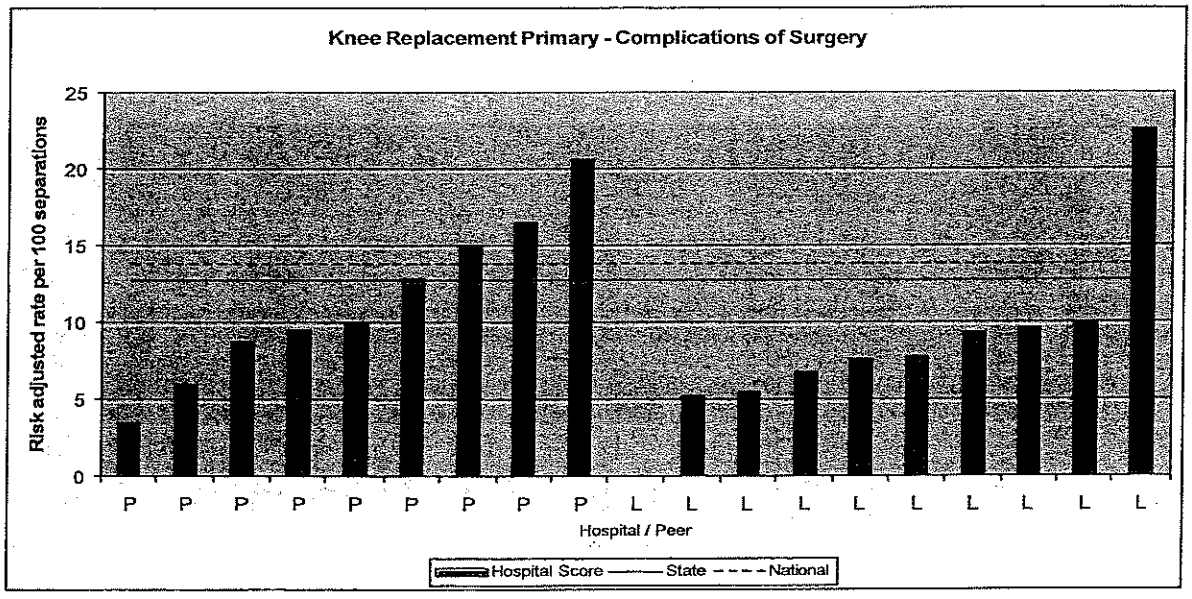


Figure 14. Primary Knee Replacement – Complications of Surgery



CI08.1a – 3a Primary Hip Replacement

Summary
The long stay point for hip replacement is 14 days. Queensland complication rates for hip replacements are slightly higher than the national average. Length of stay rates are approximately the same as the national rates.

Outlier Discussion
Although the results are showing variation in performance, none of the hospitals for this year of data were considered outliers using the measured quality definitions for this indicator.

Figure 15. Primary Hip Replacement – Long stay Rate

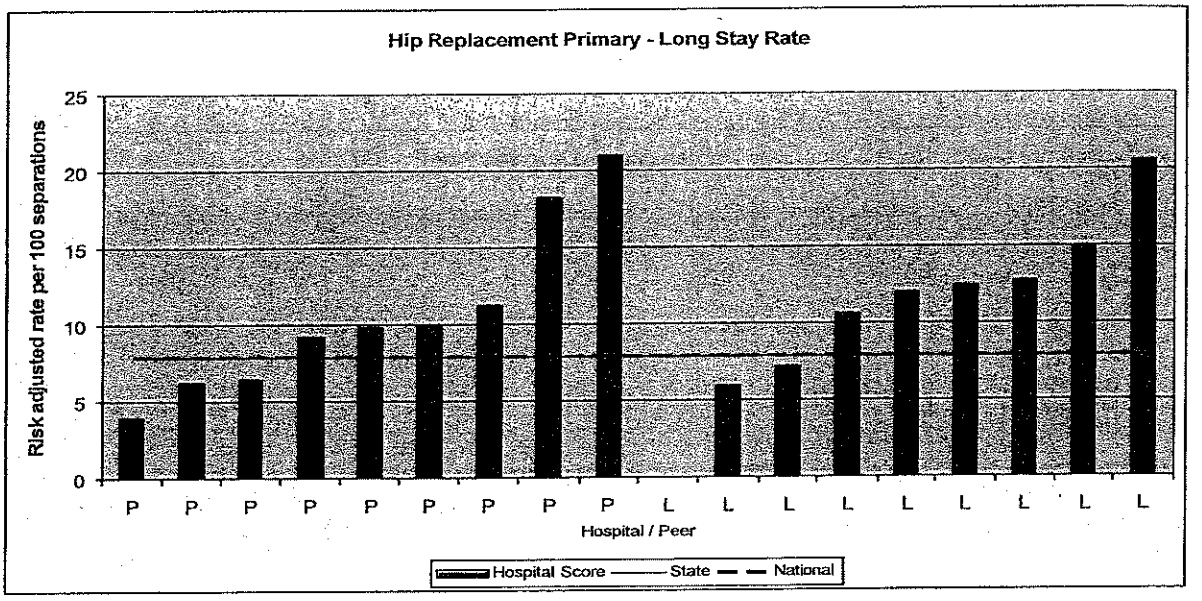
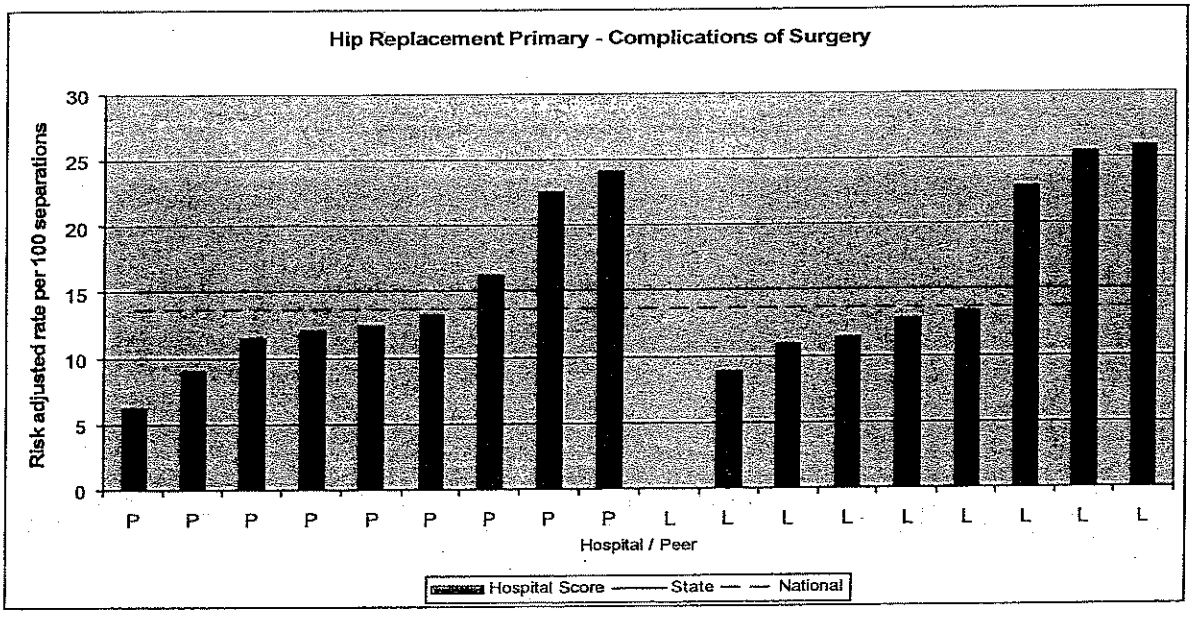


Figure 16. Primary Hip Replacement – Complications of Surgery



Cl09.2 -3 Hysterectomy

Summary

The long stay point for hysterectomy is 6 days. Queensland's state rate for length of stay for hysterectomy was lower than the national average, complications of surgery were slightly higher than the national average.

Outlier Discussion

Long Stay Rates: **RBH** has been identified as a negative outlier for the last 3 years for hysterectomy long stays. **Mt Isa and St George hospitals** are also negative outliers for long stays. **Mater hospital** has been a positive indicator for long stays for the last three years.

Complications of Surgery: For complications of surgery only 2 negative outliers were reported they were **Cairns and Dalby hospitals**.

Figure 17. Hysterectomy – Long Stay Rate

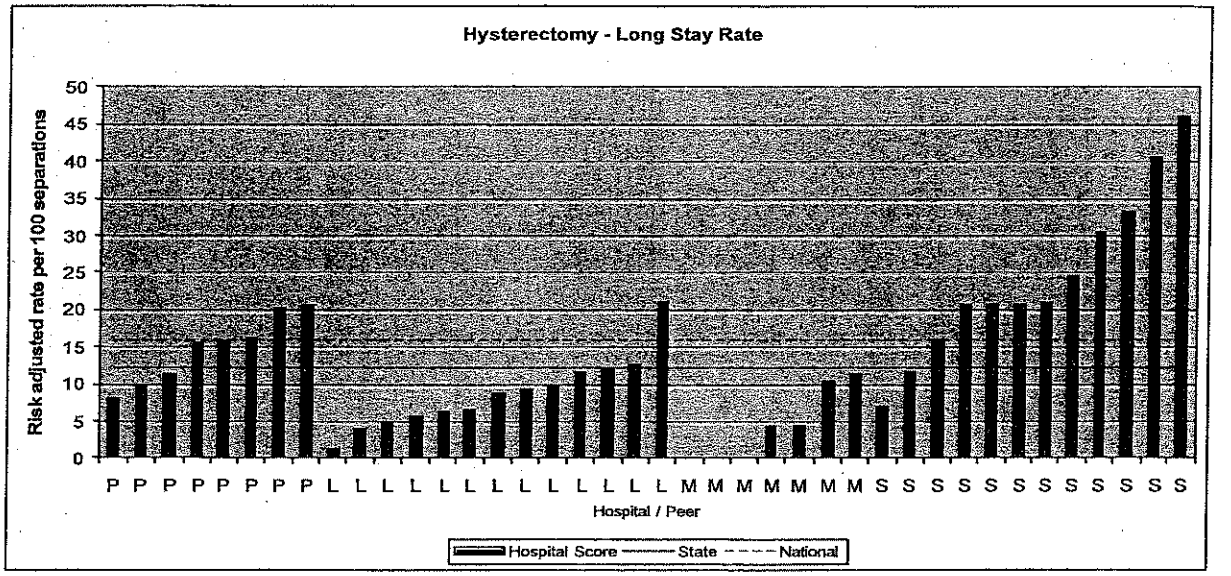
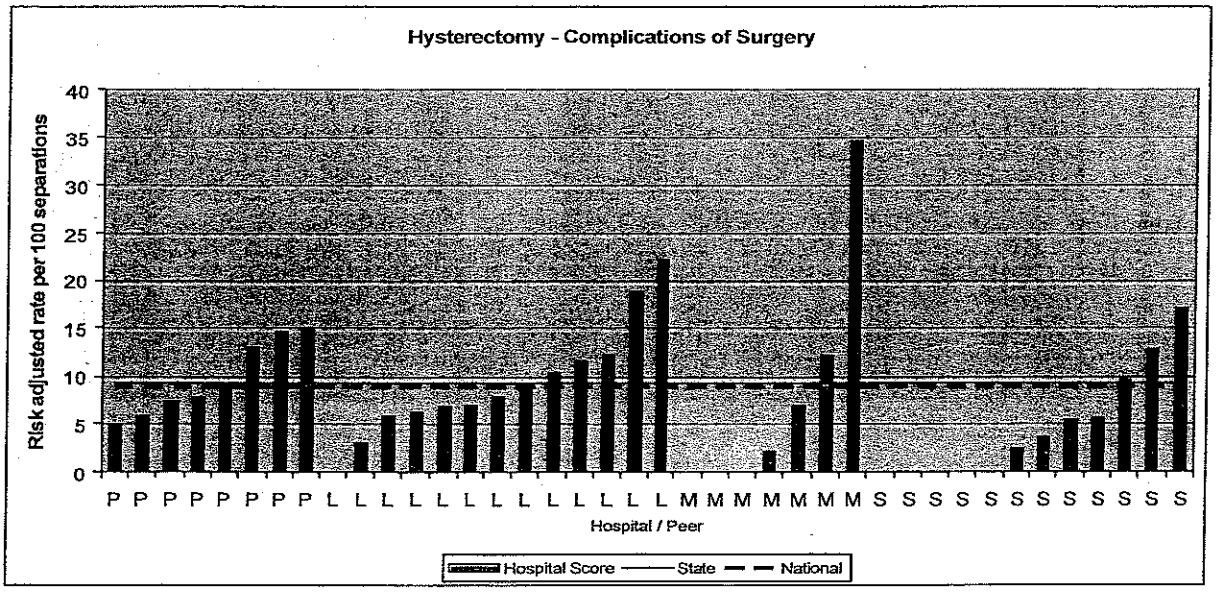


Figure 18. Hysterectomy – Complications of Surgery



CI07.7 – 8 Standard Primiparae (National Definition)

Summary
National comparative data is not available for this indicator. The national definition for standard primiparae includes first time singleton pregnancies for women between the ages of 25 and 29 years and 37 to 41 weeks gestation period. The most notable change with this indicator is the 5% increase in caesarean sections over a 3 year period from 18.3% to 23.4%. Social caesarean sections are included in this cohort. There has also been a 2% increase in induction of labours for this cohort across the state from 29.4% to 31.6%.

Outlier Discussion
Caesarean section: Redlands hospital is the only positive outliers for C-section rates. Logan and Mt Isa are both negative outliers for this indicator, with a dramatic increase in Mt Isa from 2001 to 2002 (5 out of 42 in 2001 to 18 out of 45 in 2002).

Induction of labour: Gold Coast, Caboolture and Innisfail Hospitals are positive outliers for induction of labour rates. RBH, Mater and Mt Isa are all negative outliers for this indicator.

Figure 19. Standard Primiparae – Caesarean Section Rates

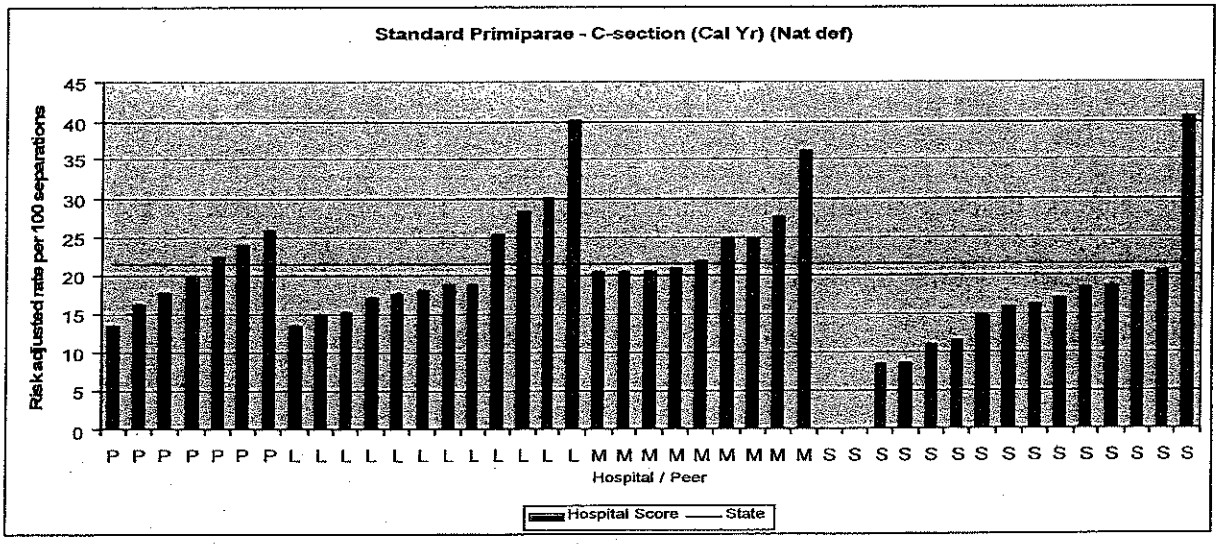
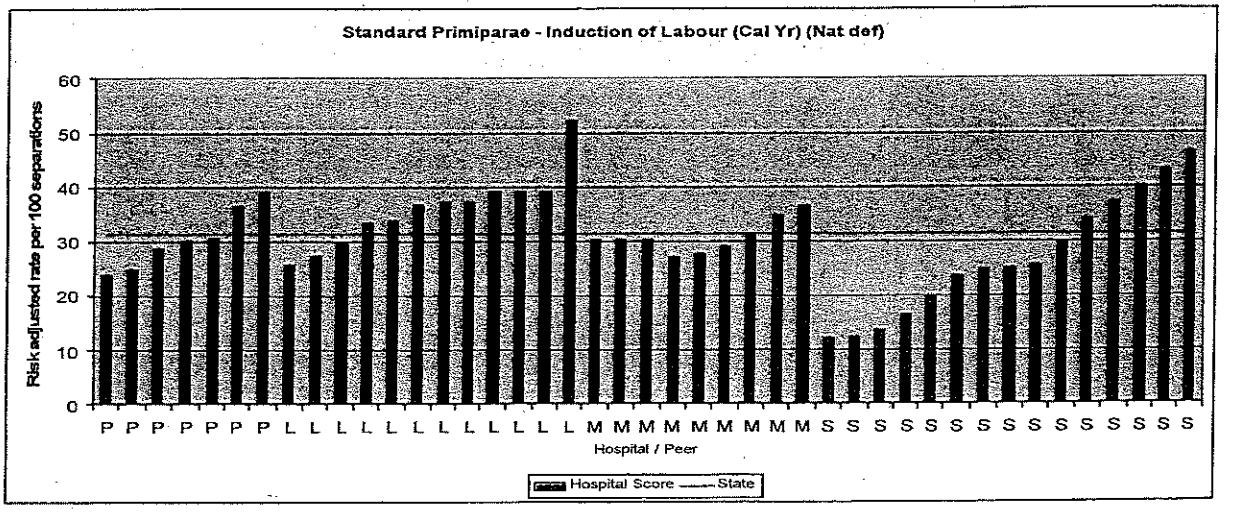


Figure 20. Standard Primiparae – Induction of Labour Rates



CI13.3 – 4 Maternal Postnatal Stay

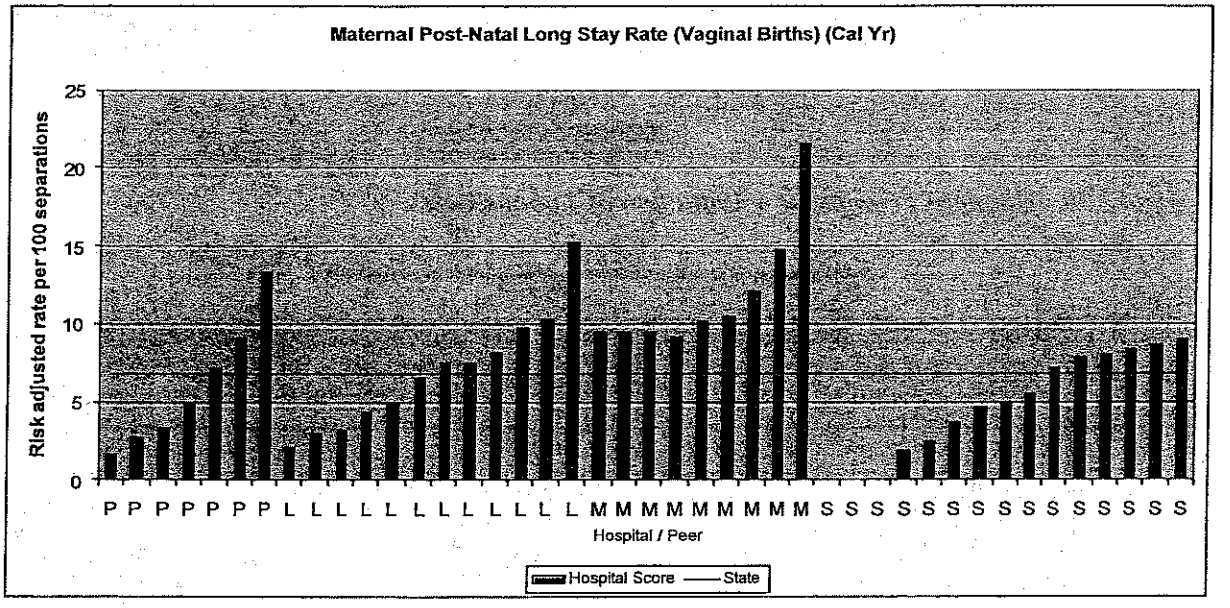
Summary

No national comparison exists for this indicator. The long stay point for vaginal births is 5 days and caesarean section 7 days. The results for these indicators show a large number of both positive and negative outliers. Interestingly, feed back from Hervey Bay, Maryborough, Kingaroy and Innisfail hospitals has indicated that it was common practice to allow mothers to stay as long as they wanted. Hospitals identified as positive outliers for this indicator generally have a specific maternity program in place to manage the length of stay following an uncomplicated birth. It also should be noted the variation in length of stay among small rural hospitals. Rural hospitals that are performing poorly on this indicator, suggest isolation was the reason for poor performance, however, many rural hospitals facing the same isolation issues where still able to perform well. Further, statistical analysis for potential benefits, as tabled in the Measured Quality Technical Supplement 2004, suggests that there is an opportunity for further improvement in the length of stay based 2002 data. As this indicator cohort includes nearly 31000 patients Queensland Health would benefit from further work in this area to reduce the variation in length of stay across the state.

