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Emergency Department Review Rockhampton Hospital

FINAL REPORT

June 2004

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Rockhampton Hospital Health Information Services

Attachment D - Emergency Department Benchmarking Report Rockhampton Hospital
December Quarter, 2003/2004 Queensland Health

Rockhampton Hospital Emergency Department Review Conducted on June 15th & 16th,
2004

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Executive Summary

The Emergency Department at Rockhampton Hospital was reviewed on the 15th and 16th June, 2004. The Review Team have made a range of recommendations for consideration by the District Manager, District Executive and the Emergency Department Management Team. The major issues that need to be addressed include the medical staffing of the ED, education and performance management processes for ED staff, the development of a quality and patient-focussed service, improvement in data quality and use, and the issue of professional isolation for ED staff at Rockhampton Hospital.

Summary of Recommendations

Data Collection

The Review Team recommends that:

- Processes be implemented and enforced within the ED that ensures all data is entered for the relevant patients in real time directly into the HBCIS field
- The HBCIS emergency department module be utilised as a real time department management tool and for real time data entry. This will facilitate the implementation of EDIS in the future as there will already be a cultural acceptance of data entry by all staff by the time EDIS is implemented.
- As part of triage education outlined elsewhere in this report, the triage nurses should only enter the final 'correct' triage category into the HBCIS field.
- The data collected by the staff in ED be collated and displayed for all the staff in a way that they are able to comprehend, participate and initiate service improvement activities. It is expected that this would have the effect of improving data quality.

Clinical Care

The Review Team recommends that:

- A process be set up within the hospital for the audit of all MET calls and outcomes. If a nursing staff member is required to intubate a patient in a hospital with 24/7 on-site medical cover then this should be regarded as a sentinel event. Consequently, a root cause analysis should be undertaken to identify the circumstances that lead to this occurrence being required and if indeed it was required.
- Core business for the ED be identified and articulated and alternatives for other services be explored.
- The emergency department develop, and the Executive endorse, a policy whereby patients who are medically stable and have a clear requirement for admission, are able to be directly admitted to the ward if there is to be a delay in inpatient medical review. This policy should outline that interim management orders, including appropriate fluid and medication orders, are fully documented and that the patient has been discussed with the ED SMO.

Medical Staffing

The Review Team recommends the following in respect of medical staffing:

- The department and the district make the accreditation of the Rockhampton emergency department as a training department for advanced training with the ACEM a priority issue.
- As part of the move to accreditation, there is a need to create a specialist workforce in the ED. A minimum number of 4 FTE Fellows of the Australasian College of Emergency Medicine, or equivalent, will be required to provide a stable sustainable quality service.
- As an interim measure until the department can attract and recruit registered emergency specialist staff, the review team recommends that the department seek to establish formal links with either individual emergency specialists on contract or another accredited ED. This could have the desired effect of providing a specialist input through quality assurance activities, case audit, training and education and policy and procedure development. This would also have the effect of ensuring department standards and practices adhered to national best practice standards

Education

The Review Team recommend that there be the development of an educational framework for all disciplines and all levels of staff within the ED. This would encompass mandatory training including customer focus education, discipline specific emergency education, and a competency program for nursing staff. This program should be developed by the Clinical Improvement Unit and endorsed by Executive.

Performance Management

The Review Team recommends the implementation of a mandatory performance management framework that is multi-disciplinary and multi-level.

Triage practices

The Review Team would recommend the following in respect of triage practice:

- The practice of "rapid" triage cease and a more appropriate model be introduced
- Analysis of triage practice should occur to ensure consistency with accepted benchmarks
- The roll out of the Triage Education Work Book continue and include all staff who are performing the triage role
- A mental health triage scale be introduced
- Consideration be given to a single point triage process

Professional Isolation

The Review Team recommend that strategies be introduced to reduce the professional isolation of staff within the ED at Rockhampton Hospital.

Introduction

Rockhampton Hospital Emergency Department review was conducted by Dr Peter Miller, Staff Specialist Director, Emergency Department, Toowoomba Hospital; Ms Michelle McKay, Nursing Director, Toowoomba Hospital; and Mr Tim Williams, Administration Officer, Emergency Department, Gold Coast Hospital.