Outlier Discussion

Vaginal births: In the Principal Referral peer group Toowoomba, Mater, Townsville and RBH are all positive outliers. Gold Coast and Nambour have been identified as negative outliers for the last 2 years in this peer group. Redlands, Bundaberg, Mackay and Logan hospitals are positive outliers for the large peer group. Ipswich, Hervey Bay, Redcliffe, and Maryborough Hospitals are all negative outliers. In the small and medium peer groups, Proserpine, Charters Towers, Chinchilla and Emerald hospitals are all positive outliers. Beaudesert, Kingaroy, Innisfail, Dalby, Biloela, St George, Roma, Charleville, Stanthorpe, Mareeba, Longreach, Thursday Island, Maleny hospitals are all negative outliers for vaginal births.

Figure 21. Maternal Post-Natal Long Stay Rates (Vaginal Births)

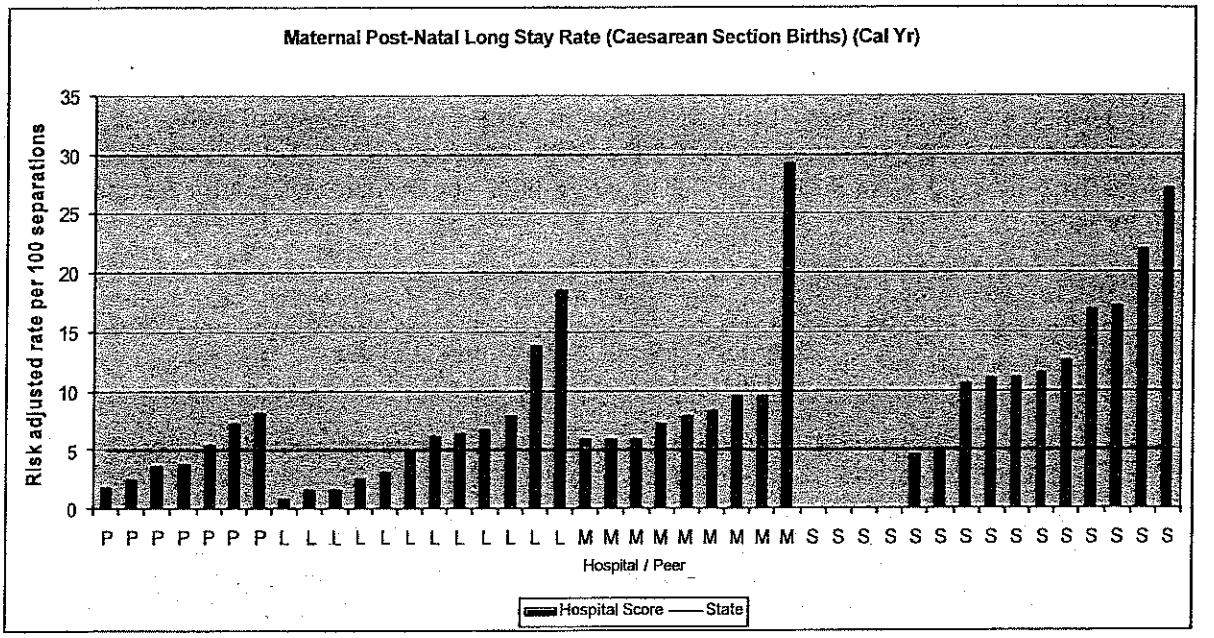


CI13.3 -4 Maternal Postnatal Stay cont.

Outlier discussion

Caesarean section births: The Mater, Toowoomba and RBH are all positive outliers for C-section rates for the Principal referral peer group. Nambour hospital is the only negative outlier for this peer group. In the large peer group Logan hospital is the only positive outlier and Mt Isa and Maryborough hospitals are both negative outliers. In the small and medium peer groups Innifail, Roma, Mareeba, St George, Thursday Island hospitals are all negative outliers. Emerald Hospital is the only positive outlier for this indicator in this peer group.

Figure 22 . Maternal Post- Natal Long stay Rates (Caesarean Section Births)



Cl15.1 – 3 Colorectal Carcinoma

Summary

The long stay point for this indicator is 19 days. Queensland's state average compares favourably to the national averages for both complications of surgery and length of stay for colorectal carcinoma. Queensland's complication of surgery rates have decreased by 5% over the last three years, from 31.4% down to 26.2%. Although not reported as an indictor in the Measured Quality Hospital reports mortality rates for colorectal carcinoma have also decreased by 2% over the last three years, from 4.2% down to 3%.

Outlier Discussion

Long Stay Rates: Townsville hospital is a positive outlier for length of stay. Although not a negative outlier Cairns Base Hospital is significant at the 90% confidence interval for length of stay.

Complications of Surgery: Townsville hospital has had a significant improvement in their complication of surgery rates from last year moving from a negative outlier at the 99.9% confidence interval to a positive outlier at the 90% confidence interval the latest year of results. Cairns base hospital is significant at the negative 90% confidence interval for complications of surgery also.

Figure 23. Colorectal Carcinoma – Complications of Surgery

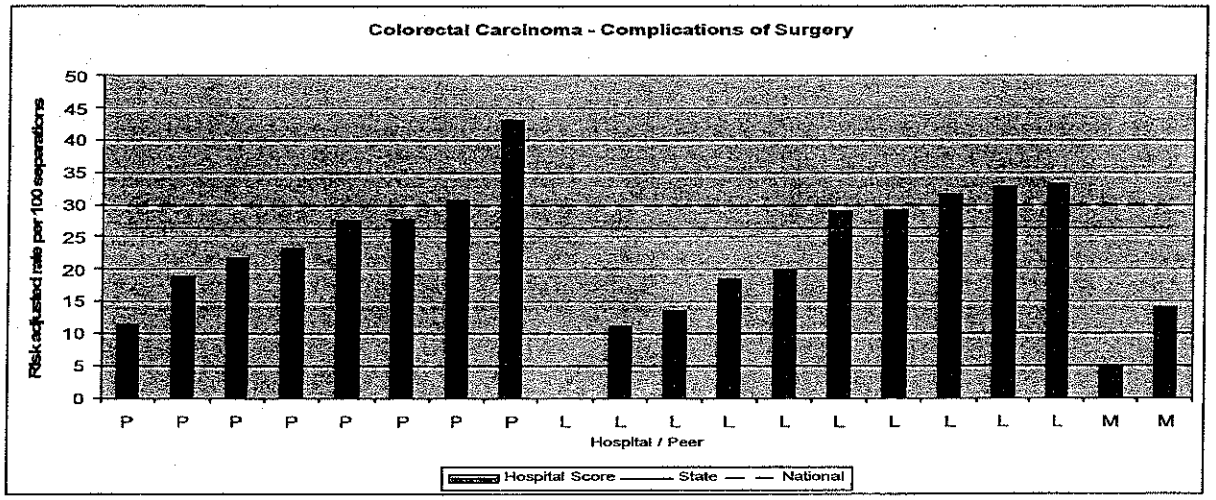
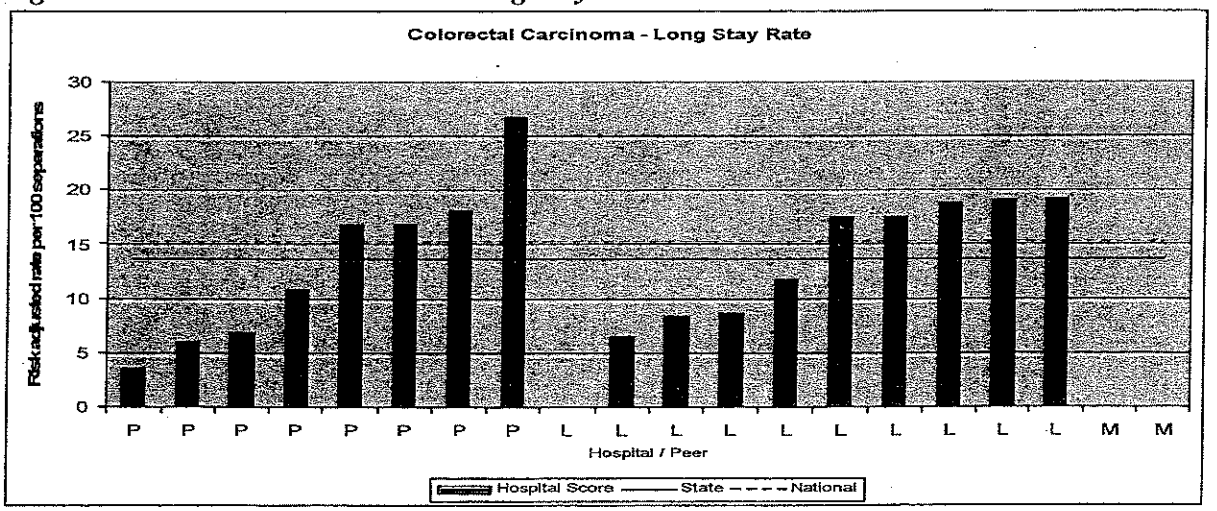


Figure 24. Colorectal Carcinoma – Long Stay Rates



Cl16.1 – 2 Laparoscopic Cholecystectomy

Summary
Queensland's state rate for length of stay is only slightly below the National average and complications of surgery rates are approximately the same. This indicator is very specific and only includes simple laparoscopic cholecystectomy with out exploration of the bile duct or emergency cases. Across the state approximately 3000 cases are performed annually for this indicator. Best practise would expect this operation to be performed as day surgery. As well as hospital procedures, surgical skill and the quality of anaesthetic services directly effects the length of stay for this procedure. The long stay point for this indicator is 3 days. Given the large variation across the state, particularly for length of stay, further investigation into this indicator would be recommended.

Outlier Discussion
Long Stay Rates: Mater and Logan hospitals have been a positive outlier for length of stay for last three years on this indicator. Gold Coast hospital is also a positive outlier showing a marked improvement in results from the last report to the most current. Redcliffe and Ipswich are also positive outliers. Townsville, Nambour, QE11, Rockhampton, Gladstone, Dalby, Roma, Stanthorpe and Longreach hospitals are all negative outliers for length of stay.
Complications of Surgery: There are no positive outliers for complications of surgery and the only negative outliers are PAH and Gympie.

Figure 25. Laparoscopic Cholecystectomy – Long Stay Rate

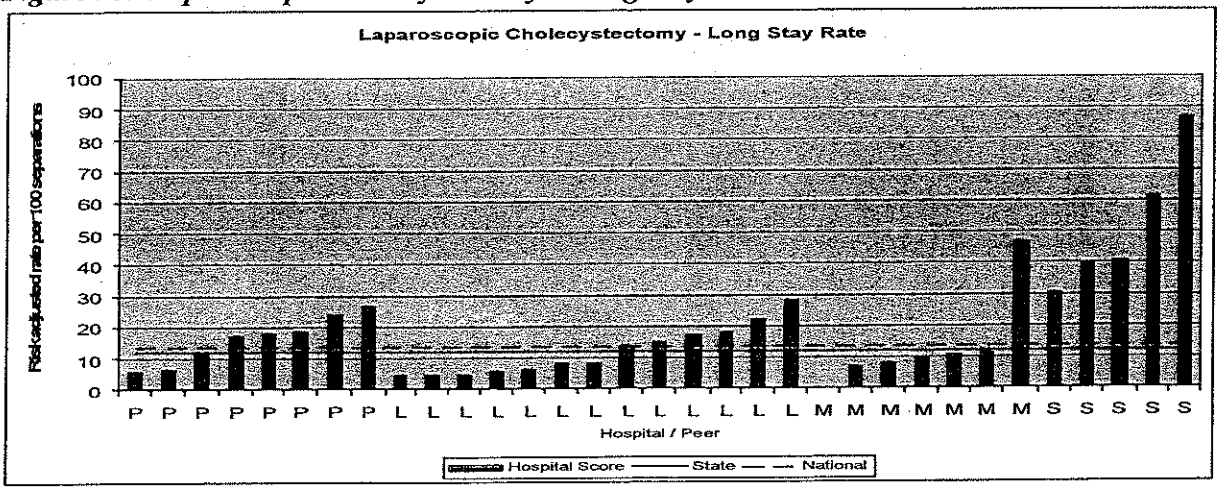
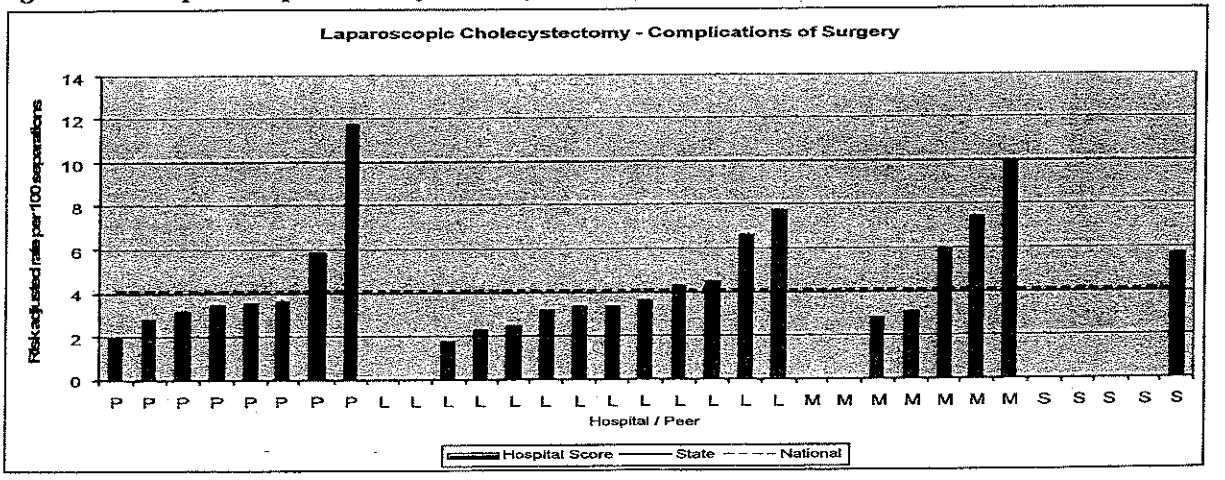


Figure 26. Laparoscopic Cholecystectomy – Complications of Surgery

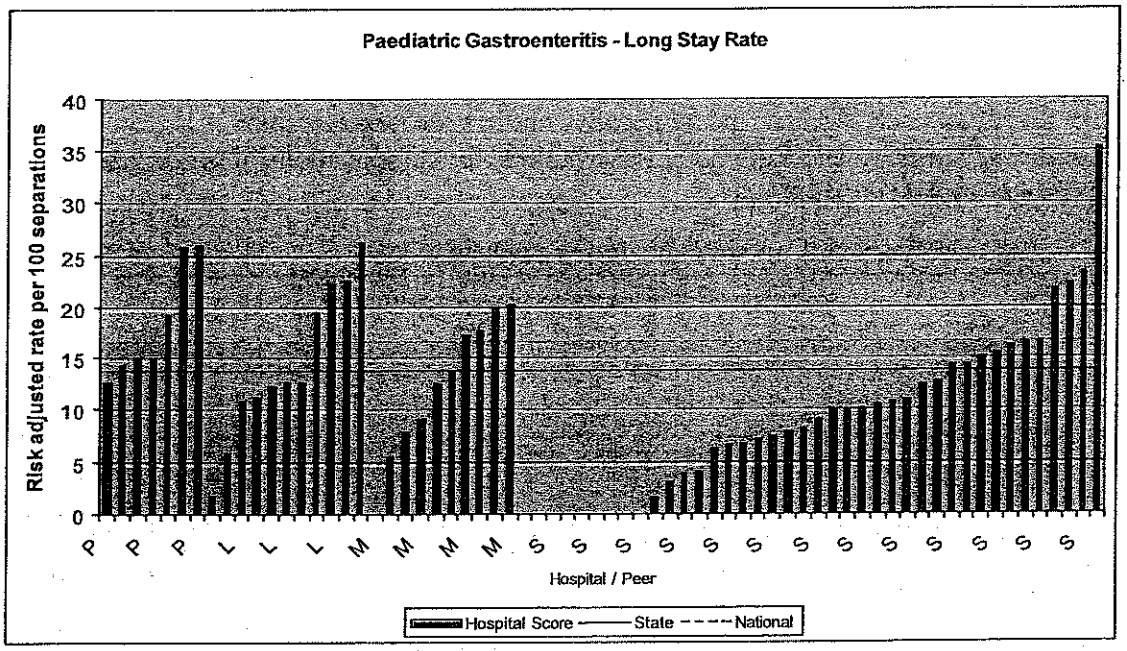


Cl51.1 Paediatric Gastroenteritis

Summary
The long stay point for this indicator is 3 days. Queensland's state average is lower than the National average for this indicator. However, statistical analysis using potential benefits, as tabled in the Measured Quality Technical Supplement, suggests that there is an opportunity for further improvement for length of stay based on data from the last three years.

Outlier Discussion
Long Stay Rates: Mackay hospital is the only positive indicator for paediatric gastroenteritis long stays. Negative outliers include, Cairns, Townsville, Logan, Mt Isa and Thursday Island hospitals. Negative outliers for this indicator appear to be localised in areas of high indigenous populations

Figure 27. Paediatric Gastroenteritis – Long Stay Rate



Efficiency

Overview

Measures of (technical) efficiency performance are an important component of reports on hospital performance. Efficient use of resources is critical to a hospital's ability to provide the right amount of quality services. Factors such as increasing throughput, advances in technology and an ageing population are leading to increased demand on existing resources.

Efficiency has been identified as a key dimension of the National Health Performance Framework. It is generally understood that improving efficiency may lead to increased throughput or improved quality of services provided with existing resources.

The indicators presented in this report are a sub set of the indicators developed by Measured Quality and cover three main aspects of efficiency practices being staffing, activity and cost of service. They were chosen based upon the size of the impact an improvement could make upon efficiency or of the significant interest from users of the MQ report.

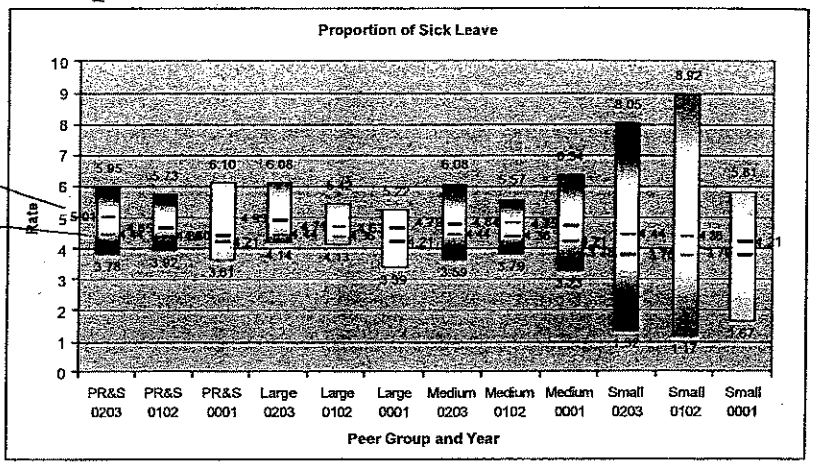
Ind no.	Name	Description	State Median		
			2000/01	2001/02	2002/03
EFF-02	Proportion of Sick Leave	The amount of sick leave taken as a proportion of ordinary worked FTE	4.21%	4.36%	**4.44%**
EFF-03	Cost of Overtime per FTE	The total cost of overtime as a proportion of ordinary worked FTE	$2,537	$2,571	**$2,649**
EFF-05	Proportion of WorkCover	The amount of WorkCover leave taken as a proportion of ordinary worked FTE	0.13%	0.29%	**0.20%**
EFF-30	Occupancy Rate	The degree to which hospital beds are filled	56.58%	55.91%	**52.35%**
EFF-32	Proportion of Same Day Patients	The proportion of completed episodes of care occurring on the day of admission to total separations	34.47%	34.28%	**34.82%**
EFF-35	Average waiting time to admission	The average waiting time to admission for elective surgery from the waiting list	64.7 days	62.1 days	**58.8 days**
EFF-37	Day Surgery	The proportion of patients undergoing a surgical procedure that are admitted and discharged on the day of their operation	55.15%	56.23%	**59.10%**
EFF-38	Day of Surgery Admission	The proportion of patients undergoing a surgical procedure whom are admitted on the day of their operation	90.42%	90.65%	**86.28%**
EFF-40	ED Access Block – 8 hours	The proportion of patients waiting less than 8 hours for admission or transfer in the ED.	93.92%	91.54%	**86.38%**
EFF-46	Avoidable Admissions	The proportion of avoidable admissions for conditions where hospitalisation is potentially preventable	16.71%	17.36%	**17.86%**
EFF-47	Relative Stay Index	An index of actual patient days in comparison with anticipated patient days	PRS 1.02 Large 0.97	PRS 1.02 Large 0.94	**PRS 1.00** **Large 0.93**
EFF-50	Average Cost per Weighted Separation	The average cost of inpatients per separation adjusted by National AR-DRG cost weights	$2,531	$2,465	**$2,665**
EFF-64	Relative Technical Efficiency	Data Envelopment Analysis of the outputs: W/Seps, Out Occ of Serv., Other admitted care and inputs: FTE, non-labour cost and gross asset value	87.1	93.05	**96.30**
EFF-69	Litigation rate per 100 beds	The amount of Health Litigation per 100 available beds	State 0 PRS 3.21 Large 5.77	State 0 PRS 4.95 Large 5.22	**State 2.68** **PRS 6.65** **Large 10.58**

Queensland Health currently invests a significant amount of resources to improving performance in many of the aspects of efficiency described above. A key recommendation of this report is that QH must continue to invest in such resources for the organisation to continue to deliver efficient health related services.