The review was conducted for the District Manager, Rockhampton Health Service District, on Tuesday 15th June 2004 and Wednesday 16th June 2004. Terms of Reference governing the review are included in Attachment A. The list of staff interviewed as part of this review are included in Attachment B.

At all times, the Review Team was met with courtesy and thoughtfulness. Interviews displayed a great willingness by all staff of the Hospital to ensure that the team was given as much information as possible, upon which it could draw helpful conclusions. The Team would wish its gratitude to be extended to all concerned.

Chapter 1 Workload and Performance

It is difficult to ascertain the workload of the Rockhampton Emergency Department (ED) due to the fact that data was not collected for the June/July 2002 period as a result of industrial action at that time. This meant that neither the 2001/2002 or 2002/2003 data are accurate. According to data provided to the Review Team, see attachment C, 35,735 patients have been recorded as attending the ED during the first 11 months of 2003/2004, of which 2336 or 6.5% were for dressing clinic. In addition the department has a number of patients who return for reviews or procedures who are counted within the attendance numbers.

The Australasian Triage Scale breakdown of the 2003/2004 attendances, is as follows:

ATS Category	Percent
1	0.4
2	3.7
3	41.7
4	45.8
5	8.3

As part of the Surgical Access Service benchmarking process, Rockhampton ED is in the major regional group, which includes Cairns, Nambour, Redcliffe and Toowoomba Emergency Departments. The admission rates per triage category, as reported in the Emergency Department Benchmarking Report December Quarter 2003/2004, Attachment D, are as follows:

ATS Category	Rockhampton	Major Regional average	Queensland average	ACHS and ACEM range
1	71.2	84.3	83.1	75 - 90
2	65.7	67.4	63	60 - 70
3	27.2	38.7	36.3	40 - 60
4	5.6	14.5	12.4	20 - 30
5	1.7	4.4	3.7	5 - 10

The Rockhampton admission rates for categories 1, 3, 4 and 5 are below the major regional and Queensland averages and below the reference range identified by the Australian Council for Healthcare Standards (ACHS) and the Australasian College for Emergency Medicine (ACEM). There are two potential explanations for this variance. The first is that the Rockhampton ED has access to high level community support structures which allow patients to be managed in the community as an alternative to hospitalisation. The second, and in the opinion of the Review Team a far more likely explanation, is that triage is not being applied in a manner that is consistent with state and national practice. Triage will be discussed in more detail in other sections of this report.

A measure of ED performance is the percentage of patients seen within the recommended timeframes per triage category. The following table outlines the Rockhampton performance as reported in the ED benchmarking table report for the December Quarter 2003/2004:

ATS Category	Rockhampton	Major Regional average	Queensland average	ACHS and ACEM benchmark
1	100	100	100	100
2	89.9	74.6	77.1	80
3	62.6	63.4	57.1	75
4	67.9	59.8	57.6	70
5	79.2	79.6	82.4	70

On this basis, Rockhampton meets the benchmark for categories 1, 2 and 5. The performance in categories 3 and 4 are comparable with, or exceed, that of the major regional and state performance. However, this data is questionable, given the triage practices highlighted earlier and the data entry practices discussed further in this report.

Another measure of ED performance is access block. This is a measure of length of stay in the Emergency Department for admitted patients. In this particular criterion, Rockhampton ED outperforms the other members of the major regional group and is well above the state average performance. 89% of patients are admitted within 5 hours of arrival at Rockhampton. Comparatively, Cairns, Nambour and Redcliffe EDs do not achieve this level of admission until 9 hours, which is also the Queensland average.

A further measure of ED performance is the percentage of patients who do not wait for treatment (DNW) and the level of complaints about the service. It was concerning to the Review Team that none of the staff responsible for the management of the ED were aware of the DNW rate, and that there was no process in place for follow up of this group. In fact, the DNW rate is currently 5.1% for the first 11 months of 2003/2004.