EFF-02 Proportion of Sick Leave

Measure

This indicator measures the amount of sick leave taken as a proportion of Ordinary Worked FTE.



Summary

The State median proportion of sick leave taken (4.44%) has increased slightly across the state over the three year period to 2002/03.

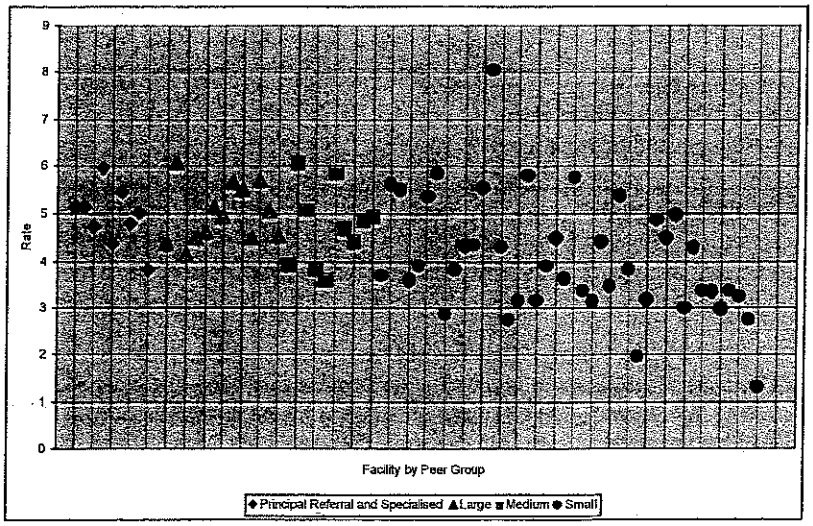
Discussion

The Principal Referral and Specialised (PR&S) and Large peer groups have recorded a result higher than the State median for the 02/03 financial year and are showing an increasing trend. The PR&S peer group contains nine facilities with scores ranging from 3.78% to 5.95% (PGM 5.01%). The Large peer group contains 13 facilities with results ranging from 4.14% to 6.08% (PGM 4.93%). A total of 937 Sick FTE were recorded from a total of 19,075 Ordinary Worked FTE (Avg 4.91%) in these two peer groups.

The Medium and Small facilities have recorded results that have remained relatively stable over the three year period, however the median score for the Medium peer group is higher than the State median. A total of 10 Medium and 42 Small facilities were included in the study, with results ranging from 3.59% to 6.08% (PGM 4.79%) for the Medium peer group and 1.32% to 8.05% (PGM 3.76%) for the Small peer group. A total of 115 Sick FTE were recorded from a total of 2,612 Ordinary Worked FTE (Avg 4.40%) in these two peer groups.

Outlier Discussion

Of the PR&S and Large Facilities, three facilities were identified as potentially negative outliers being, **Nambour** (5.95%), **Rockhampton** (5.71%) and **Redcliffe** (6.08%). A total of three facilities were identified as potentially positive outliers, being **Cairns** (3.78%), **QEII** (4.14%) and **Ipswich** (4.38%). A total of five Small and one Medium facility were identified as potentially negative outliers with scores ranging from 5.61% to 8.05%.



Outlier Actions from Phase 2

A number of District have identified the development of a Sick Leave management policy with improved education and access to information for line managers will improve rates of leave.

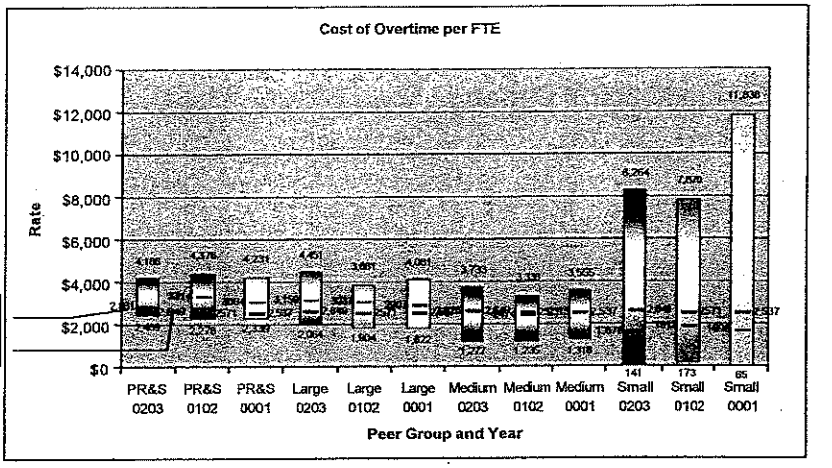
National Comparison

Absenteeism rates vary between industry types. Rates of leave above 4.6% are over entitlement for a given period. Rates above 5% are to be considered significant.

EFF-03 Cost of Overtime per FTE

Measure

The cost of Overtime per Ordinary Worked FTE.



Summary

The State median for the Cost of Overtime per FTE ($2,649) has increased slightly over the three year period to 2002/03.

Peer Group Median
State Median

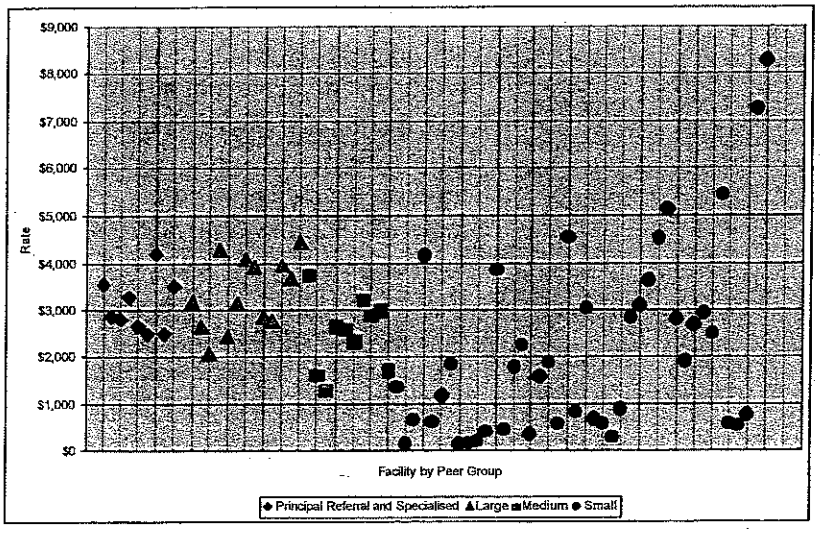
Discussion

The Principal Referral and Specialised (PR&S) and Large peer groups have recorded a result higher than the State median for the 02/03 financial year. The Large peer group is showing an increasing trend however the peer group median for PR&S declined in the latest round. The PR&S peer group contains nine facilities with scores ranging from $2,489 to $4,188 (PGM $2,861). The Large peer group contains 13 facilities with results ranging from $2,064 to $4,451 (PGM $3,159). A total of $58.1M in overtime was recorded from a total of 19,075 Ordinary Worked FTE (Avg. $3,048) in these two peer groups.

The Medium and Small facilities have recorded results that have remained relatively stable over the three year period, with the median score for both peer groups below the State median. A total of 10 Medium and 42 Small facilities were included in the study, with results ranging from $1,276 to $3,733 (PGM $2,626) for the Medium peer group and $141 to $8,264 (PGM $1,678) for the Small peer group. A total of $5.8M in overtime was recorded from a total of 2,612 Ordinary Worked FTE (Avg $2,220) in these two peer groups.

Outlier Discussion

Of the PR&S and Large facilities, three facilities were identified as potentially negative outliers being, **Townsville** ($4,188), **Redland** ($4,296) and **Mt Isa** ($4,451). A total of three facilities were identified as potentially positive outliers, being **RB&WH** ($2,489), **QEII** ($2,064) and **Logan** ($2,434). A total of five Small and one Medium facility were identified as potentially negative outliers with scores ranging from $3,733 to $8,264.



Outlier actions from Phase 2

Comprehensive reviews of workforce skill mix and rostering practices have had a positive effect on rates of overtime in partnership with an encouragement of toil usage and requests for overtime to be approved at a senior level.

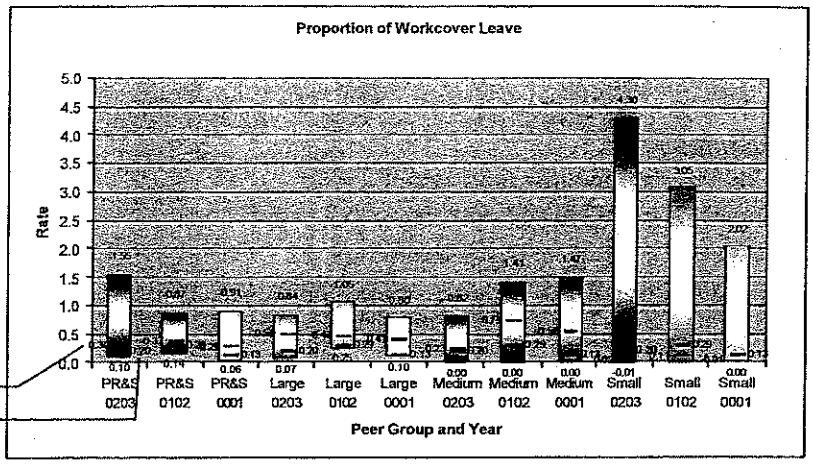
National Comparison

National data indicates an average of approximately one hour of overtime per employee per week, for Queensland Health this equates to $1,800 per FTE.

EFF-05 Proportion of WorkCover Leave per FTE

Measure

This indicator measures the amount of WorkCover leave taken as a proportion of Ordinary Worked FTE.



Summary

The State median proportion of WorkCover leave taken (0.20%) has improved significantly from the result recorded in 2001/02.

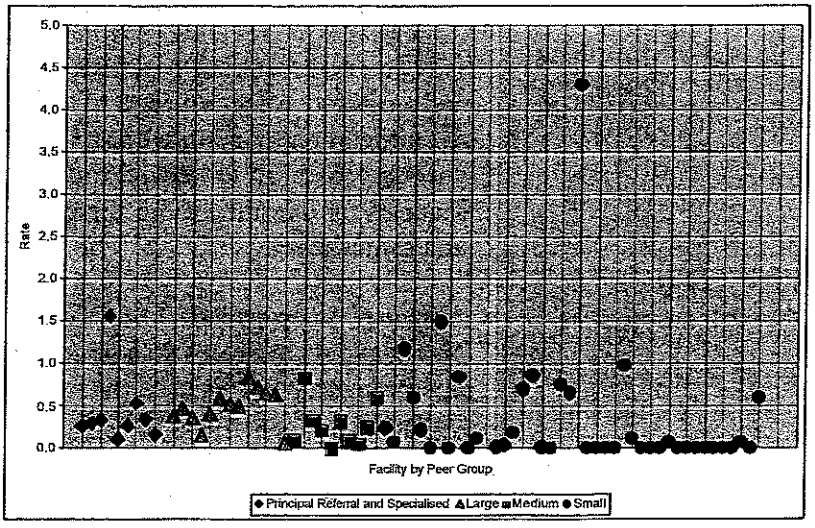
Discussion

The Principal Referral and Specialised (PR&S) and Large peer groups have recorded a result higher than the State median for the 02/03 financial year and have remained stable over the period of analysis. The PR&S peer group contains nine facilities with scores ranging from 0.10% to 1.55% (PGM 0.30%). The Large peer group contains 13 facilities with results ranging from 0.07% to 0.84% (PGM 0.50%). A total of 78.4 WorkCover Leave FTE were recorded from a total of 19,075 Ordinary Worked FTE (Avg 0.41%) in these two peer groups.

The Medium and Small facilities have recorded results that have improved from the previous year, however the median score for the Medium peer group is higher than the State median. A total of 10 Medium and 42 Small facilities were included in the study, with results ranging from 0% to 0.82% (PGM 0.23%) for the Medium peer group and 0% to 4.29% (PGM 0.02%) for the Small peer group. A total of 8 WorkCover Leave FTE were recorded from a total of 2,612 Ordinary Worked FTE (Avg 0.31%) in these two peer groups.

Outlier Discussion

Of the PR&S and Large facilities, three facilities were identified as potentially negative outliers being, **Nambour** (1.55%), **Gladstone** (0.72%) and **Maryborough** (0.81%). A total of three facilities were identified as potentially positive outliers, being **Gold Coast** (0.10%), **Mt Isa** (0.07%) and **Redland** (0.15%). A total of five Small and one Medium facility were identified as potentially negative outliers with scores ranging from 0.82% to 4.30%.



Outlier actions from Phase 2

Some Districts have indicated they will implement return to work programs, dedicate a qualified Occupational Health & Safety Officer for the District, mandatory training for patient handling, materials handling and aggression management.

National Comparison

Based upon a national average of 10 weeks lost per case, the Qld Health incident rate compares favourably with available national data.

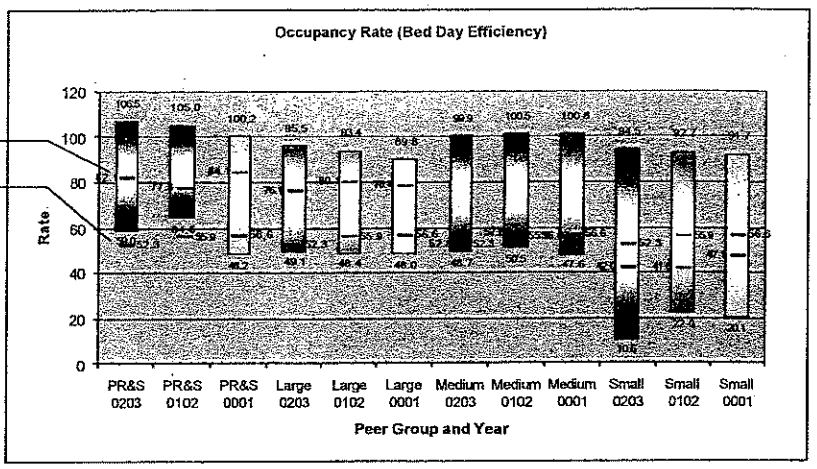
EFF-30 Occupancy Rate – Bed Day Efficiency

Measure
This indicator measures the degree to which hospital beds are filled across hospitals.

Peer Group Median

State Median

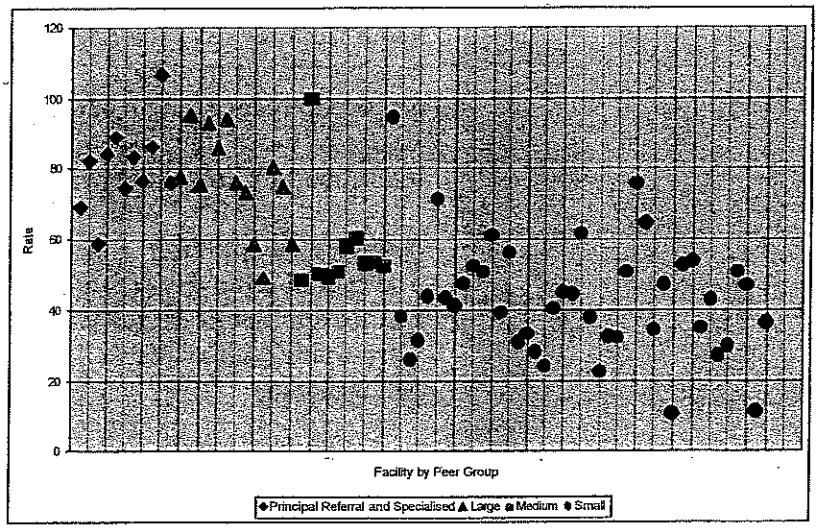
Summary
The State median Occupancy Rate (52.3%) has shown a gradual decline over the three years to 2002/03.



Discussion
The Principal Referral and Specialised (PR&S) and Large peer groups have recorded a result higher than the State median for the 02/03 financial year and have remained stable (75% to 85%) over the period of analysis. The PR&S peer group contains 11 facilities with scores ranging from 58.9% to 106% (PGM 82.1%). The Large peer group contains 13 facilities with results ranging from 49.1% to 95.5% (PGM 76.1%). A total of 2,041,615 Accrued Patient days were recorded from a total of 2,517,671 Available Bed Days (Avg 81.1%) in these two peer groups.

The Medium peer group median has declined from results recorded previously. The Small peer group median has remained comparable with the result recorded for the previous year. A total of 10 Medium and 42 Small facilities were included in the study, with results ranging from 48.7% to 99.9% (PGM 52.8%) for the Medium peer group and 10.6% to 94.5% (PGM 42.0%) for the Small peer group. A total of 303,037 Accrued Patient days were recorded from a total of 641,877 Available Bed Days (Avg 47.2%) in these two peer groups.

Outlier Discussion
Due to the central tendency of Occupancy Rate performance, facilities that had significantly high or low occupancy rates were identified as outliers. In the PR&S peer group, three facilities were identified as outliers being, Royal Children's (59.0%), Nambour (88.9%) and Cairns (106%). In the Large peer group a total of four facilities were identified as outliers, being Gladstone (49.1%), Mt Isa (58.6%), Caboolture (94.3%) and Redcliffe (95.5%). A total of ten Small (lower 10.6% to 26.0%, higher 61.5% to 94.5%) and two Medium facilities (48.7% and 99.9%) were identified as outliers.



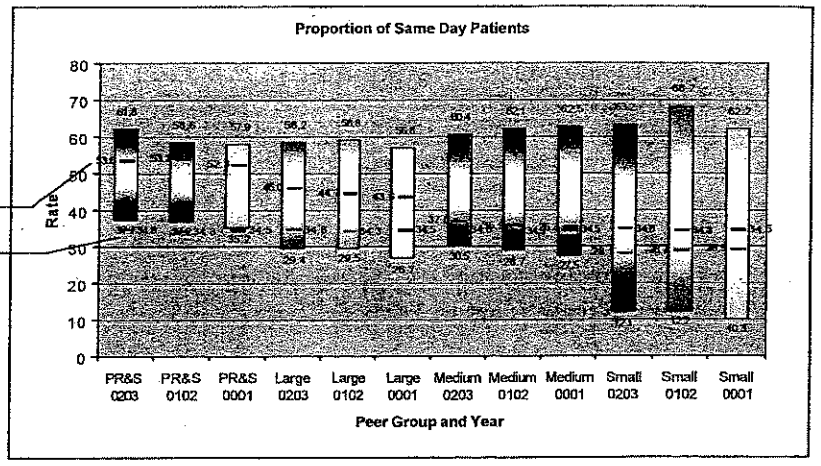
Outlier actions from Phase 2
Some Districts have indicated they will monitor and analyse length of stays. Investigate Bed/Ward reconfigurations, with wards combined according to models of care. Implementation of bed management policy and review bed numbers to reflect actual need.

National Comparison
National best practice indicates that Occupancy Rates of 85% promote efficient practices with rates above 90% leading to excessive bed crisis.

EFF-32 Proportion of Same Day Patients

Measure

A measure of the number of completed episodes of care occurring on the day of admission as a proportion of total separations.



Summary

The state Median proportion of Same Day Patients (34.82%) has remained stable over the three year period to 2002/03.

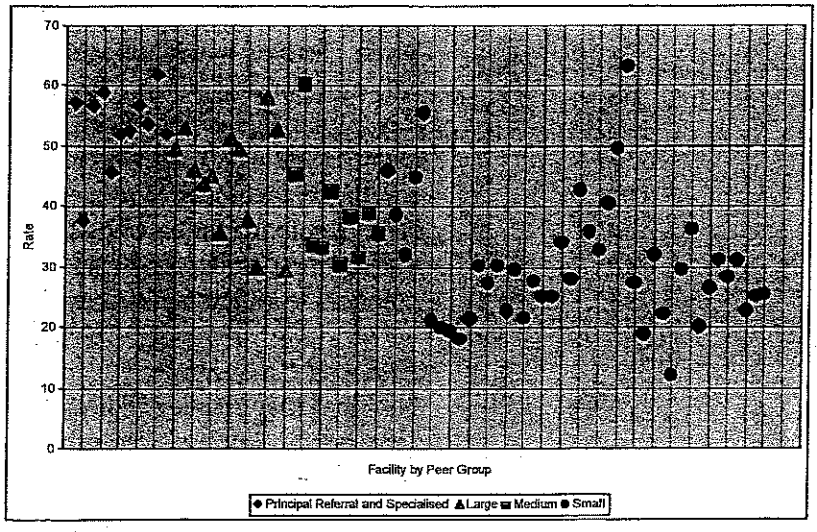
Discussion

The Principal Referral and Specialised (PR&S) and Large peer groups have recorded results higher than the State median for the 02/03 financial year and have shown a slight increase over the period of analysis. The PR&S peer group contains 11 facilities with scores ranging from 37.7% to 61.8% (PGM 53.6%). The Large peer group contains 13 facilities with results ranging from 29.4% to 58.2% (PGM 46.0%). A total of 303,279 patients were treated on a same day basis from a total of 585,239 patients (Avg 51.8%) in these two peer groups.

The Medium peer group median has improved from results recorded previously. The Small peer group median has declined marginally over the three year period. A total of 10 Medium and 42 Small facilities were included in the study, with results ranging from 30.5% to 60.4% (PGM 37.0%) for the Medium peer group and 12.1% to 63.2% (PGM 28.1%) for the Small peer group. A total of 26,043 patients were treated on a same day basis from a total of 75,892 patients (Avg 34.3%) in these two peer groups.

Outlier Discussion

Of the PR&S and Large facilities, three facilities were identified as potentially negative outliers being, **TPCH** (37.7%), **Mt Isa** (29.4%) and **Gladstone** (29.8%). A total of four facilities were identified as potentially positive outliers, being **PAH** (58.9%), **Cairns** (61.8%), **Redcliffe** (52.9%) and **Rockhampton** (58.2%). A total of five Small and one Medium facility were identified as potentially negative outliers with scores ranging from 12.1% to 30.4%.



Outlier actions from Phase 2

Some facilities have indicated a possible change in clinical practice to reduce length of stay to 'day only' procedures plus ongoing utilisation of Clinical Pathways.

National Comparison

The overall same day separation rate for Qld Public Hospitals is comparable with available national data.

EFF-35 Average Waiting Time to Admission

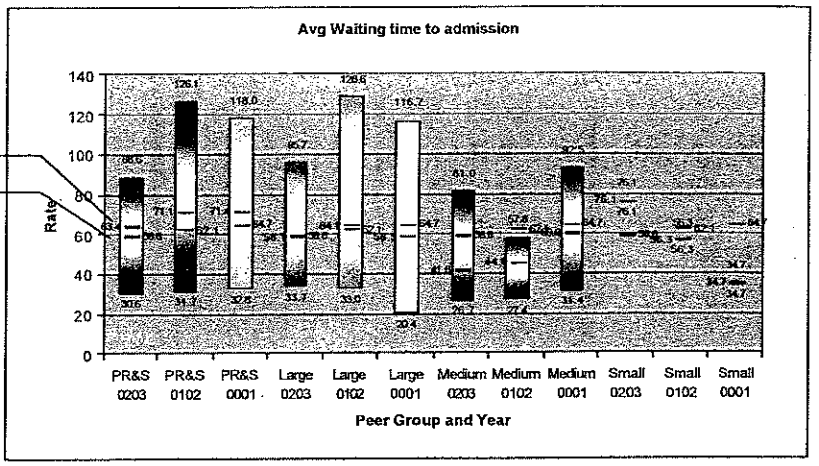
Measure

A measure of the average waiting time for admission for elective surgery from the waiting list.

Peer Group Median
State Median

Summary

The State median average number of days waited for admission for elective surgery (58.8) has improved over the three year period to 2002/03.



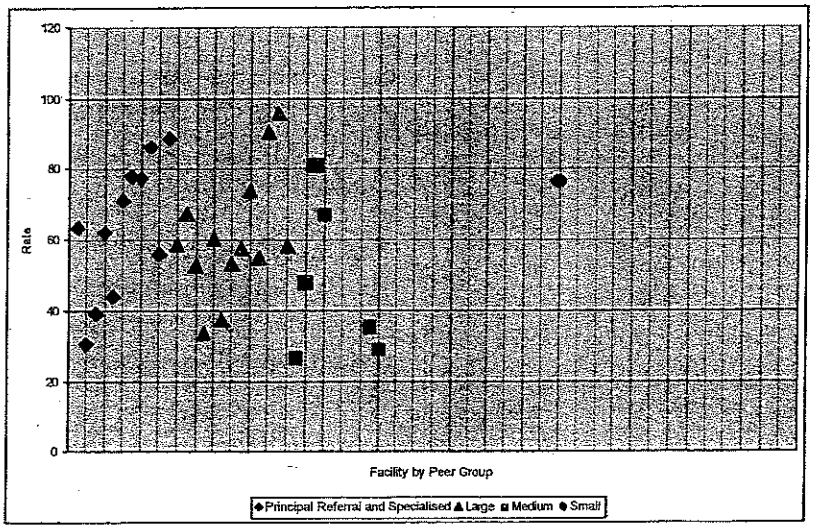
Discussion

The Principal Referral and Specialised (PR&S) peer group has recorded a median result higher than the State for the 02/03 financial year and has remained stable over the period of analysis. The Large peer group median is lower than the State median and has improved significantly from the result recorded in the previous year. The PR&S peer group contains 11 facilities with scores ranging from 30.6 to 88.6 days (PGM 63.4 days). The Large peer group contains 13 facilities with results ranging from 33.7 to 95.7 days (PGM 58.1 days). A total of 86,014 admissions (Avg 64.5 days) were analysed in these two peer groups.

The Medium peer group median has improved significantly from results recorded previously. The Small peer group contains only one facility, where the average waiting time has increased significantly over the three years. A total of six Medium and one Small facility was included in the study, with results ranging from 26.7 to 81.0 days (PGM 41.6 days) for the Medium peer group and a result of 76.1 days for the Small facility. A total of 2,081 admissions (Avg 54.0 days) were analysed in these two peer groups.

Outlier Discussion

Of the PR&S and Large facilities, four were identified as potentially negative outliers being, **RB&WH** (86.3 days), **Mater Adults & Mothers** (88.6 days), **Rockhampton** (90.4 days) and **Mackay** (95.7 days). A total of three facilities were identified as potentially positive outliers, being **TPCH** (30.6 days), **Redland** (33.7 days) and **Caboolture** (37.7 days). One Medium facility was identified as a potentially negative outlier **(Gympie)** with a result of 81 days.



Outlier actions from Phase 2

Some facilities have indicated they have undertaken audits of the waiting list, reviewed the appropriateness of categorisation and compared to other facilities. Theatre utilisation was reviewed along with the ratio of outpatient sessions to theatre sessions.

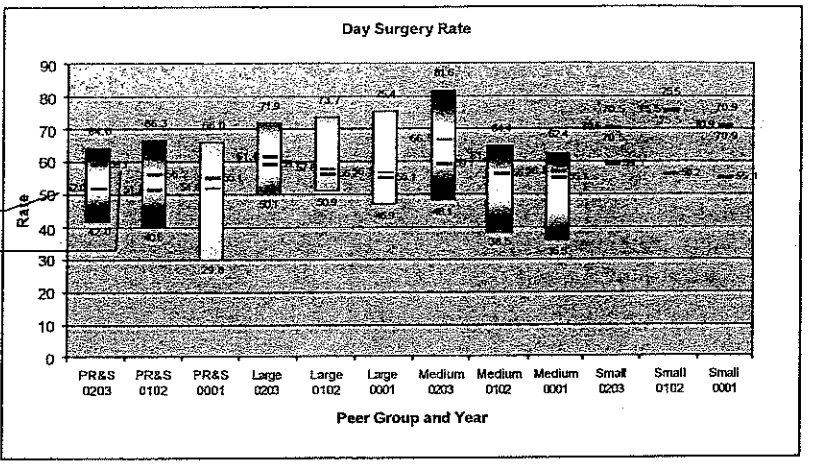
National Comparison

The average waiting time to admission for Qld Public Hospitals compares favourably with available national data.

EFF-37 Day Surgery Rate

Measure

A measure of the proportion of patients undergoing a surgical procedure that are admitted and discharged on the day of their operation.



Summary

The State median Day Surgery Rate (59.1%) has improved over the three year period to 2002/03.

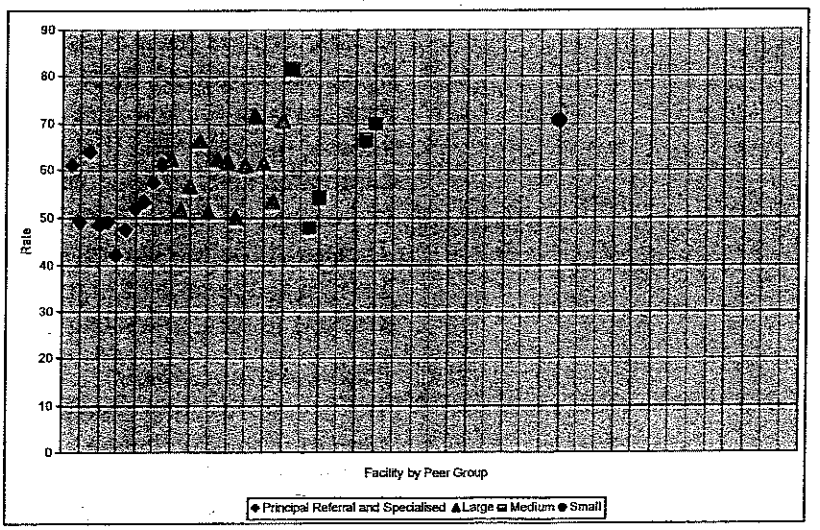
Discussion

The Principal Referral and Specialised (PR&S) peer group has recorded a median result lower than the State for the 02/03 financial year and has remained stable over the period of analysis. The Large peer group median is higher than the State median and has improved significantly from the result recorded in the previous year. The PR&S peer group contains 11 facilities with scores ranging from 42.0% to 64.0% (PGM 52.0%). The Large peer group contains 13 facilities with results ranging from 50.1% to 71.9% (PGM 61.6%). A total of 58,580 cases were performed on a same day basis from a total of 108,136 cases (Avg 54.2%) that were analysed in these two peer groups.

The Medium peer group median has improved significantly from results recorded previously. The Small peer group contains only one facility, where the day surgery rate has remained relatively stable over the three year period. A total of five Medium and one Small facility was included in the study, with results ranging from 48.1% to 81.6% (PGM 66.5%) for the Medium peer group and a result of 70.5% for the Small facility. A total of 1,210 cases were performed on a same day basis from a total of 1,936 cases (Avg 62.5%) that were analysed in these two peer groups.

Outlier Discussion

Of the PR&S and Large facilities, three were identified as potentially negative outliers being, **Gold Coast** (42.0%), **Hervey Bay** (50.1%) and **Logan** (51.2%). A total of four facilities were identified as potentially positive outliers, being **Mater Children's** (61.0%), **Royal Children's** (64.0%), **Mt Isa** (70.7%) and **Gladstone** (71.9%). One Medium facility was identified as a potentially negative outlier (**Gympie**) with a result of 48.1%.



Outlier actions from Phase 2

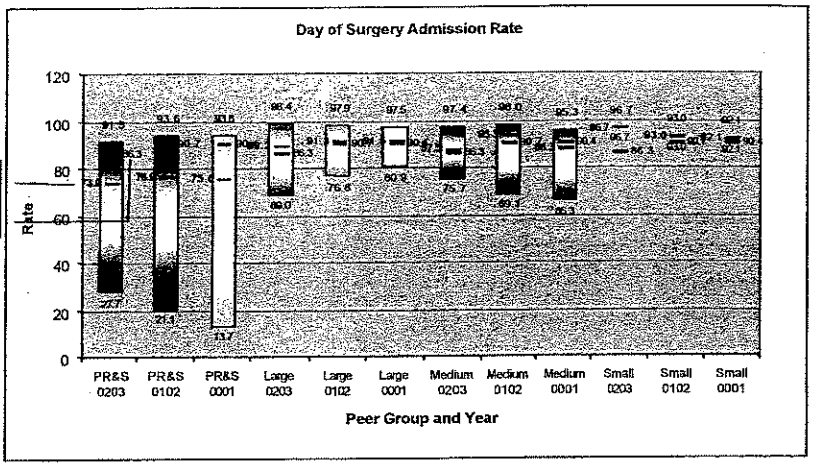
Some facilities have indicated they will review elective surgery waiting lists and ensure the selection of appropriate day surgery procedures.

National Comparison

The day surgery rate for Qld Public Hospitals compares favourably with available NSW data.

EFF-38 Day of Surgery Admission Rate

Measure
The proportion of patients undergoing a surgical procedure whom are admitted on the day of their operation.

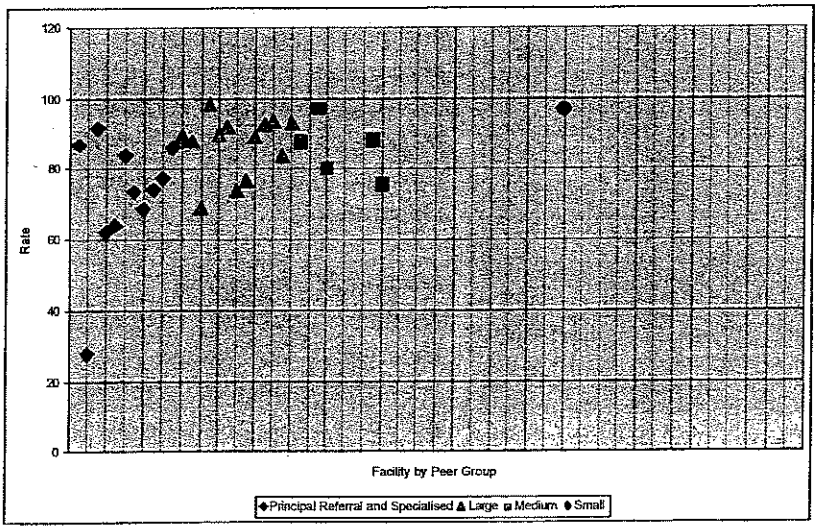


Summary
The State median Day of Surgery Admission Rate (86.3%) has declined from the result recorded in the previous year.

Discussion
The Principal Referral and Specialised (PR&S) peer group has recorded a median result lower than the State for the 02/03 financial year and has declined slightly from the result recorded in 2001/02. The Large peer group median is higher than the State median and has declined slightly over the three year period. The PR&S peer group contains 11 facilities with scores ranging from 27.7% to 91.5% (PGM 73.9%). The Large peer group contains 13 facilities with results ranging from 69.0% to 98.4% (PGM 89.2%). A total of 36,296 cases were admitted on the day of surgery from a total of 49,556 cases (Avg 73.2%) that were analysed in these two peer groups.

The Medium peer group median has declined from the result recorded previously. The Small Peer Group contains only one facility, where the day of surgery admission rate has improved from the result recorded previously. A total of five Medium and one Small facility was included in the study, with results ranging from 75.7% to 97.4% (PGM 87.5%) for the Medium peer group and a result of 96.7% for the Small facility. A total of 651 cases were admitted on the day of surgery from a total of 726 cases (Avg 89.7%) that were analysed in these two peer groups.

Outlier Discussion
Of the PR&S and Large facilities, three were identified as potentially negative outliers being, **TPCH** (27.7%), **QEII** (69.0%) and **Bundaberg** (74.1%). A total of four facilities were identified as potentially positive outliers, being **Mater Children's** (86.7%), **Royal Children's** (91.5%), **Rockhampton** (93.8%) and **Redland** (98.4%). One Medium facility was identified as a potentially negative outlier (**Innisfail**) with a result of 75.7%.



Outlier actions from Phase 2
Some facilities have indicated they will increase throughput to pre-admission clinics using nurse initiated referral. Where possible, patients are actively managed as day of surgery admission.

National Comparison
The day of surgery admission rate for Qld Public Hospitals is somewhat below the accepted target of 80%.

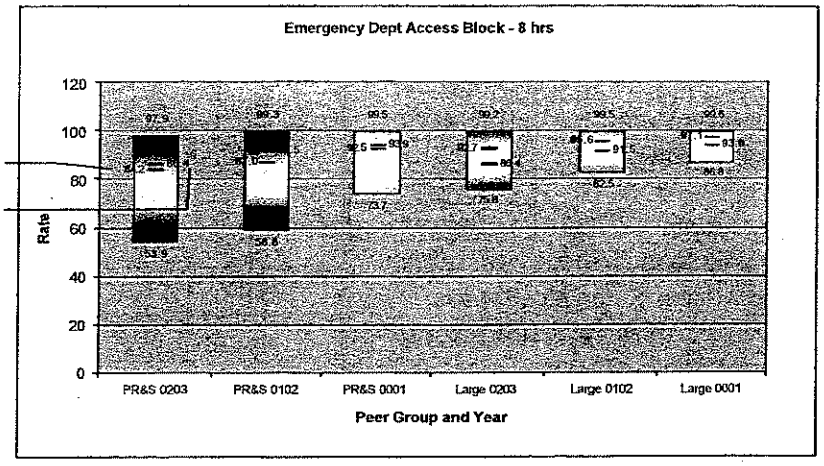
EFF-40 Emergency Department Access Block – 8 hours

Measure

The proportion of patients waiting less than eight hours for admission or transfer in the Emergency department.

Peer Group Median

State Median



Summary

The State median Emergency Department Access Block – 8 hour rate (86.4%) has shown a steady decline over the three year period being investigated.

Discussion

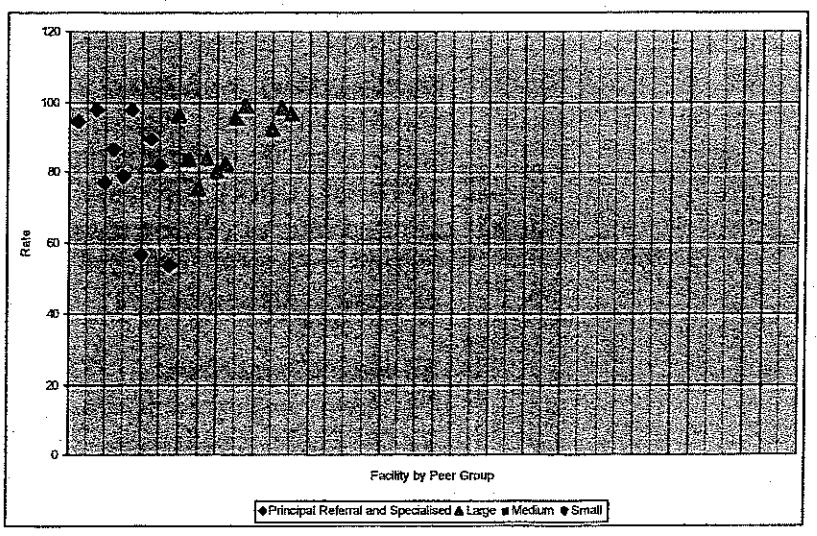
The Principal Referral and Specialised (PR&S) peer group has recorded a median result lower than the State for the 02/03 financial year and has declined over the three year period. The Large peer group median is higher than the State median and has also declined over the same period. The PR&S peer group contains 10 facilities with scores ranging from 53.9% to 97.9% (PGM 84.2%). A total of 89,916 cases were admitted or transferred within 8 hours of presentation to an emergency department from a total of 110,401 cases (Avg 81.4%) in this peer group.

The Large peer group contains 11 facilities with results ranging from 75.8% to 99.2% (PGM 92.7%). A total of 65,532 cases were admitted or transferred within 8 hours of presentation to an emergency department from a total of 73,775 cases (Avg 88.8%) in this peer group. The state-wide current average of 84.4% is showing a declining trend over the three years of investigation.

There are no facilities in the Medium or Small peer groups with electronic Emergency Department data collections.

Outlier Discussion

Of the PR&S and Large Facilities, two were identified as potentially negative outliers being, **Mater Adult and Mothers** (53.9%) and **QEII** (75.8%). A total of three facilities were identified as potentially positive outliers, being **Toowoomba** (97.9%), **Hervey Bay** (99.2%) and **Mackay** (98.3%).



Outlier actions from Phase 2

Emergency Department performance in monitored corporately through the quarterly ED Benchmarking Report prepared by the Surgical Access Service, and reported to Directors of Emergency Departments.

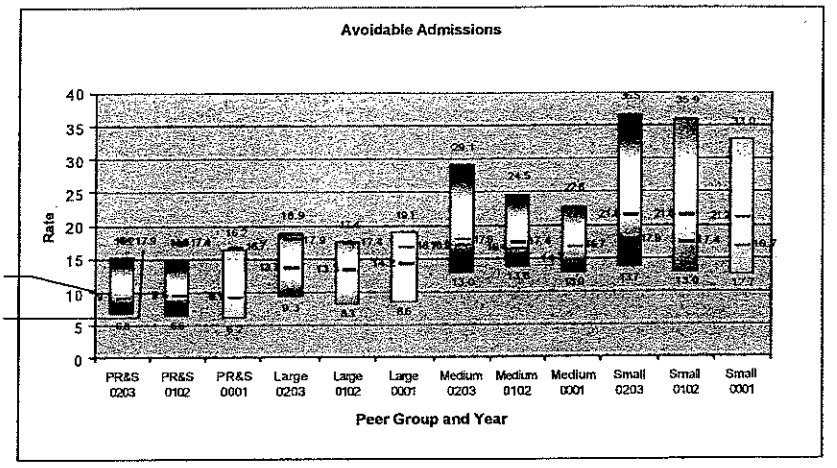
National Comparison

Available information regarding Emergency Department Access Block has shown an increasing trend in both NSW and Victorian Emergency Departments.

EFF-46 Avoidable Admissions

Measure

The proportion of avoidable admissions or potentially preventable hospitalisations for conditions where hospitalisation is thought to be avoidable if timely and adequate non-hospital care is provided.



Summary

The State median Avoidable Admission Rate (17.9%) has shown a steady increase over the three year period being investigated.

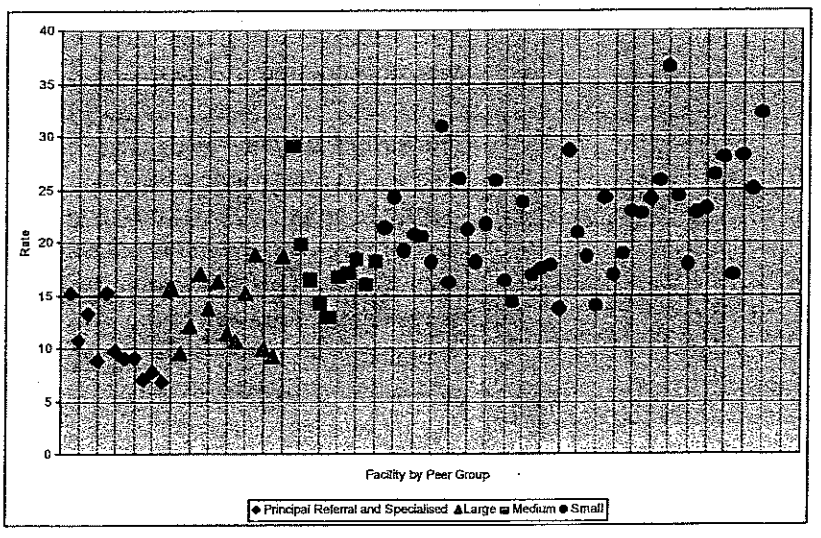
Discussion

The Principal Referral and Specialised (PR&S) and Large peer groups have recorded results lower than the State median for the 02/03 financial year and have remained relatively stable over the period of analysis. The PR&S peer group contains 11 facilities with scores ranging from 6.8% to 15.2% (PGM 9.14%). The Large peer group contains 13 facilities with results ranging from 9.3% to 18.9% (PGM 13.7%). A total of 64,302 potentially avoidable admissions from a total of 606,395 admissions (Avg 10.6%) were analysed in these two peer groups.