There have been 32 complaints recorded by the Clinical Improvement Unit since July 2003. While this is a low number in comparison to the total attendance numbers, it was disturbing to note that 81% of the complaints relate to treatment and communication. These are issues that should be able to be addressed within the department by the development of a patient-focussed service and analysis of patient incidents to ensure that clinical care is appropriate. To introduce the changes required will take considerable effort and commitment. Furthermore, changing the focus of the department to be patient-centred will require a considerable culture change, education of all staff, role modelling of appropriate behaviour by senior staff and discipline processes for those staff whose behaviour is inappropriate. Improvement in treatment complaints will require a much greater level of patient incident reporting and analysis. The Review Team was provided with a copy of the APO report for July 2003 to February 2004. During that time, only 1 medication error, 8 falls and 33 "other" incidents, many concerning violence, was reported by the ED staff. The Review Team understands that there are changes currently being implemented for both the complaints and patient incident reporting and analysis processes; and this is to be commended.

Chapter 3 Emergency Department Work Practices

There are a number of work practices in the Rockhampton ED that require discussion.

Data collection

The Rockhampton ED is one of the 21 reporting departments to the Queensland Health Surgical Access Service. This requires a certain level of data reporting. The department will also require certain clinical data information in order to assess performance, quality activities and service planning. The processes for collecting this data in the Rockhampton ED are seriously flawed. Factors that contribute to this poor data quality include:

Retrospective manual data entry

The current process in Rockhampton ED involves direct entry of demographic patient data into HBCIS by both the triage clerk and the triage nurse. The time that the patient is seen by a doctor however is manually documented on the triage sheet by the doctor at the time of the doctor picking up the chart. The doctor is also charged with the responsibility of placing a time of discharge for the patient on the medical notes. The triage clerk then retrospectively enters the data into the relevant HBCIS fields. All staff interviewed agreed that medical compliance with this process was poor. The triage clerk is responsible for chasing doctors who have not completed the 'time seen' and 'time discharged' fields and asking them to guess or remember when they saw and discharged the patient. This follow up is attempted on the same shift that the patient presented, but is often delayed until the next shift that the relevant doctor is rostered on for. This process clearly produces waiting time data that is so fundamentally flawed that it is totally meaningless. No indication of real waiting time performance can be inferred due to the nature of this process.

When questioned as to the source of this process, it appeared to be a remnant of the view of the previous Director of ED that data entry and computers were not something that doctors would or should be occupied with. This culture, while not the view of the current Director, is still present in the ED.

To change this practice will require the doctors in the department to be responsible for the data that they are required to enter. This work practice change will require strong medical leadership from the senior medical staff in the department.

Poor utilisation of existing IT resources

The Rockhampton Hospital ED currently has the HBCIS emergency department module as its primary IT department management resource. This is not utilised efficiently for either department management in real time or for data collection. The department appears to have adequate computer workstations to allow HBCIS to be used for these purposes. Given the physical layout of the department where clinical care for ED patients currently occurs in two physically separate areas, a real time department management system would be an ideal way to keep track of patients under the care of the ED. This does not occur and neither does the direct entry of data.

Again this practice is part of a cultural apathy that is a remnant from the philosophy of the previous director. The NUM is keenly awaiting the implementation of EDIS as a new department management tool in the Rockhampton department. The review team acknowledges that the HBCIS emergency department module is not intuitively easy to use for people with limited IT skills. Despite this there needs to be an acceptance in the ED that data collection is part of core business.

Aberrant triage practices

The Rockhampton ED employs an unusual practice of 'rapid triage' which is later followed by a more thorough triage assessment following the patient being registered by the triage clerks. The initial triage category is placed on HBCIS, but is often later amended following the more thorough and detailed triage assessment. It was widely reported amongst all staff that if the triage category is clinically amended on the triage sheet it is not always amended on the HBCIS screen. This is an obvious source of inaccurate data.

Data collected is not utilised by the ED for quality or service planning activities

The data that is collected could be a source of quality initiatives in the department to improve performance in measured areas and directly feedback any improvements to the staff. Furthermore, it could also be utilised by ED management for roster planning and statistical evidence in workforce planning. It appeared to the review team that any data collected was not being directly utilised within the department. This has the effect of devaluing the whole process in the eyes of the staff and reinforces the view that data collection is not core business.