The Medium peer group median has increased over the three year period to 2002/03. The Small peer group median has remained unchanged over the same period. A total of 10 Medium and 42 Small facilities were included in the study, with results ranging from 13.0% to 29.1% (PGM 16.9%) for the Medium peer group and 13.7% to 36.5% (PGM 21.6%) for the Small peer group. A total of 15,570 potentially avoidable admissions from a total of 78,868 admissions (Avg 19.7%) were analysed in these two peer groups.

Outlier Discussion

Of the PR&S and Large facilities, four were identified as potentially negative outliers being, **Mater Children's** (15.2%), **Nambour** (15.2%), **Mt Isa** (18.7%) and **Gladstone** (18.9%). A total of three facilities were identified as potentially positive outliers, being **Mater Adult and Mother's** (6.8%), **Mackay** (9.3%) and **Redcliffe** (9.5%). A total of five Small and one Medium facility were identified as potentially negative outliers with scores ranging from 28.1% to 36.5%.



Outlier actions from Phase 2

The Avoidable Admission indicator was not reported in Phase 2.

National Comparison

The separation rate per 1,000 population for Qld is 32.36, slightly higher than the National rate of 30.78.

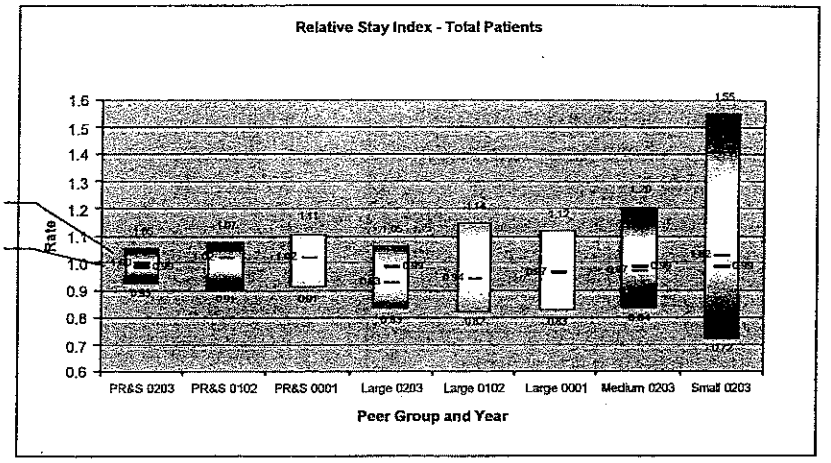
EFF-47 Relative Stay Index

Measure

An index of actual patient days in comparison with a calculated anticipated number of patient days adjusted for Casemix and the patients' age.

Peer Group Median

State Median



Summary

The State median Relative Stay Index (0.99)has shown marginal improvement over the three year period being investigated.

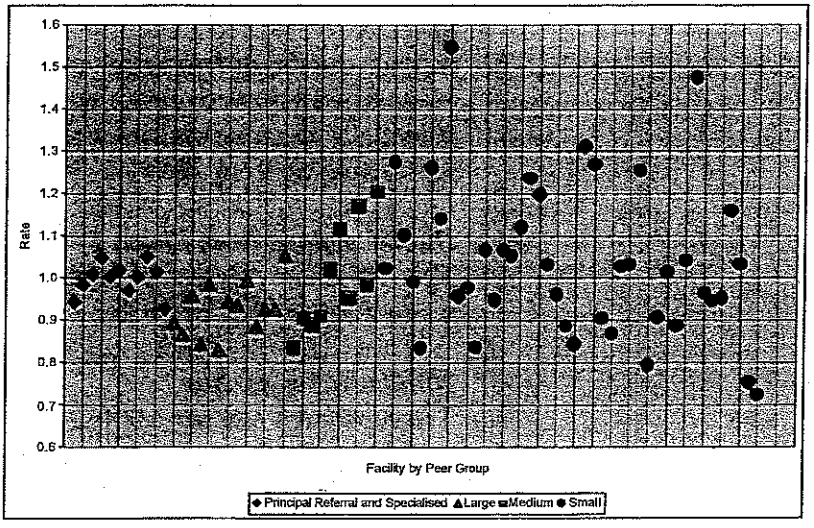
Discussion

The Principal Referral and Specialised (PR&S) peer group has recorded a result higher than the State median for the 02/03 financial year and has shown a slight improvement over the period of analysis. The Large peer group median has improved over the three year period and is currently lower than the State median. The PR&S peer group contains 11 facilities with scores ranging from 0.93 to 1.05 (PGM 1.00%). The Large peer group contains 13 facilities with results ranging from 0.83 to 1.05 (PGM 0.93). A total of 1,529,919 bed days were analysed in 2002/03 with the patient mix generating 1,561,819 anticipated bed days (var. 31,900) (Avg 0.98).

The three years of data to 2002/03 for the Medium and Small peer groups were analysed as a whole to ensure statistical reliability. A total of 10 Medium and 42 Small facilities were included in the study, with results ranging from 0.84 to 1.20 (PGM 0.97) for the Medium peer group and 0.72 to 1.55 (PGM 1.02) for the Small peer group. A total of 624,724 bed days were analysed in 2002/03 with the patient mix generating 612,403 anticipated bed days (var. -12,341) (Avg 1.02).

Outlier Discussion

Of the PR&S and Large facilities, four were identified as potentially negative outliers being, **PAH** (1.05), **RB&W** (1.05), **Mt Isa** (1.05) and **Maryborough** (0.99). A total of three facilities were identified as potentially positive outliers, being **Mater Adult and Mother's** (0.93), **Caboolture** (0.83) and **Redland** (0.84). A total of five Small and one Medium facility were identified as potentially negative outliers with scores ranging from 1.27 to 1.55.



Outlier actions from Phase 2

The Relative Stay Index indicator was not reported in Phase 2.

National Comparison

The relative stay index for Qld public hospitals (0.93) compares favourably with available national data (0.98). This favourable result is replicated for each of the subcategories of Medical, Surgical and Other patients.

EFF-50 Average Cost per Weighted Separation (NHCDC)

Measure

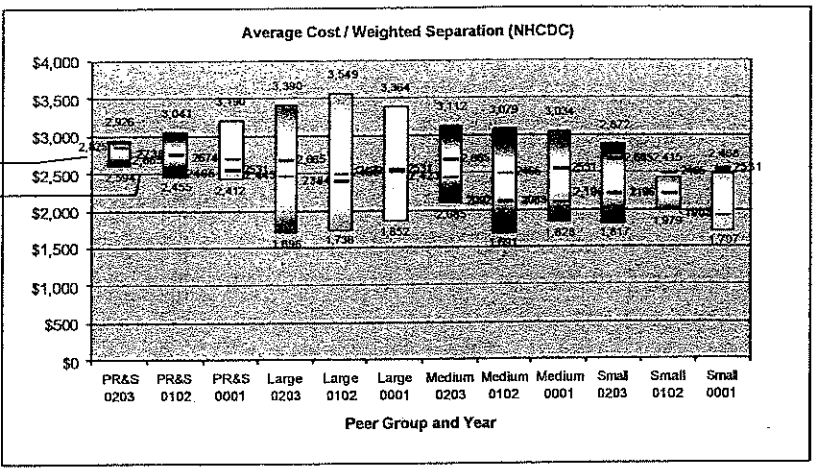
The average cost of inpatients per separation adjusted by National AR-DRG cost weights.

Peer Group Median

State Median

Summary

The State median Average Cost per Weighted Separation ($2,665) has increased from the result recorded in 2001/02. (Note: two medium facilities removed and one Principal added from 01/02)



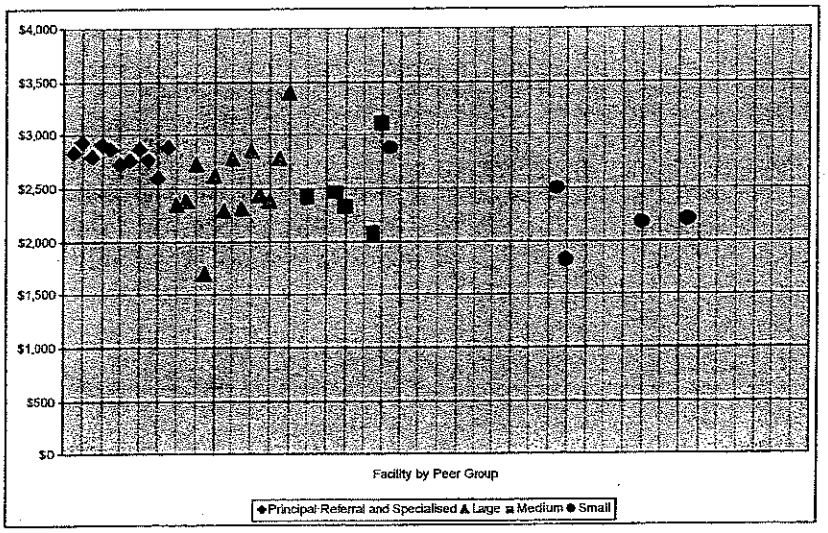
Discussion

The Principal Referral and Specialised (PR&S) peer group has recorded a result higher than the State median for the 02/03 financial year and has shown a slight increase over the period of analysis. The Large peer group median remained relatively stable over the three year period and is currently lower than the State median. The PR&S peer group contains 11 facilities for 2002/03 with scores ranging from $2,5,94 to $2,926 (PGM $2,825). The Large peer group contains 13 facilities (Note: Toowoomba now included in 02/03 data) with results ranging from $1,696 to $3,390 (PGM $2,445). A total expenditure of $1,558M was recorded across 573,699 national weighted separations during 2002/03 in these two peer groups (avg. $2,716).

The Medium peer group median has increased from the result recorded in 2001/02 (Note: Proserpine and Beaudesert removed from 02/03 data). The Small peer group median has remained the same as the result recorded in 01/02. A total of five Medium and five Small facilities were included in the study, with results ranging from $2,085 to $3,112 (PGM $2,423) for the Medium peer group and $1,817 to $2,872 (PGM $2,196) for the Small peer group. A total expenditure of $49.4M was recorded across 20,843 national weighted separations during 2002/03 in these two peer groups (avg. $2,369).

Outlier Discussion

Of the PR&S and Large facilities, four were identified as potentially negative outliers being, **TPCH** ($2,926), **PAH** ($2,907), **Mt Isa** ($3,390) and **Maryborough** ($2,850). A total of three facilities were identified as potentially positive outliers, being **Gold Coast** ($2,717), **Cairns** ($2,594) and **Redland** ($1,696). One Small (**Wynnum** $2,872) and one Medium facility (**Innisfail** $3,112) were also identified as potentially negative outliers.



Outlier actions from Phase 2

Some facilities have indicated a constant review of practices and models of service delivery will improve costs. Additionally facilities have indicated a need to review their costing systems and processes.

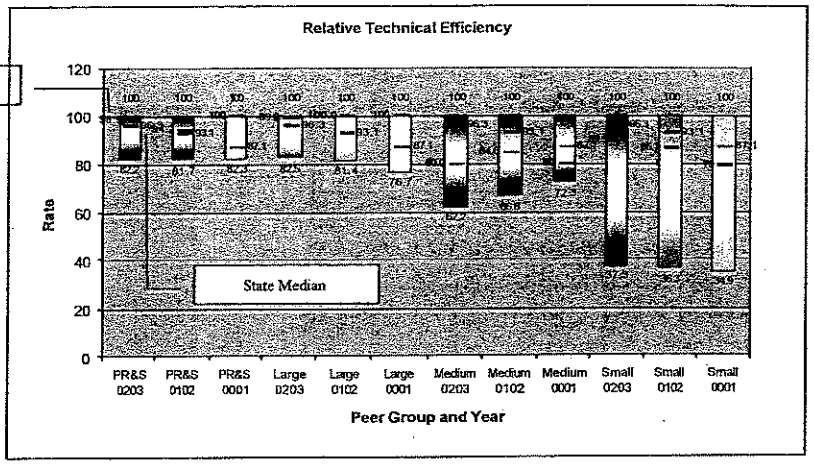
National Comparison

The Average Cost per Weighted Separation for Qld public hospitals compares favourably with available national data.

EFF-64 Relative Technical Efficiency

Measure

The relative technical efficiency of each Hospital using Data Envelopment Analysis to measure performance across the outputs of Weighted Seps, Outpatient Occ of Service and Other admitted Care types, and inputs of Ord Worked FTE, Non Lab Exp and Gross Asset Value.



Summary

The State median Relative Technical Efficiency score (96.3%) has increased over the three year period to 2002/03. Generally, a 6% improvement in outputs could be achieved if all facilities were 100% technically efficient.

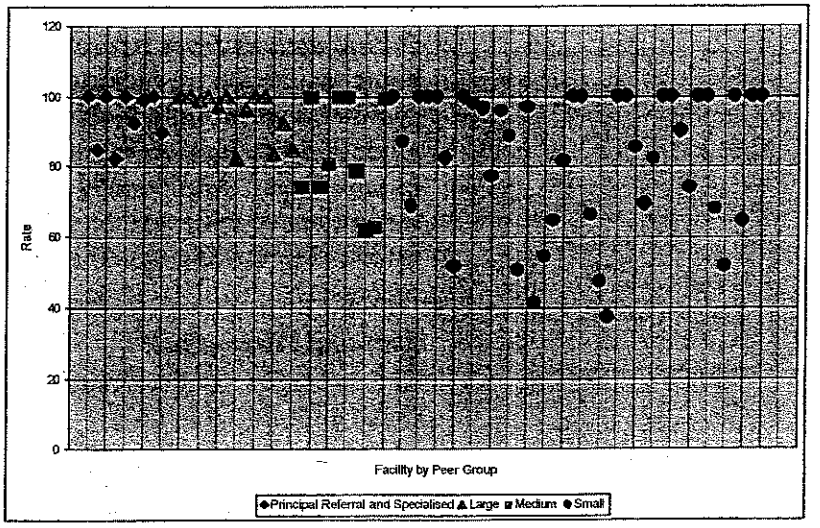
Discussion

The Principal Referral and Specialised (PR&S) and Large peer group has recorded a result higher than the State median for the 02/03 financial year and has shown a slight improvement over the period of analysis. The PR&S peer group contains nine facilities with scores ranging from 82.2% to 100% (PGM 98.9%). The Large peer group contains 13 facilities with results ranging from 82.5% to 100% (PGM 99.2%). The Medium peer group median has declined from the result recorded in 2001/02. The Small peer group median has increased significantly over the three year period. A total of 10 Medium and 42 Small facilities were included in the study, with results ranging from 62.2% to 100% (PGM 80%) for the Medium peer group and 37.3% to 100% (PGM 89.5%) for the Small peer group.

For the 2002/03 financial year, the analysis suggests that an increase of 37,133 Phase 8 Weighted Separations, 12,603 Weighted Outpatient Occasions of Service and 2,846 Weighted Other Activity is achievable whilst maintaining the current level of inputs if all facilities were 100% technically efficient. Alternatively, the analysis suggests that a decrease of 1,306 Ordinary FTE - Worked, $35M non-labour expenditure and $270M Gross Asset Value is achievable whilst maintaining the current level of outputs if all facilities were 100% technically efficient.

Outlier Discussion

Of the PR&S and Large facilities, three were identified as potentially negative outliers being **Nambour** (82.2%), **Bundaberg** (82.5%) and **Rockhampton** (83.5%). A total of ten facilities were identified as potentially positive outliers all with scores of 100%. One Medium (**Ingham** 62.2%) and four Small facilities (**Clermont, Roma, Longreach** and **Charleville**) were also identified as potentially negative outliers with scores ranging from 37.3% to 50.9%.



Outlier actions from Phase 2

The Relative Technical Efficiency indicator was not reported in Phase 2.

National Comparison

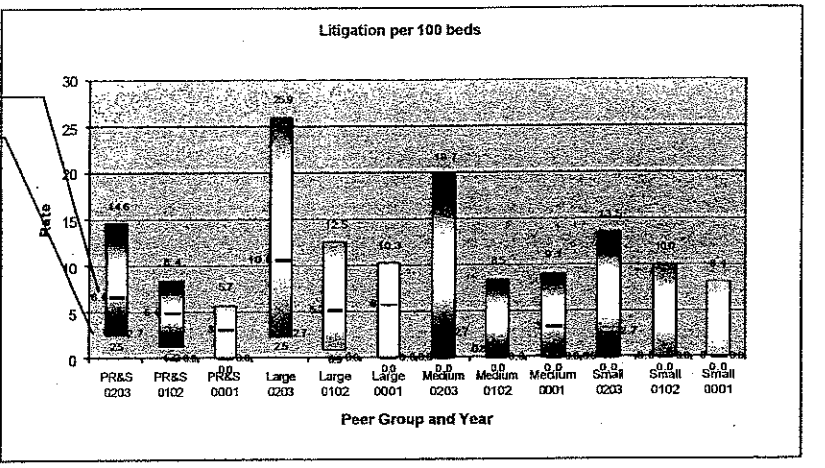
No nationally comparable data available.

EFF-69 Litigation Rate per 100 Beds

Measure
The amount of health litigation per 100 available beds.

Peer Group Median
State Median

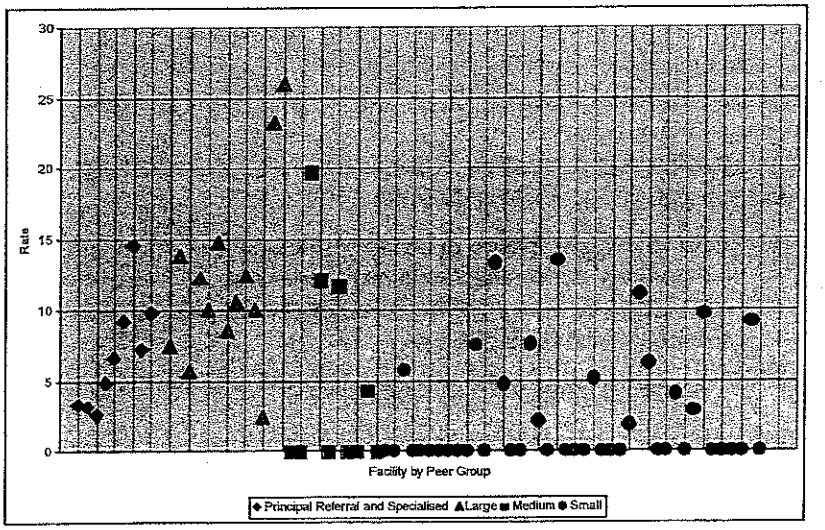
Summary
Litigation rates have artificially increased during the three year period to 2002/03 (State median 2.68) in accordance with Tort Law Reforms introduced in Queensland.



Discussion
The Principal Referral and Specialised (PR&S) and Large peer groups median results are above the State median for the 02/03 financial year. The PR&S peer group contains nine facilities with scores ranging from 2.55 cases per 100 beds to 14.60 per 100 beds. The Large peer group contains 13 facilities with results ranging from 2.46 to 25.93 per 100 beds. A total of 518 cases (Avg 8.0 cases per 100 beds) were analysed in these two peer groups for the 2002/03 financial year.

The Medium peer group median has decreased over the three year period to 2002/03. The Small peer group median has remained unchanged over the same period. A total of 10 Medium and 42 Small facilities were included in the study, with results ranging from 0 to 19.7 (PGM 0) for the Medium peer group and 0 to 13.5 (PGM 0) for the Small peer group. A total of 52 cases (Avg 3.82 cases per 100 beds) were analysed in these two peer groups for the 2002/03 financial year.

Outlier Discussion
Of the PR&S and Large facilities, three were identified as potentially negative outliers being **Townsville** (14.6), **Mt Isa** (25.9) and **Mackay** (23.3). A total of three facilities were identified as potentially positive outliers, being **PAH** (2.55), **Rockhampton** (2.46) and **QEII** (5.77). A total of five Small and one Medium facility were identified as potentially negative outliers with scores ranging from 9.09 to 19.7.



Outlier actions from Phase 2
The Litigation Rate per 100 beds indicator was not reported in Phase 2.

National Comparison

No nationally comparable publicly available data available. It is envisaged that rates will remain high for 2003/04 and reduce from 2004/05 due to the milestones dates introduced in the Tort Law reform of Queensland.

System Integration & Change

Overview

Measures of *systems and processes performance* comprise the indicators within the System Integration and Change quadrant. These aspects of the functioning of a hospital or health service are many and varied and no report can be wholly comprehensive and include all possible performance indicators. The areas chosen in this quadrant were considered to represent current practice and to reflect trends in quality health service delivery. The indicators provide measures around the domains of continuity, capability, sustainability and safety and were selected as being amenable to sustainable change in the short term.

Today's health care system is facing significant and emerging challenges. Whilst Australia's health system has provided high quality care for decades, changes in health care delivery, technology and consumer expectations have placed pressure on the future capability and sustainability of the system. Rapid changes in health care delivery, escalating costs associated with diagnosis and treatment, workforce issues (shortages and ageing), combined with the financial restraint imposed on the system compels Queensland Health to review processes and systems supporting health care delivery and to invest in innovation and change.