The Review Team recommends the following in relation to data collection:

- processes be implemented and enforced within the ED that ensures all data is entered for the relevant patients in real time directly into the HBCIS field
- the HBCIS emergency department module be utilised as a real time department management tool and for real time data entry. This will facilitate the implementation of EDIS in the future as there will already be a cultural acceptance of data entry by all staff by the time EDIS is implemented.
- as part of triage education outlined elsewhere in this report, the triage nurses should only enter the final 'correct' triage category into the HBCIS field.
- the data collected by the staff in ED be collated and displayed for all the staff in a way that they are able to comprehend, participate and initiate service improvement activities. It is expected that this would have the effect of improving data quality.

Medical Emergency Team

Medical Emergency Teams have been introduced to hospitals in Australia in an attempt to reduce the incidence of in-hospital cardiac arrest and to provide certainty of rapid, skilled medical and nursing response to previously agreed and defined ward based emergency situations. If the patient can be stabilised and remain on their ward, such an

outcome is satisfactory. If this is not achievable, the patient will need to be transferred to an area of higher dependency within the hospital (HDU, Coronary Care or Intensive Care). The efficacy of these teams is due to fact that the staff from these higher dependency areas are also members of the team and continue patient care in their specialised unit if needed. The critical care skill base to provide this type of response varies in different hospitals, but is usually drawn from the areas of Intensive Care/Anaesthetics/Emergency.

The Rockhampton Hospital has implemented a MET team and this is to be commended. It was worrying in the extreme that the emergency department actually needs to call on the services of the MET for its own patients. This utilisation appears to systematise chronic underperformance of the ED in providing its core business. The existence of emergency departments in Australasia is based on fundamental premise that highly skilled, critical care equipped doctors and nurses are present to assess and treat unstable patients at the point of presentation. If the ED cannot perform the service and has to call on emergency response from staff outside the department on a regular, systematised basis it reflects a deficit in ED capacity or skill mix that needs urgent attention.

It was reported by three staff interviewed that as part of the MET training process that nurses responding to MET calls are taught to intubate patients in the absence of a medical officer. It is outside the scope of this review to investigate whether this actually occurs or not, however it was reported by interviewees that it is not an uncommon occurrence.

The review team would recommend that a process be set up within the hospital for the audit of all MET calls and outcomes. If a nursing staff member is required to intubate a patient in a hospital with 24/7 on-site medical cover then this should be regarded as a sentinel event. Consequently, a root cause analysis should be undertaken to identify the circumstances that lead to this occurrence being required and if indeed it was required.

Core business

Emergency departments in regional areas evolve to meet the service needs of the community. This tendency often creates situations where the ED extends its care to areas outside of the scope of standard emergency care practice in an attempt fill a gap in medical service provision in the community. While the desire to 'fix' the situation is admirable, non-core business in an ED can be a significant drain on resources and can blur the focus of the emergency department. Emergency departments providing services outside their scope can be likened to the department of medicine providing surgery.

The Rockhampton Hospital ED is currently providing a number of services that fall outside the scope of core ED business. They are provided at the level that can be a significant staffing and financial drain on the department. If the ED were to 'trim' its services to meet the objective of 'providing high quality timely emergency care to the community of Rockhampton and surrounding areas', this would provide clear direction and focus and limit the creep of services to areas outside of this objective.

Current practices that the review team identified as non core ED business include:

- Dressing clinic and dressing reviews
- Needle exchange service
- Sedation and fracture manipulation in children
- Management of chest pain in the observation unit
- Unregulated scheduled review of patients (ie more than a limited defined number of conditions)
- Outreach clinics to Marlborough and St Lawrence
- Scheduled general outpatients services
- 'Ward Call' to inpatient wards overnight
- Medical Retrievals via Capricornia Helicopter Rescue Service
- Provision of regional medical relief services to other hospitals in the district from the ED

While it is recognised that some of these services will, out of necessity, still need to be provided by the District, they should not fall under the responsibility of the emergency department management and resources.

The co-location of the needle exchange service in the ED is an area that warrants particular mention. This is a necessary service for the community in terms of public health risk management, but causes particular issues to the ED. It has been the source of several complaints about perceived positive discrimination towards IV drug users being given apparent preferential service before unwell people in the waiting room. While this is clearly an issue of public perception it is quite simply managed by not co-locating the two services. The clientele of the needle exchange service are also prone to aggression and violence and this escalates an already tense environment in an ED waiting area.

The Review Team recommend that core business for the ED be identified and articulated and alternatives for other services be explored.

Right of admission

The serious limitations on the clinical space in the body of the emergency department should necessitate a strong focus on patient flow. If patients are delayed in ED, for any length of time longer than the bare minimum in the ED, it seriously affects the capacity of the department to provide clinical care to existing patients or to have capacity to accept new arrivals.

The Review Team was shown an existing policy that enables the senior medical officer on duty in the ED to admit patients to all wards except ICU/CCU and Psychiatry. It was recurrently stated that despite this ability being endorsed, it is rarely exercised.

Rockhampton Hospital by all reports has minimal 'access block' to inpatient beds from the emergency department. However it appears there is significant 'exit block' in the ability or inclination of the emergency department to access available beds for patients requiring admission who are in the ED.

It appears that the block to getting patients into ward beds who require admission is due to the preference of the inpatient registrars to review patients in the ED prior to them being transferred to the ward. This process is rarely completed in a timely manner due to inpatient registrars competing priorities of outpatient clinics, ward rounds and operating theatre lists.

While it is accepted that some patients are unstable and may not be safe to be admitted to the ward without face to face clinical handover, these in reality would be a minority.

The Review Team recommend that the emergency department develop, and the Executive endorse, a policy whereby patients who are medically stable and have a clear requirement for admission, are able to be directly admitted to the ward if there is to be a delay in inpatient medical review. This policy should outline that interim management orders, including appropriate fluid and medication orders, are fully documented and that the patient has been discussed with the ED SMO.

This process should be driven by the most senior ED doctor on shift and is expected to have the effect of dramatically improving patient flow and the ability of the ED to provide clinical care for the patients remaining in the department. As long as strict guidelines are followed regarding clinical handover and the process is overseen by the most senior ED clinician, then this improvement in 'exit block' will not cause any compromise in clinical care.

Triage practices

As has been mentioned earlier in this report, the Rockhampton ED employs a practice of "rapid" triage followed by a more detailed assessment after the patient has registered with the clerical staff. This practice results in each ambulatory patient essentially being triaged twice, doubling the workload for the triage nurse, and potentially requires the patient to discuss their condition twice.

It is certainly preferred practice that patients presenting to an ED see a clinician first, and it was encouraging to see that this is the practice at Rockhampton. This practice reduces the risk that an acutely unwell patient will be required to spend unnecessary time in the waiting room prior to medical attention. The concept of the triage nurse "quickly eyeballing" waiting patients to ensure that the acutely unwell ambulatory patients are identified and treated as rapidly as possible is a standard triage practice. However the description given to the Review Team of the Rockhampton practice seems to be a very labour intensive hybrid version. As discussed in the nursing staffing section of this report, it would be preferable to have the triage nurse complete the triage process on patients at first contact and the nurse in the sub-acute area be responsible for managing ongoing interventions for the group of waiting ambulatory patients.

As discussed in Chapter 1, the Review Team believe that the application of the Australasian Triage Scale (ATS) at Rockhampton is not consistent with the broader Queensland practice. It was encouraging to see the roll out of the Triage Education Work Book that has been occurring over the last year. This process needs to be made mandatory for all staff who are performing the triage role and, once all staff have moved through the education process, analysis of triage practice should be occurring as a strategy to move triaging to being within the accepted standards. Unfortunately there is no tool in existence at this point that can be utilised to ensure consistency of triage

application. However, analysis of admission rates per triage category and retrospective triage audits are two means that can, and should, be utilised.

It is also unfortunate that the Rockhampton ED does not use a mental health triage scale, specific to that vulnerable group of patients. The Emergency Mental Health Project 2002 – Report of the Consultative Committee recommends the use of the South East Sydney Area Health Service triage scale which is widely used within Queensland, and the Review Team would endorse this recommendation.

Finally, as discussed in Chapter 5 of this report, consideration should be given to having a single triage point where all patients, both ambulatory and ambulance, are triaged by the triage nurse.