The indicators presented in this current report are a sub set of the indicators within the quadrant. They were chosen based on variation in results and amenability to change by the users of the MQ report. These measures cover aspects of workforce management, quality of information, standardised approaches to clinical management, integration with the local community, tele-health and quality and safety of healthcare practices.

National Comparison

Exact comparisons for these indicators are not available. Nationally, the development of indicators around the National Health Performance Framework dimensions of continuity, capability, sustainability and safety continues to be a work in progress. The Australian Hospital Statistics Report 2002-2003 reports the number of separations with external causes for adverse events as an indicator of safety, which is still developmental. This report has no indicators for the provision of continuous care specific to the acute care sector and no indicators for sustainability.

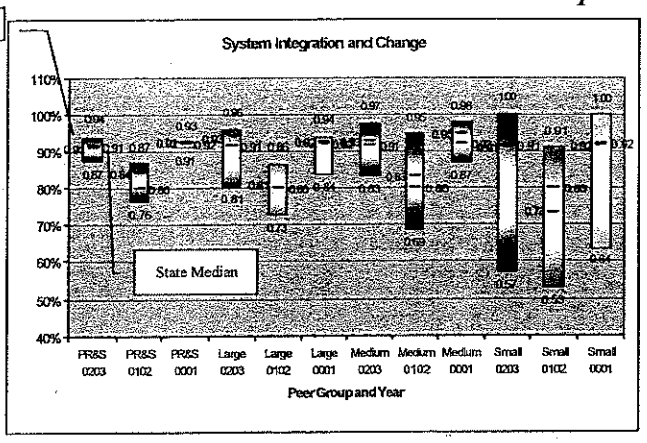
Hospital survey

Where state-wide data has not been available, the Measured Quality reports, System Integration and Change quadrant have for the past 3 years utilised a hospital survey to provide data around a range of processes relating to continuity, capability, sustainability and safety. In wide consultation across Queensland Health, this survey has been refined to better extract hospital based information which can been used for the benchmarking exercise of the Measured Quality reports

Workforce Management	SIC03.01	Retention of nursing staff
	SIC03.03	Median age of nursing staff
	SIC03.08	Indigenous workforce
Quality of Information	SIC04.02a	Timeliness of information
Standardised Approaches to Clinical Management		
	SIC06.01-08	Standardised approaches to clinical management - development and use of - collection and management of data for - development and use of Queensland Health endorsed clinical pathways - in selected surgical areas - in selected medical areas - in selected O & G areas - in selected paediatric areas - barriers to the development and use of
Integration with the Local Community	SIC08.01	Consumer participation in health services
	SIC08.02	Community partnerships with health services
	SIC08.04	'*Continuity of Care Planning Framework* 'implementation
	SIC08.05	Environmental management
Tele-health	SIC09	Tele-health usage for staff development
Quality and safety of Health care practices	SIC10.01	Incident management

SIC03.01 Retention of Nursing Staff

Graph 1



Measure

This indicator measures the percentage of registered nursing staff retained after one year at the hospital where they were working (excluding new graduates).

Summary

Retention of Nursing Staff has increased significantly from the 2001/02 financial year. The state-wide median is now 91.4% up from 79.9% recorded in 01/02.

Discussion

The Principal Referral and Specialised (PR&S) and Large Peer Groups have recorded results similar to the State Median for the 02/03 financial year. The PR&S peer group contains nine facilities with scores ranging from 87.4% to 94.0%. The Large peer group contains 12 facilities with results ranging from 80.6% to 95.6%. A total of 9,440 nurses were retained after one year of service from the 10,359 nurses whom were studied in these two peer groups for the 2002/03 financial year.

The results for the Medium and Small facilities are presented for the period 2000/01 to 2002/03. A total of 10 Medium and 42 Small facilities were included in the study, with results ranging from 57.1% to 100%. A total of 1,582 nurses were retained after one year of service from the 1,769 nurses whom were studied in these two peer groups during the 2002/03 financial year.

Outlier Discussion

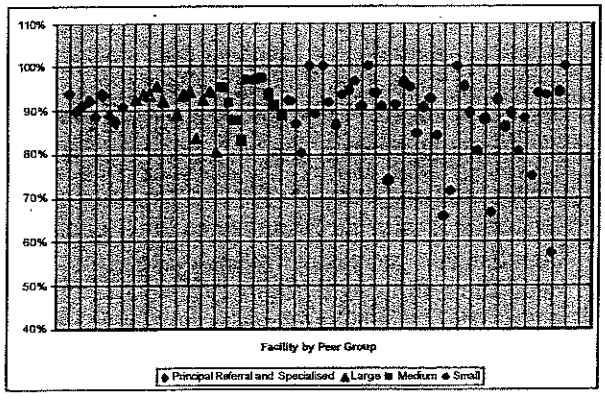
Of the PR&S and Large Facilities, three facilities were identified as potentially negative outliers being, **RBH** (87.4%, 691 retained of 791 nursing staff), **Gladstone** (83.7%, 103 of 123) and **Mt Isa** (80.6%, 104 of 129). A total of three facilities were identified as potentially positive outliers, being, **TPCH** (94.0%, 769 of 818) **Redland** (95.6%, 129 of 135) and **Maryborough** (94.5%, 138 of 146). A total of five small and one medium facility were identified as potentially negative outliers being **Kingaroy** (83.0%, 39 of 47), **Normanton** (57.1%, 4 of 7), **Longreach** (65.6%, 21 of 32), **Joyce Palmer** (66.7%, 12 of 18), **Clermont** (71.4%, 15 of 21) and **Cunnamulla** (73.9%, 17of 23). A total of five small and one medium facility were identified as potentially positive outliers being **Proserpine** (97.4%, 37 of 38), **Moranbah** (100%, 20 of 20), **Miles** (100%, 18 of 18), **Maleny** (100%, 12 of 12), **Doomadgee** (100%, 3 of 3) and **Gatton** (100%, 18 of 18).

Improvement Opportunities

Outlier Action (2004 report)

Maryborough, Proserpine, Clermont and Cunnamulla hospitals have identified this outlier for investigation.

Graph 2



Outlier Actions (2003 report)

This has been seen as a corporate issue, and in the main, hospitals are looking to the Nursing Advisory Unit and Workforce Planning Units for strategic advice to manage nursing workforce in their facility. In 2003 a Nursing Support Unit at Cairns hospital was established to address the issue and Rockhampton hospital (although not identified as an outlier) have established a Nursing Workloads Management Committee to explore and manage a range of issues in the nursing workforce.

National Comparison

A 2004 publication on nursing retention in NSW, reports retention rates of RN's in public hospitals at 78.9%, with variation from 78% in principal referral hospitals to 83% in district and community hospitals. These results are based on 1996-97 data.

SIC03.03 Median Age of Nursing Staff

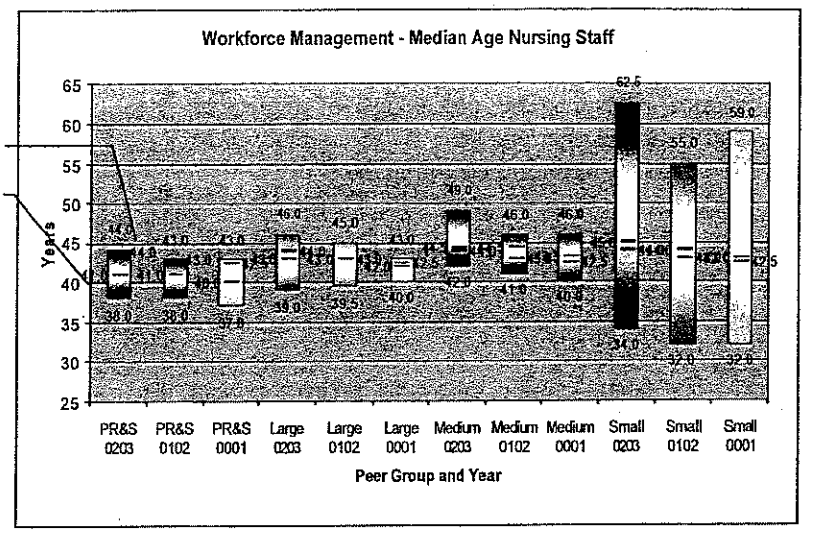
Graph 1

Measure

This indicator measures the median age of registered nursing staff by hospital, following one year of service.

Summary

The median age of nursing staff for Queensland in 2002/03 is 44.0 years, having shown increases in both of the previous two years.



Discussion

A comparison of the median age of nursing staff within each of the four hospital peer groups shows the oldest median age, and the broadest spread of scores in the small hospital peer group and the youngest median age in the principal referral and specialist hospital peer group.

The pattern of increasing median age for nursing staff is consistent across the three years of data and in each of the four hospital peer groups. In identification of outliers, hospitals with significantly different median ages at the $10^{th\%ile}$ and $90^{th\%ile}$ were highlighted. While is has not been presented that an older or younger workforce is necessarily positive or negative, issues surrounding an ageing workforce are well documented in the literature.

Outlier Discussion

Across the four hospital peer groups ten facilities were identified with significantly older median ages - .**Cairns** (44 years) (PR&S); **QE II** and **Redlands** (45 years) and **Hervey Bay** (46 years) (Large); **Beaudesert** (49 years) (Medium): and **Mt Morgan** and **Bamaga** (50 years), **Maleny** (50.5 years), **Stanthorpe** (51 years), and **Doomagee**(62.5 years) (Small).

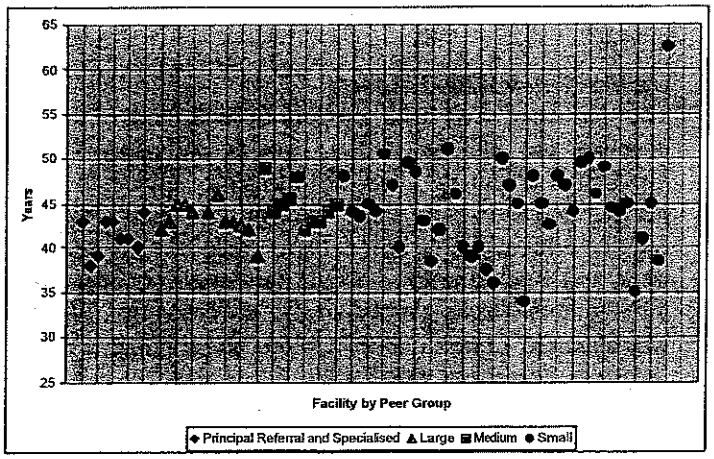
A total of seven facilities were identified with significantly younger median ages - **Royal Children's** (38 years) (PR&S); **Mt Isa** (39 years) (Large); **Warwick** (42 years) (Medium), **Longreach** (34 years), **Cloncurry** (35 years), **Emerald** (36 years) **Biloela** (37.5 years) (Small).

Improvement Opportunities

Outlier Action (2004 report)

Cairns and Hervey Bay hospitals have identified this outlier for investigation.

Graph 2



Outlier Actions (2003 report)

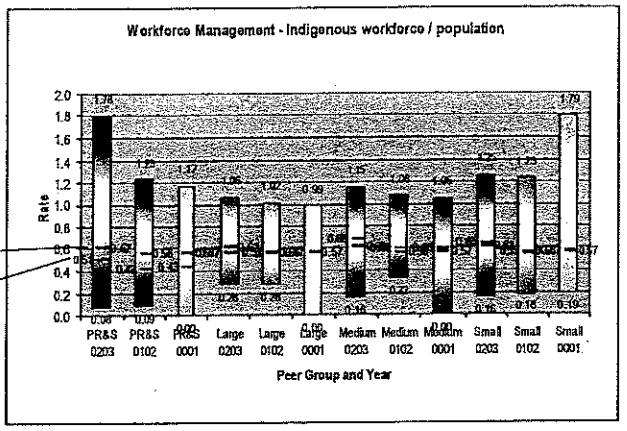
This has been seen as a corporate issue, and in the main, hospitals are looking to the Nursing Advisory Unit and Workforce Planning Units for strategic advice to manage an ageing nursing workforce in their facility.

National Comparison

The AIHW nursing labour force 2002 publication reports the increasing average age of nursing workforce from 39.3 yrs in 1995 to 42.2 years in 2001. The Queensland trend is consistent with this data.

SIC03.08 Indigenous Workforce
(Compared with Indigenous population in Health Service Districts)

Graph 1



Measure

This indicator compares the Indigenous profile of the workforce in each Health Service District (the proportion of staff who identify as Aboriginal or Torres Strait Islander) with the Indigenous profile in the District population (the proportion of the community who identify as Aboriginal or Torres Strait Islander).

Summary

A score of one indicates that the HSD workforce profile reflects the community profile in respect of Aboriginal and Torres Strait Islander people. The median score for this indicator across Queensland in 2002/03 was 0.62, showing an increase from the previous two years (01/02 – 0.56 and 00/01 – 0.57).

Discussion

The median scores in the Principal Referral & Specialist, Medium and Small Peer Groups show the same trend as with the state-wide data. In the Large Peer Group, the median score has remained at 0.57 for the three years. For the 2002/03 data, the peer group medians for the Principal Referral & Specialist and Large hospital groups fall below the state-wide median – PR&S (0.51) and Large (0.57). For the Medium and Small hospital peer groups, the median scores are above the state-wide score – Medium (0.68) and Small (0.65).

Outlier Discussion

Within each Health Service District, all in-scope facilities were allocated the District score. Outliers were however identified within each peer group. 10 facilities, in six HSD's were identified as being potentially positive outliers in this indicator. **Gold Coast** (1.78) (PR&S); **Gladstone** (0.96), **Rockhampton** (1.06), (Large); **Kingaroy** (1.15) (Medium); **Murgon, Nanango, Cherbourg** (1.15) (South Burnett HSD), **Clermont MPHS, Moranbah** (1.15, Moranbah HSD), and **Monto** (1.25, North Burnett HSD) (Small).

A total of eight facilities within five Health Service Districts were identified as being potentially negative outliers in this indicator. **Royal Children's** (0.08) (PR&S); **QEII** (0.28), **Mackay** (0.43) (Large); **Warwick** (0.16) (Medium) **Goondiwindi** and **Stanthorpe** (0.16, Southern Downs HSD), and **Charters Towers** and **Hughenden** (0.27 Charters Towers HSD) (Small).

Improvement Opportunities

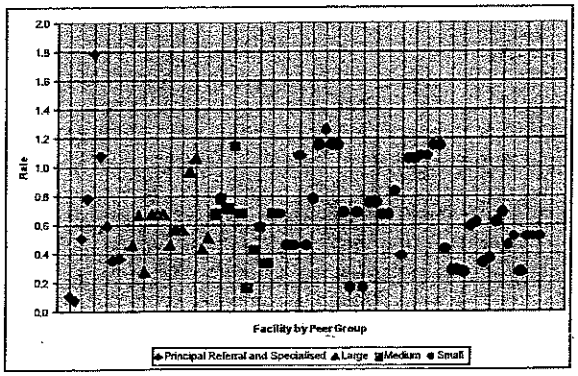
Outlier Actions (2004 report)

QEII (negative outlier) and **Clermont MPHS** (positive outlier) have identified this outlier for further investigation

One of the issues acknowledged in Health Service Districts for this indicator was the rates of identification as Aboriginal and Tosses Strait Islander by Indigenous employees.

The Aboriginal and Torres Strait Islander Health Unit in Queensland Health has identified as one of its key priorities to "support the development of the Queensland Implementation Plan for the Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework".

Graph 2

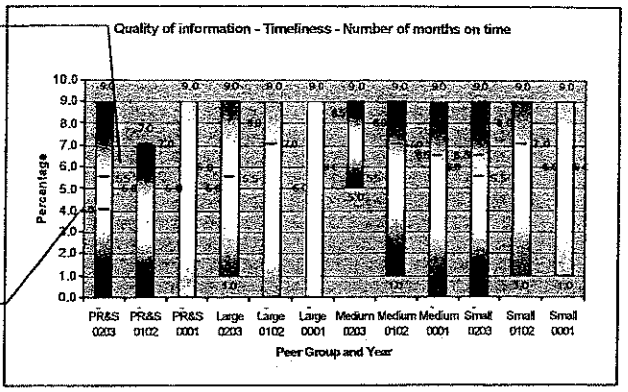


National Comparisons

No national comparisons were located however the Queensland Health Indigenous workforce report (1998) set a state-wide target of 2.4% for Indigenous workers in Queensland Health. From 1997 data, the report estimated that 1.3% of the Queensland Health workforce identified as Aboriginal or Torres Strait Islander. This current measure indicates that 2.11% of the Health Service District workforce identify as Aboriginal or Torres Strait Islander.

SIC04.02a Timeliness of Information
(Number of months on time)

Graph 1



Measure

This indicator measures the number of months data is submitted on time by hospitals to the Health Information Centre (HIC). The deadline for submission of data to HIC is five weeks after the end of the reference month to which the data refers. The first three months of the financial year are excluded in this measure to account for the deployment of new software. Score range is 0-9 months.

Summary

Of the 76 hospitals included in the Measured Quality report, in 2002/03, **20** scored **9/9 months on time**, in 2001/02 17 facilities scored 9/9 and in 2000/01 10 facilities scored 9/9. In 2002/03, five facilities scored 0/9 months on time and in each of the previous two years four facilities scored 0/9. The state-wide median score for 2002/03 was **5.5**, in 2001/02, **7.0** and in 2000/01 **6.0**. In the most recent year of data the median scores for the hospital peer groups were Principal Referral & Specialist 4.0, Large 5.0; Medium 8.5 and Small 6.5. In the Medium hospital group this score reflects an improvement from the previous year, however in the other three peer groups, the 2002/03 median score is less favourable that the previous years.

Discussion

The data provided by hospitals to the Health Information Centre, forms the Queensland Health Admitted Patient Data Collection QHAPDC. It is this data that forms the basis on which significant decisions are made in relation to provision of services, planning and quality monitoring in Queensland Health. Timely availability of data on a state-wide basis is critical to minimise the lag time in decision making.

Outlier Discussion

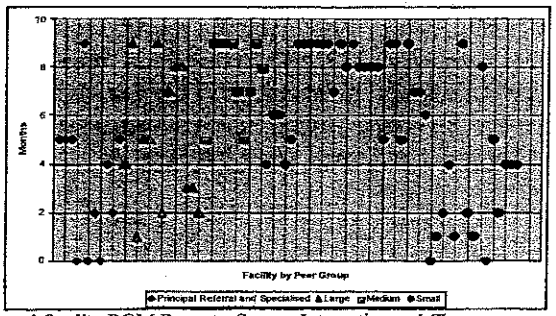
In 2002/03 five hospitals scored 0/9 months on time, **Gold Coast, Princess Alexandra, The Townsville** (PR&S) and **Ayr** and **Weipa** (Small). Four hospitals scored 1/9 months on time, **QE II** (L), **Bamaga, Thursday Is** and **Bowen** (S). **20** hospitals scored 9/9 months on time. Within the hospital peer groups these included one facility in the PR&S peer group, two facilities in the Large group, two facilities in the Medium group and 12 facilities in the Small group.

Improvement Opportunities

Outlier Actions (2003 report)

A number of factors were cited as contributing to favourable results. These included:- coders providing training to nursing and medical staff in regard to coding requirements **(Rockhampton),** regular chart audits with actioning, constant monitoring of data, regular error reports run and all errors resolved **(Toowoomba)**, and provision of information sessions to staff including inpatient billing clerks regarding HBCIS input **(Dalby)..**
Factors contributing to unfavourable results included the recruitment and retention of experienced coders, availability of part-time coders in small hospitals, and the backfilling of HIM positions where permanent staff are on extended leave. **Gladstone** Hospital noted the fact that new graduate HIMs need time to develop skills in HBCIS. Other factors included the need to raise awareness of staff responsible for data entry, timely release of medical records for the completion of coding, monthly deadlines not actively managed and the need to set targets for coders and Senior HIM.

Graph 2



Outlier Action (2004 report)

Six hospitals have highlighted this indicator for further investigation. **Ayr, Weipa** and **Bowen** (negative outliers) and **Caboolture, Redcliffe** and **Chinchilla** (positive outliers). Measured Quality have also recommended that **Bamaga, Thursday Is** and **Bowen** consider investigation.

SIC 06 Standardised Approaches to Clinical Management

Measure

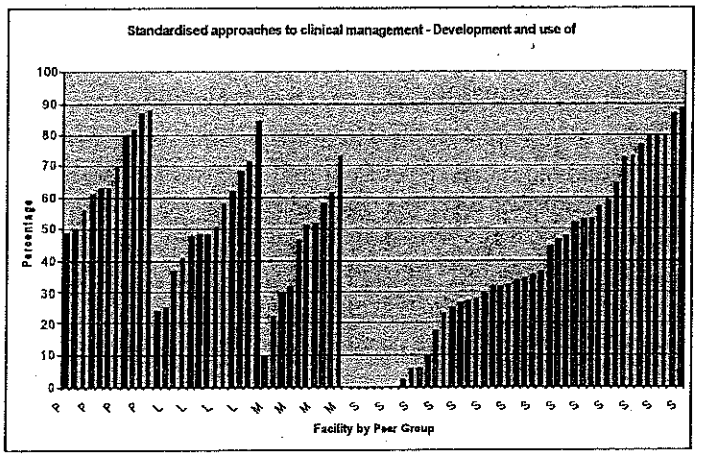
Eight indicators measure a range of issues relating to *standardised approaches to clinical management.* The data for this indicator was captured via a hospital survey[1].

The eight indicators are as follows.