The Review Team would recommend the following in respect of triage practice:

- The practice of double triage cease and a more appropriate model be introduced
- Analysis of triage practice should occur to ensure consistency with accepted benchmarks
- The roll out of the Triage Education Work Book continue and include all staff who are performing the triage role
- A mental health triage scale be introduced
- Consideration be given to a single point triage process

Chapter 4 Emergency Department Staffing

Medical Staffing

The Rockhampton Hospital ED by the best estimate has a medical staffing establishment comprising:

- Director (SMO)
- SMO 3 FTEs
- SMO 1 FTE temporary until 31/12/04
- PHO 7 FTEs
- RMO 3 FTEs
- Interns 3 FTEs

Out of this pool, the ED is expected to not only provide services to the Emergency Department but also to provide ward call services to the hospital between 2200 and 0800, 7 days per week and to provide a medical officer to cover rural regional hospital relief (Mount Morgan, Woorabinda, Yeppoon). Furthermore, it also required to provide medical retrieval services to the Capricorn Helicopter Rescue Service. There are a number of significant issues relating to the medical staffing of the ED that are complex and interrelated. We will attempt to deal with them under specific topics.

Rostering

The Director attempts to roster the SMO staff to cover 2 shifts per day 5 days per week and 10 hours per day on weekends. There is an SMO on call when there is no SMO rostered on shift in the department.

As one of the SMOs allocated to ED does not do any on call, weekend or evening shifts, this places a disproportionate burden on the remaining 4 individuals providing extended hours clinical cover. The fact that currently there are in fact 4 persons providing this service seems to be somewhat fortuitous as one of the positions is temporary and extra to current establishment. If this 'extra' person was not employed, the service would fall to an unacceptable and unsustainable level. This would leave the clinical and on call burden on the remaining staff and would place them and the public at serious risk. The fact that one of the SMOs in the department does not, is unwilling to, or is not capable of, contributing to the after hours and on-call component of the roster needs to be urgently addressed.

The Queensland Health role delineation for the Rockhampton hospital is that of a major regional facility. This level facility should have Senior medical officer/FACEM cover at least equal to that currently being provided by the incumbents. This level of cover however is unsustainable at current staffing levels and is impacting in a number of other areas both within and outside the ED.

The obligation of the ED to provide junior staff for weekend and holiday relief to the rural hospitals places a disproportionate and unacceptable load on the remaining junior staff to provide cover to the department. The current rostering pattern has RMOs working 7 out of 10 weekends during a rotation, and PHOs working a 1 in 2 weekend roster. The current accepted industry standard for weekend work in EDs is a maximum of 1 in 2 weekends.

While the hospital obviously has a duty to provide support for remote practitioners in rural hospitals, the requirement that these staff are rostered through the ED places an inequitable burden of weekend and antisocial shifts on this group of doctors. This contributes heavily to poor morale and ongoing recruitment difficulties.

Supervision

Many of the junior medical staff felt that supervision by more senior staff in the department was inadequate. This sentiment is juxtaposed against what is clearly good extended hours senior medical staff coverage.

This situation may arise due to:

- Inadequate staffing numbers,
- The heavy personal caseload of the SMOs,
- The senior staff concentrating their supervision on the underperformers at the expense of the good performers
- A cultural issue within the department that does not foster close clinical supervision of junior doctors as a high priority goal.
- Lack of confidence of the SMO staff in their own clinical abilities

The exact root of this issue could not be determined at the time of review, but it is clearly an issue for the quality of care being provided in the ED as well as an issue affecting morale and retention of junior medical staff.

Skill mix

The emergency department medical staffing skill mix is highly variable. Many people on the roster are not performing at an acceptable level according to their level of employment. This has many trickle-down effects. It causes competent medical staff to carry a higher case load to make up the deficit. It forces the senior medical and nursing staff to more closely supervise them at the expense of supervision and education of other more competent staff. It forces the Director to roster according to skill mix and not according to level of employment and therefore places an inequitable burden on staff performing acceptably. In fact the situation often arises where staff on lower pay scales are rostered to 'supervise' staff on higher pay scales. This obvious inequity needs to be addressed through recruitment, education and performance management strategies.

There is the perception amongst the ED senior medical staff, which is supported by other department senior staff, that the hospital 'manages' its underperforming doctors by placing them in ED. While this perception is rife, there appear to be structural issues in the term allocation process that reinforce this perception and indeed this occurrence.