Standardised approaches to clinical management

- development and use of
- collection and management of data for
- development and use of Queensland Health endorsed clinical pathways
- in selected surgical areas
- in selected medical areas
- in selected O & G areas
- in selected paediatric areas
- barriers to the development and use of

Graph 1

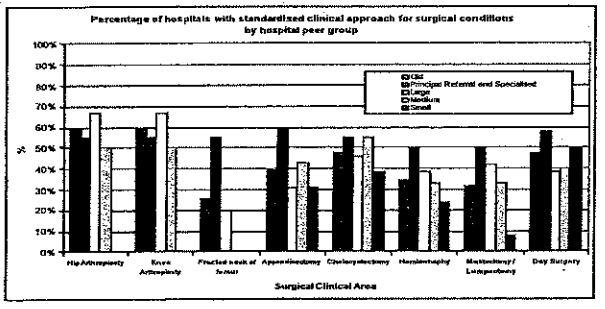


Summary

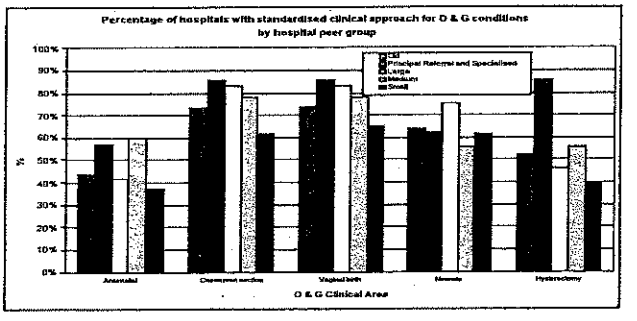
The state-wide median for the development and use of standardised approaches to clinical management is 48.2%. The peer group median for the principal referral and specialised hospitals is 63.3%, for large hospitals 48.5%, for medium hospitals 48.9% and for small hospitals is 33.3%.–

The information presented in **Graphs 2-5** show the percentage of hospitals in Queensland with standardised approaches to clinical management in the four clinical groups of surgical, obstetrics and gynaecology, medical and paediatrics by hospital peer group.

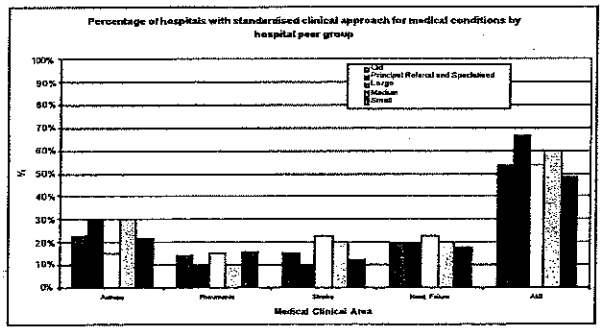
Graph 2



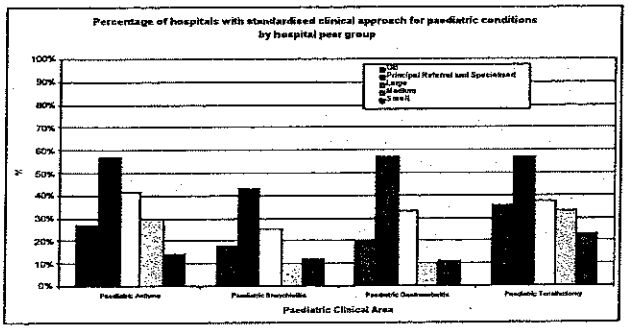
Graph 3



Graph 4



Graph 5



[1] Hospital Survey 2004, Measured Quality, System Integration and Change

Discussion

The use of standardised clinical protocols, clinical practice guidelines and clinical pathways as a system-wide strategy facilitates the development of a consistent standard of high quality care. It moves care from fragmented strategies with a single department focus to emphasis on care provided by the organisation as a whole. These approaches to clinical management allow the care of high volume conditions to be standardised and therefore streamlines care.

Within Queensland Health, standardised evidence-based clinical pathways have been developed in seven surgical areas (total hip arthroplasty, total knee arthroplasty, fractured neck of femur, appendicectomy, cholecystectomy, herniorrhaphy and day surgery), and three obstetric areas (vaginal birth, neonatal care and antenatal care). This suite of pathways has been implemented across Queensland Health facilities since 2001. The survey questions identified 22 clinical conditions (eight surgical conditions, five O & G conditions, five medical conditions and four paediatric conditions). Hospitals were only scored where the clinical condition was treated in that facility.

Outlier Discussion

Hospitals scores were identified as outliers at the 90th and 10th percentile. For the initial indicator in this group, (Development and use of standardised approaches to clinical management- Graphs 1-5), ten facilities were identified as favourable outliers and eleven as unfavourable outliers. The unfavourable outliers were **Royal Childrens** (48.9%) (PR&S), **Gladstone** (24%) and **Mt Isa** (25.1%) (Large), **Caloundra** (9.5%) (Medium) and **Maleny, Bowen, Normanton, Hughenden, Thursday Is, Bamaga and Wynnum** (0%) (Small). The favourable outliers were **Mater Public Children's** (86.7%) and **Mater Public Adult and Mothers** (87.6%) (PR&S), **Bundaberg** (71.4%) and **Rockhampton** (84.2%) (Large), **Gympie** (73.3%) (Medium) and **Tully, Miles and Gatton** (80%), **Barcaldine** (86.7%) **and Chinchilla** (88.3%) (Small).

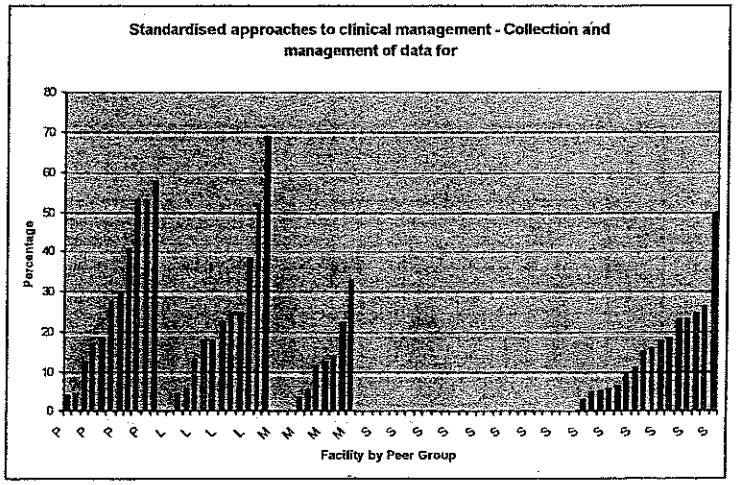
In looking at the eight indicators, unfavourable scores were observed as follows. One facility, **Gladstone** showed 6/8 unfavourable scores, three facilities, **Caloundra, Dalby and Royal Children's** showed 4/8 unfavourable scores and seven facilities **Bamaga, Bowen, Hughenden, Mackay, Mt Isa, Normanton and Thursday Is** showed 3/8 unfavourable scores. Favourable scores were observed as follows. One facility, **Rockhampton** showed 7/8 favourable scores, two facilities, **Barcaldine and Gold Coast** showed 6/8 favourable scores, four facilities, **Bundaberg, Chinchilla, Gatton and Tully** showed 4/8 favourable scores.

Collection and Management of Data

Clinical pathways are outcome focused and the collection of data supports variance analysis of clinical outcome. This subsequent analysis of variations from the pathway provides information to the clinical team on the overall quality of care and helps identify any trends that may require further investigation. This, in turn, supports the management of clinical risk and allows modifications and improvements to be made to the content of the pathway. To facilitate the analysis of variance, clinical pathways include a code set that enables clinicians to code and record variance, actions and outcomes as they arise during the course of treatment. These are monitored and analysed using an excel spreadsheet developed by the program.

The state-wide median for the collection and management of variance data is 5.4%. The peer group median for the principal referral and specialised hospitals is 27.3%, for large hospitals 18.1%, for medium hospitals 8.6% and for small hospitals is 0%. ***Graph 6*** shows the scores for each of the 76 hospitals by peer group.

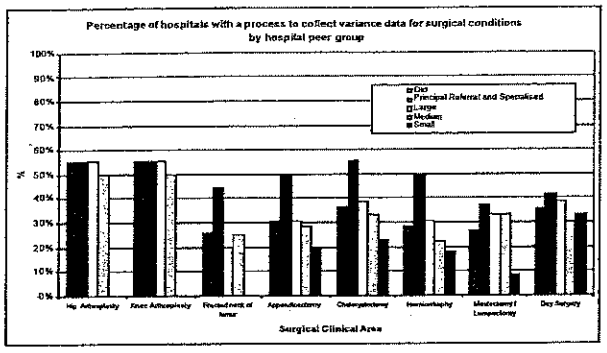
Graph 6



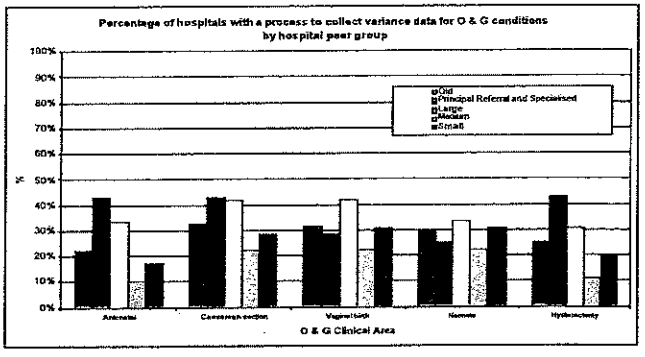
Graphs 7-10 show the percentage of hospitals with processes in place to collect variance data where standardised approaches are in place.

The percentage of hospitals reporting a process for collection and management of data is generally higher for principal referral and specialist hospitals. Data collection is more widespread for surgical conditions followed by obstetrics and gynaecology, medical and paediatric conditions.

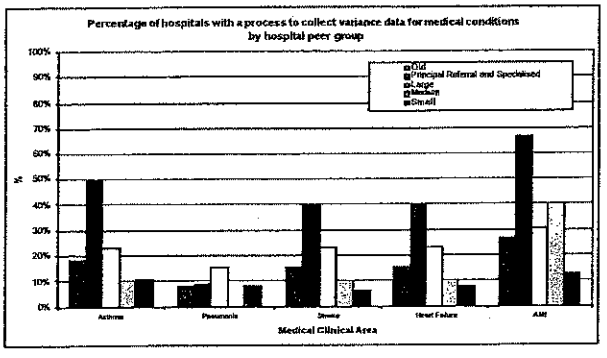
Graph 7



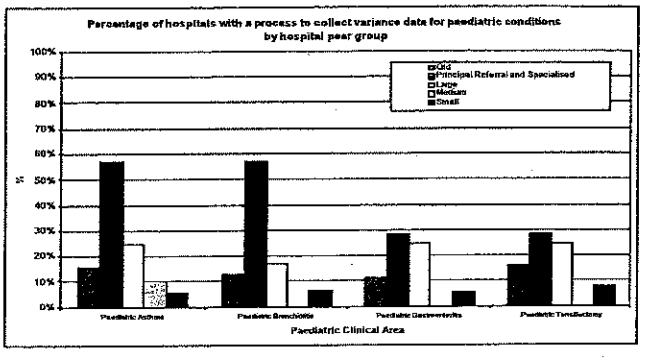
Graph 8



Graph 9



Graph 10



The percentage of hospitals reporting a process for collection and management of data is generally higher for principal referral and specialist hospitals. Data collection is more widespread for surgical conditions followed by obstetrics and gynaecology, medical and paediatric conditions.

Improvement Opportunities

Outlier Actions (2003 report)

The 2003 Measured Quality Report included measures around "clinical pathways". Hospitals with favourable results indicated possible contributing factors such as the use of Trendcare, local championing of clinical pathways, local adoption and review of pathways, and training for clinical staff in the use of pathways. One hospital with an unfavourable result **(Toowoomba)** cited lack of medical staff support as a primary contributing factor.

Outlier Actions (2004 report)

Fourteen hospitals identified with one or more negative outliers in this group of measures and have identified that further investigation is required. These include **Nambour, Toowoomba, Mater Public Children's** (PR&S), **Redcliffe, Redland, QE II** (Large), **Caloundra, Dalby, Proserpine** (Medium) and **Hughenden, Clermont, Esk, Laidley and Mossman** (Small). Five hospitals identified with one or more positive outliers in this group of measures have identified that further investigation will proceed. These include **Townsville** (PR&S), **Caboolture** (Large), **Gympie** (Medium) and **Chinchilla and Miles** (Small). Measured Quality has recommended that **Gladstone, Mt Isa and Princess Alexandra** also consider further investigation.

Queensland Health endorsed pathways

For Large Peer Group Hospitals, 27% of hospitals (three) are yet to be exposed to the Queensland Health endorsed Clinical Pathways. Despite this 80% of the remaining hospitals reported uptake above the peer group median of 60%. 70% of hospitals reported uptake of surgical pathways above the state median of 54.2% and 70% of hospitals reported uptake of maternity pathways above the state median of 80%. Of the three hospitals with low outliers 2 hospitals have been provided education but have delayed implementation of clinical pathways due to organisational priorities and 1 hospital is yet to be provided education.

For Medium Peer Group Hospitals 100% reported some use of Queensland Health endorsed clinical pathways. 40% of this group reported results above the state median of 66.7% and 50% reported results above the peer group median of 56.7%. There were three (3) low outliers, of these some of the procedures do not suit the hospital case mix and one hospital has experienced barriers to implementation.

Of the small hospitals 69% reported uptake of Queensland Health endorsed clinical pathways. 21% of these hospitals reported no use of clinical pathways despite 33% of these hospitals being provided with education and support; however, pathways have been implemented on a district wide basis. 10% of hospitals within this group indicated that clinical pathways were not suited to their casemix.

Standardised approaches to clinical practice through clinical pathways are less developed for medical DRG's with the exception of AMI. While there is some clinical pathway development for Asthma and Stroke there is no state-wide approach. The clinical pathway program has identified this as an issue for development should the program is continued beyond December 2004.

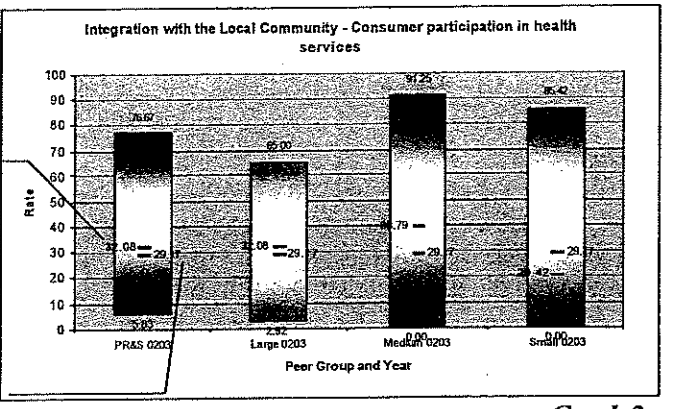
Standardised approaches to clinical management are increased where clinical pathways are in use. Clinician acceptance of standardised approaches to clinical management has improved as has the uptake of variance analysis. While the variance collection system developed by the clinical pathway team is adequate for the short time, the ability to make information available at the right time and the right place in the right medium has been a challenge to the program with districts identifying the lack of a system to facilitate variance collection as one of the barriers to utilising standardised approaches to clinical management. It is therefore necessary that consideration be given to making timely variance data available to clinicians. There needs to be a corporate system that is able to collect data state-wide to enable comparisons between districts and enhance clinician learning. This could be achieved by developing a system or adapting a current system so that clinicians are able to enter the clinical variation as it occurs. This would facilitate prospective data analysis so that clinicians can identify causes of variation in a timely manner and eliminate the cause of identified variation, whether this is patient related, a clinician decision or service related.

Research evidence suggests that properly developed clinical guidelines or clinical pathways can lead to improvements in clinical practice and health outcomes. The systematic and coordinated approach utilised by the Clinical Pathways Program has enabled health service districts to implement best practice within the local health service delivery processes. In particular rural districts have access to training and contemporary evidence and their acceptance has been most successful. The collection and analysis of variance has identified causes of system problems which in turn improves the outcome for the patient.

Important features of these pathways are the robust review of clinical evidence that informs the content of each pathway and the acceptance and endorsement of this evidence by a multidisciplinary expert panel prior to use. The clinical pathways reflect existing knowledge and practices at the time of their publication, and have required further revision in order to remain valid.

SIC08.01 Consumer Participation in Health Services

Graph 1



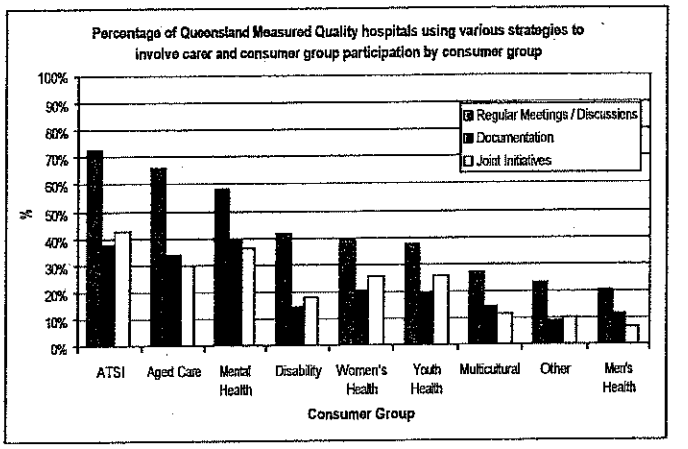
Measure

This indicator measures the extent to which hospitals have processes to involve local carer and consumer group participation. The data for this indicator was captured via a hospital survey[2].

Summary

The survey identified seven consumer groups, with three strategies whereby carers and consumer could be involved. The state-wide median score (29.7%) reflects the need for overall improvement across the state. The median score in the small hospital peer group falls below the state-wide result.

Graph 2



Discussion

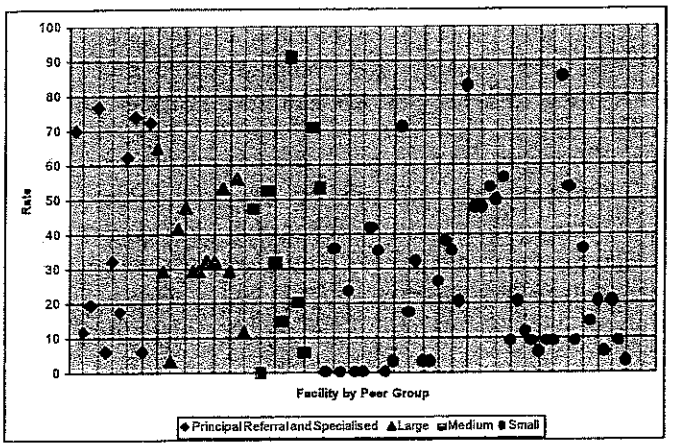
The analysis in Graph 2 identifies details of carer and consumer participation by consumer group. These results clearly show that while facilities are meeting with carers and consumers, documentation (plans/ written agreement) and joint initiatives involving shared resources are much less evident. The information in Graph 3 highlights the variation in performance across all four hospital peer groups.

Outlier Discussion

Across the four hospital peer groups ten facilities were identified as having relatively less consumer involvement in their health services across the three areas of regular meetings, documented plans and joint initiatives. **Cairns and Nambour** (5.8%) (PR&S); **QE II** (2.9%) and **Mt Isa** (11.7%) (Large); **Caloundra** (0.0%) (Medium); and **Maleny, Murgon, Esk, Wynnum and Laidley** (0.0%) (Small).

A total of eleven facilities were identified as having relatively more consumer involvement in their health services - **Royal Brisbane & Women's** (73.8%) and **Princess Alexandra** (76.7%) (PR&S); **Mackay** (56.3%) and **Ipswich** (65%) (Large); **Warwick** (91.3%)(Medium); **Barcaldine** and **Mossman** (53.3%), **Clermont MPHS** (56.3%), **Chinchilla** (70.8%), **Emerald** (82.5%) and **Mareeba** (85.4%) (Small).

Graph 3



Improvement Opportunities

Outlier Actions (2004 report)

QEII, Murgon, Laidley, Esk and Wynnum hospitals (negative outliers) and **Clermont MPHS and Chinchilla** (positive outliers) have identified this outlier for investigation.

Data has been provided to ISAP and Corporate Office project areas responsible for community engagement to highlight future focus for community engagement activities.

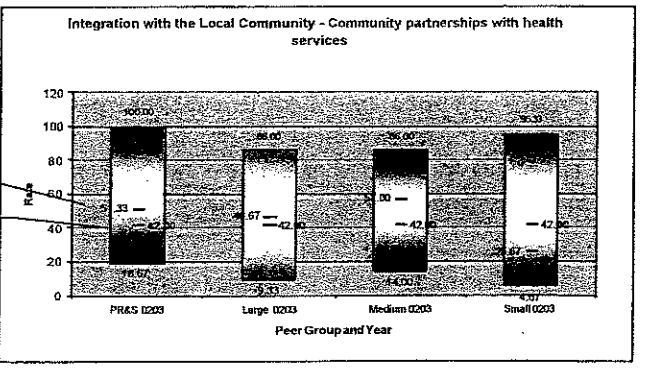
[2] Hospital Survey 2004, Measured Quality, System Integration and Change

SIC08.02 Community Partnerships with Health Services

Graph 1

Measure

This indicator measures the extent to which hospitals have processes that develop partnerships with general practice and other health care providers in the local community. The data for this indicator was captured via a hospital survey[3].



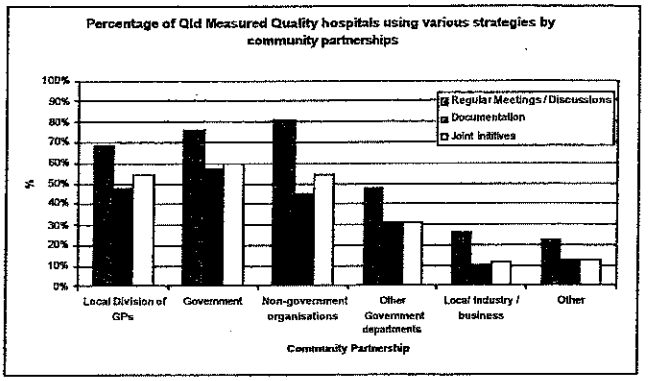
Summary

The survey identified five community partners, with three strategies whereby these partners could be involved. The state-wide median score (42.0%) reflects a reasonable level of involvement with community partners. This is a new indicator in the 2004 report, therefore only one year of data in available. The median score in the small hospital peer group falls below the state-wide result.

Graph 2

Discussion

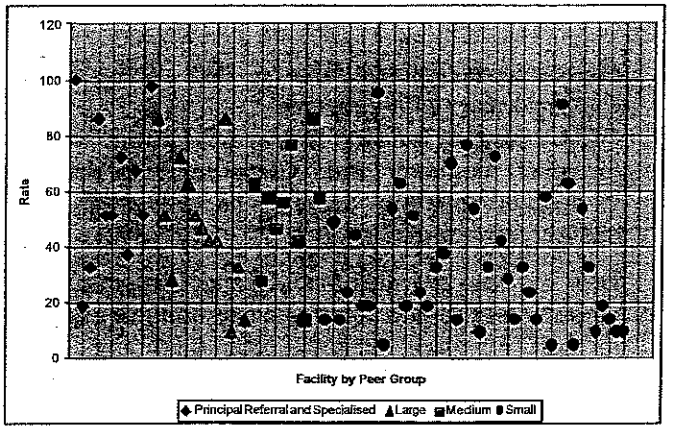
The analysis in Graph 2 identifies details of community partnerships by group. These results show that facilities are meeting regularly with community partners, with variation depending on the group. Documentation (plans/ written agreement) and joint initiatives are apparent to much the same degree, and in all cases this is approximately 10-20% less than for 'regular meetings'. The information in Graph 3 highlights the variation in performance across all four hospital peer groups.



Outlier Discussion

Across the four hospital peer groups, seven facilities were identified as performing unfavourably. **The Prince Charles** (18.7%) (PR&S); **Rockhampton** (9.3%) and **Mt Isa** (14.0%) (Large); **Ingham** (14.0%) (Medium): and **Murgon, Thursday Is and Bamaga** (4.7%) (Small). A total of ten facilities were identified as performing favourably – **Mater Public Adult and Mothers** (97.7%) and **Mater Public Children's** (100%) (PR&S); **Gladstone and Ipswich** (86%) (Large);.**Atherton** (86%) (Medium); **St George** (70%), **Longreach** (72%), **Emerald** (76.7%), **Mareeba** (90.7%) and **Monto** (95.3%) (Small).

Graph 3



Improvement Opportunities

Outlier Actions (2004 report)

Ingham and Murgon hospitals (negative outliers) have identified this outlier for investigation and Measured Quality has recommended that **The Prince Charles** and **Mt Isa** also consider further investigation.

Data has been provided to ISAP and Corporate Office project areas responsible for community engagement to highlight future focus for community participation activities.

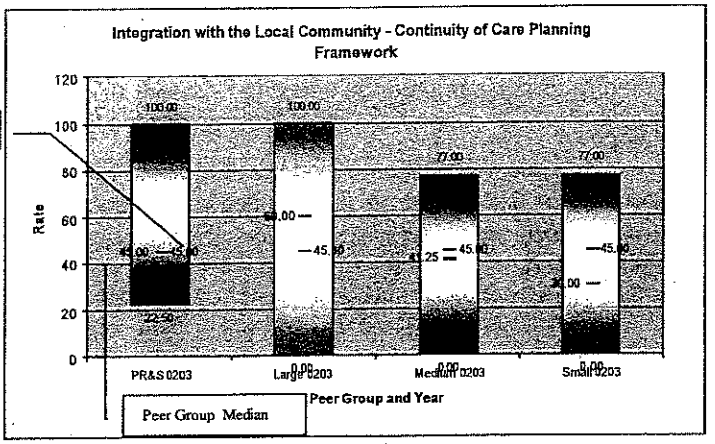
[3] Hospital Survey 2004, Measured Quality, System Integration and Change

SIC08.04 Continuity of Care Planning Framework

Measure

This indicator measures the extent to which hospitals are implementing the *Continuity of Care Planning Framework*. The date for this indicator was captured via a hospital survey[4].

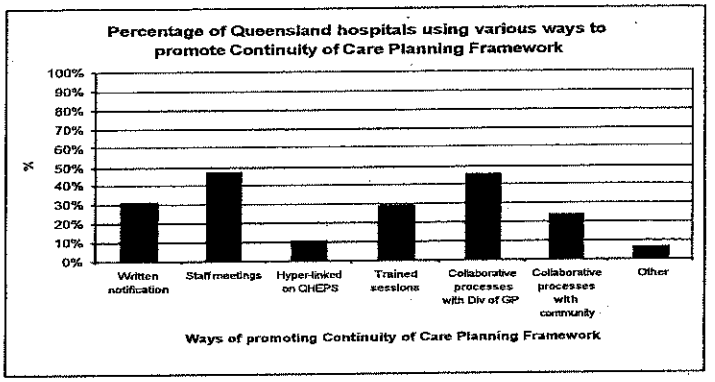
Graph 1



Summary

The survey sought information around the provision of training / promotion activities related to the framework, and locations of the written materials within hospitals. Given that the framework was distributed to Health Service District only three months prior to the survey completion, the state-wide median score of 45.0% provides a strong baseline measure. This is a new indicator in the 2004 report, therefore only one year of data in available. The median scores in the medium and small hospital peer group fall below the state-wide result.

Graph 2



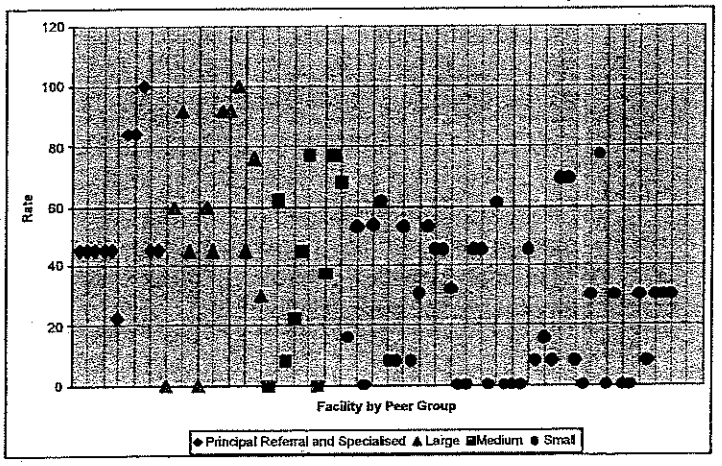
Discussion

The information presented in Graph 2 shows the various ways for promotion of the framework, and the percentage of hospitals using these promotional activities.

Outlier Discussion

Across the four hospital peer groups, fifteen facilities had not commenced the implementation of this framework. This included eleven hospitals in the small peer group, two in the medium peer group **Proserpine and Beaudesert** and two in the large peer group **Ipswich and Logan.** In addition **Gold Coast** (22.5%) (PR&S) was identified as performing unfavourably. A total of fourteen facilities were identified as performing favourably – **Townsville and Toowoomba** (84%) and **Royal Brisbane and Women's** (100%) (PR&S); **Maryborough, Hervey Bay and QE II** (92%) **and Gladstone** (100%) (Large); **Atherton and Warwick** (77%) (Medium) **Emerald** (61%) **Laidley** (61.5%), **Ayr and Bowen** (69%) and **Mareeba** (77%). (Small).

Graph 3



Improvement Opportunities

Outlier Actions (2004 report)

Townsville, Toowoomba, Ayr and Maryborough hospitals (positive outliers) and **Proserpine and Ipswich** (positive outliers) have identified this outlier for investigation.

The Community Services Unit of Queensland Health are progressing this body of work in collaboration with GPAC, Zonal Management Units and Health service Districts.

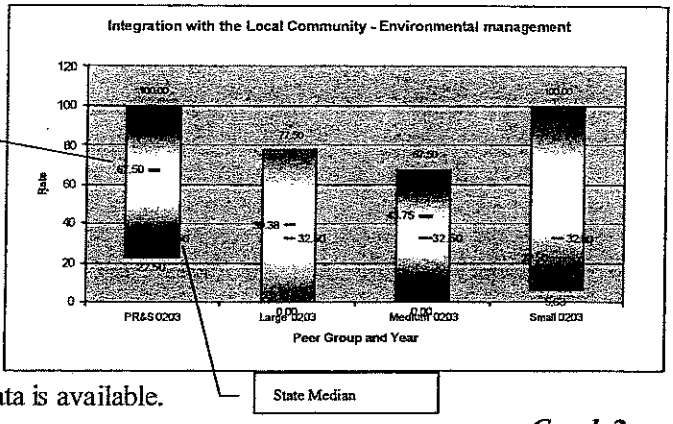
[4] Hospital Survey 2004, Measured Quality, System Integration and Change

SIC08.05 Environmental Management

Measure

This indicator measures the extent to which hospitals have environmental management strategies in place, including staff development activities. The data for this indicator was captured via a hospital survey[5].

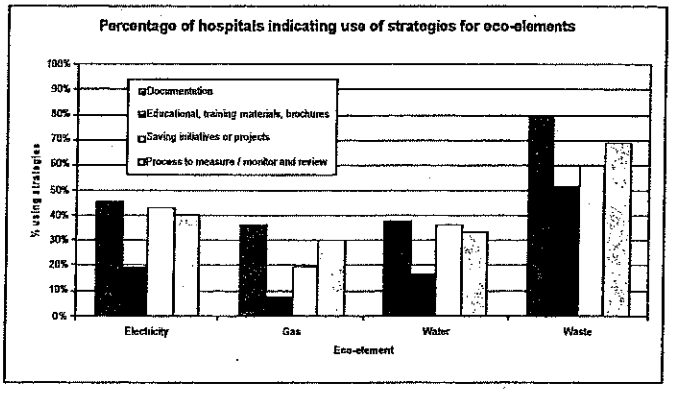
Graph 1



Summary

The survey identified four eco-elements (electricity, water, gas and waste) and four strategies for each. Additional data was sought relating to staff awareness training modules for eco-efficiency. The state-wide median score (32.5%) indicates some strategies for environmental management are in place, but with significant potential for improvement. This is a new indicator in the 2004 report, therefore only one year of data is available.

Graph 2



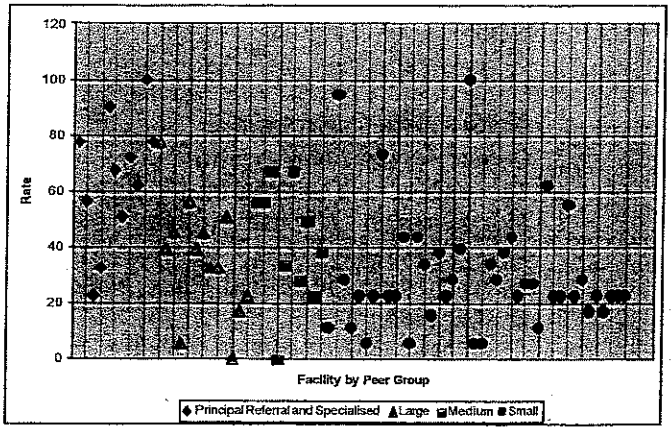
Discussion

The information presented in Graph 2 provides the breakdown of strategies for each of the eco-elements. The strategies in place for waste management are more widespread than for the other three eco elements. Across the state the strategy that is in place in the fewest facilities relates to educational, training materials and brochures.

Outlier Discussion

Across the four hospital peer groups ten facilities were identified as performing unfavourably. **Royal Children's** (22.5%), **Princess Alexandra** (32.5%0 and **Toowoomba** (50.6%) (PR&S); **Rockhampton** (0.0%) **and Redland** (5.6%) (Large); **Kingaroy** (0.0%) (Medium); and **Maleny, Yeppoon, Mt Morgan and Goondiwindi** (5.6%) (Small). A total of eleven facilities were identified as performing favourably – **Nambour** (90.0%) and **Cairns** (100%) (PR&S); **Logan** (56.3%) and **Ipswich** (77.5%) (Large); **Gympie and Warwick** (67.5%) (Medium); **Mossman** (55%), **Joyce Palmer** (61.9%), **Monto** (73.1%), **Boonah** (94.4%) and **Emerald** (100%) (Small).

Graph 3



Improvement Opportunities

Outlier Actions (2004 report)

Redland, Mt Morgan, Yeppoon, Kingaroy and Toowoomba hospitals (negative outliers) and **Joyce Palmer** (positive outlier) have identified this outlier for investigation and Measured Quality has recommended that **Royal Children's and Princess Alexandra** also consider further investigation.

The Eco-efficiency Unit in Queensland Health has been established to provide clear strategic direction for energy, gas, water (and to a lesser extent waste) management for all Queensland Health facilities. The Unit provides advice on total solutions for environmental management

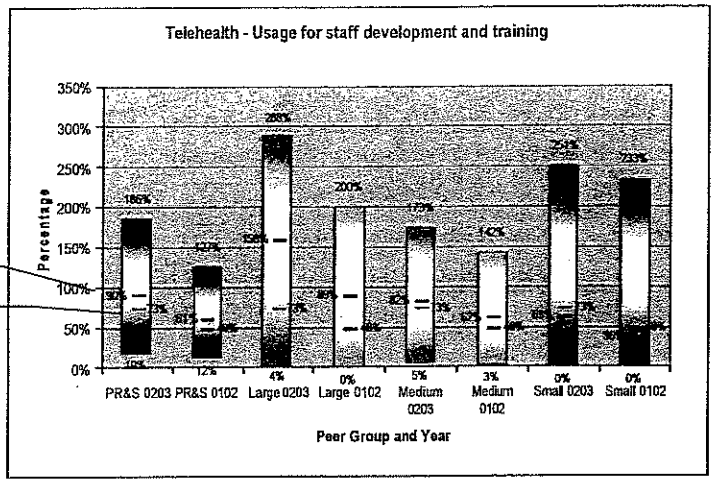
[5] Hospital Survey 2004, Measured Quality, System Integration and Change

SIC09 Telehealth usage for staff development

Graph 1

Measure

This indicator provides a measure of the use of videoconferencing technology for staff development activities, relative to the size of the hospital (number of beds). The data was provided from the Multi-point Videoconference Usage monthly reports, scores being expressed as percentages.



Summary

The 2002/03 state-wide median of 73% shows an increase from the previous year of 48%. The median score for the small hospital peer group falls below the state-wide result.

Discussion

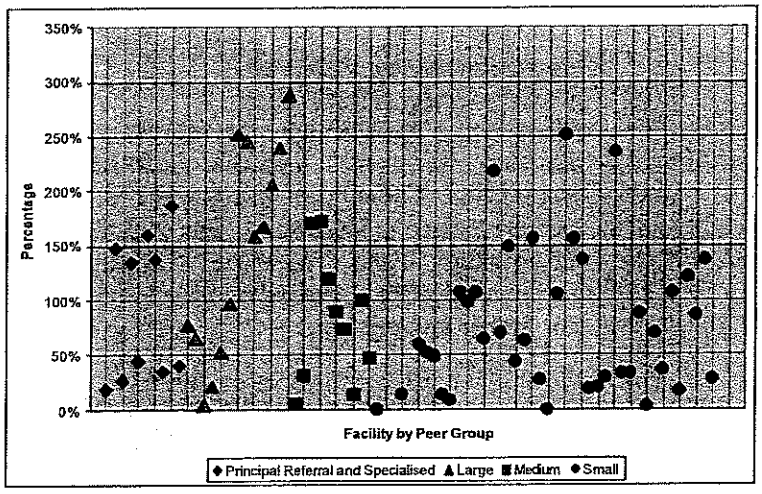
This indicator provides data on only one use of tele-conferencing that is, for staff development activities. The use of tele-conferencing for clinical purposes is widespread across Queensland however at this time there is no state-wide capture of data for reporting. The results in a number of facilities for this indicator exceeded 100%, indicative of the high level of utilisation of tele-conferencing for staff development

Outlier Discussion

In 2002/03, across the four hospital peer groups, eight facilities were identified as positive outliers, having the highest rate of usage of videoconferencing. These hospitals were **Cairns** (PR&S); **Bundaberg and Mt Isa** (Large); **Kingaroy** (Medium); and **Emerald, Charleville, Charters Towers and Longreach** (Small).

A total of eight facilities were identified with the lowest rates of usage of videoconferencing – **The Prince Charles** (PR&S); **QEII and Redlands** (Large); **Beaudesert** (Medium) **Yeppoon, Wynnum, Mossman and Nanango** (Small). Wynnum and Nanango do not have V/C equipment at their sites, and the remaining 6 facilities have new equipment – either installed in 2003 or 2004.

Graph 2



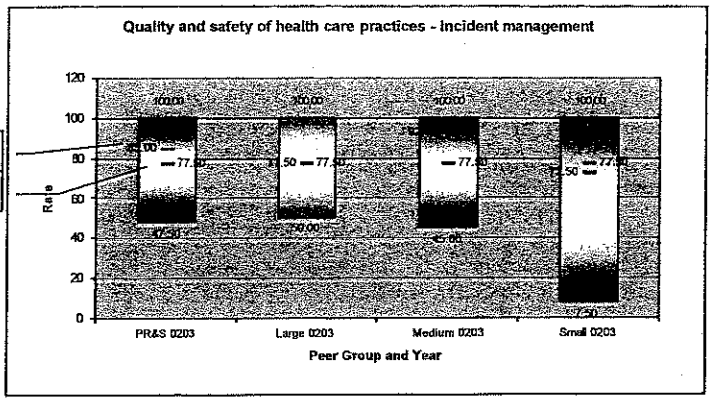
Improvement Opportunities

Outlier Actions (2004 report)

Longreach (positive outlier), **QEII, Redlands and Yeppoon** (negative outliers) have identified this indicator as a priority for further investigation.

SIC10.01 Incident Management

Graph 1



Measure

This indicator measures the extent to which hospitals have policies and processes in place for incident management. The data for this indicator was captured via a hospital survey[6].

Peer Group Median
State Median

Summary

The survey identified eight categories of incidents and five strategies for each. The state-wide median score (77.5%) reflects a reasonably high level of processes in place for incident management across the state. This is a new indicator in the 2004 report, therefore only one year of data in available. The median scores in small hospital peer group falls just below the state-wide result and the spread of hospital scores for the small hospital peer group is the broadest (7.5% - 100%).

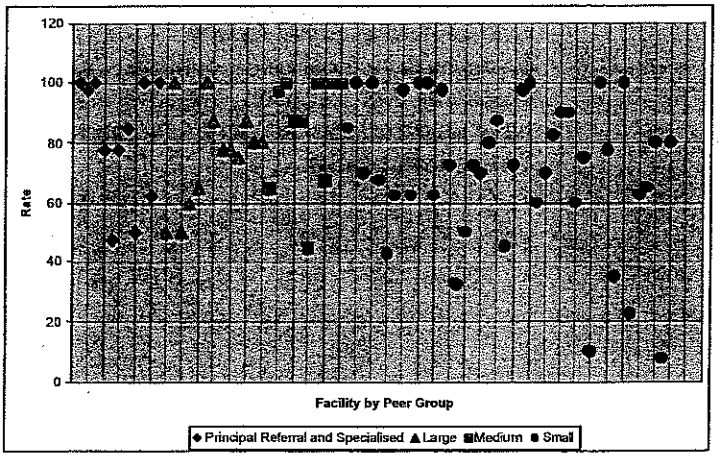
Discussion

The Australian Health Ministers, in April 2004, agreed that by January 2005, public hospitals will introduce 'incident management' systems to monitor, investigate, analyse and guide their actions in dealing with patient safety and quality incidents. The information reported around this Queensland Health indicator will provide a baseline measure for future reporting of implementation of incident management processes.

Outlier Discussion

Across the four hospital peer groups 17 facilities scored at 100% for this indicator and were identified as favourable outliers. There were **Royal Children's, Royal Brisbane and Women's, Mater Public Adult and Mothers, Mater Children's** (PR&S); **Redcliffe and Caboolture** (Large); **Gympie Innisfail, Atherton and Proserpine** (Medium); and **Longreach, Nanango, Mareeba, Tully, Chinchilla, Boonah and Gatton** (Small). A total of nine facilities were identified as performing unfavourably – **Nambour** (47.5%) (PR&S); **QEII and Ipswich** (50%) (Large); **Warwick** (45%) (Medium); **Mornington Is** (7.5%), **Bamaga** (10%), **Weipa** (22.5%), **Charleville** (32.5%) and **Thursday Is** (35%) (Small).

Graph 2



Improvement Opportunities

Outlier Actions (2004 report)

Charleville, Beaudesert, QE II, Gatton and Ipswich hospitals (negative outliers) and **Proserpine, Caboolture and Redcliffe** (positive outlier) have identified this outlier for investigation and Measured Quality has recommended that **Thursday Is** also considered for further investigation.

In 2004 the Queensland Health Incident Management Policy was endorsed and distributed state-wide. The Patient Safety Centre will support the agenda of incident management across Queensland Health through a network of local Patient Safety Officers and PRIME, the information management system.

[6]Hospital Survey 2004, Measured Quality, System Integration and Change