The Rockhampton Hospital has a large number of 'rural scholarship holder' medical staff. These staff are allowed to remain in Rockhampton for the second year of their

residency by agreement with Queensland Health. These doctors in their second year are preferentially given rotations in many of the inpatient units in order to adequately prepare them for their rural service. This process while admirable in its intentions has the perverse effect of rendering the only terms available to 'non-intern' RMOs, who are not on scholarship, as those which are less sought after such as ED. Given the fact that many of the non-intern RMOs are recruited from overseas, it means that overseas trained doctors (who were clearly identified by all interviewed as a high proportion of the underperformers) are concentrated in ED. This does not represent good risk management by the organisation in this respect.

Overseas Trained Doctors

A recurrent theme of the staff interviewed by the review team is the medical knowledge and competencies of overseas trained doctors. It was felt that a large proportion of these individuals had clinical skills that were not appropriate to their area of practice and that, for some individuals, the level of English competency was not adequate for clinical practice.

The orientation of overseas trained doctors is a statewide issue. There no longer appears to be coordinated statewide approach to this issue. Given the chronic recruitment problems faced by the RHSD, it may be beneficial to quality clinical care and to staff retention if the District were to explore the option of developing a locally based cultural and linguistic awareness and orientation program. Similar processes have been successfully implemented at Ballarat Hospital to address this issue.

Accreditation

The emergency department at Rockhampton is not accredited for advanced training in the speciality of emergency medicine. This situation has a number of adverse effects on the staff in the department.

- There is no specialist role model for junior staff
- There is no culture of ongoing professional development amongst the medical staff
- There is no incentive for registrars of other disciplines to spend time in the ED as their time will not be counted towards training in their relevant speciality
- There is no prospect of recruiting or retaining staff who may wish to pursue a career in emergency medicine.

Specialist input

There is no specialist emergency medicine presence or input into the clinical care within the department. This has deleterious effects on staff recruitment and retention as outlined above. It also has the potential to compromise clinical care. Emergency medicine specialist presence in the ED should be made a priority.

Hospital perceptions

There is a widely held perception in the hospital that the emergency department provides substandard care. There is a perception that the department is a 'dumping ground for underperforming doctors' and that the senior medical staff are not regarded

as specialist or senior colleagues. As part of the process of rebuilding the emergency department, the hospital management will need to take conscious steps to address each of these perceptions about the medical staff in ED. This can be approached initially through a variety of measures:

- ED presence at relevant hospital committees
- Participation in grand rounds by ED on areas of ED expertise
- Multidisciplinary case reviews involving ED Senior staff

Solution

The main solution to the chronic medical staffing issues in the emergency department is to create a specialist workforce in the ED. It is the view of the review team that the *minimum* quantum of emergency specialists required to provide a stable sustainable quality service is 4 FTEs.

This injection of staff should initially be over and above existing staff levels as they exist at present. This will have the flow on effect of raising the standard of clinical care and supervision, improving the status of the emergency department in the hospital and community, aiding the department in obtaining training accreditation, providing positive role models and career options for junior staff and hopefully aid recruitment and retention of local graduates.

The culture of apathy that is prevalent throughout the department seems to be largely a "hangover" from the previous directorship. It should be noted that the current Director is making earnest efforts to reinvigorate the department's position, and this should be acknowledged. If the desired FACEMs are employed by the District, a position of non-FACEM Director may be suitable for the current occupant. This model has worked successfully elsewhere.

The Review Team recommends the following in respect of medical staffing:

- The department and the district make the accreditation of the Rockhampton emergency department as a training department for advanced training with the ACEM a priority issue.
- As part of the move to accreditation, there is a need to create a specialist workforce in the ED. A minimum number of 4 FTE Fellows of the Australasian College of Emergency Medicine, or equivalent, will be required to provide a stable sustainable quality service.
- As an interim measure until the department can attract and recruit registered emergency specialist staff, the review team recommends that the department seek to establish formal links with either individual emergency specialists on contract or another accredited ED. This could have the desired effect of providing a specialist input through quality assurance activities, case audit, training and education and policy and procedure development. This would also have the effect of ensuring department standards and practices adhered to national best practice standards. This model is already in common practice in many private sector EDs.

Nursing Staffing

The Emergency Department is staffed by 30.4 FTE nursing staff. This allows for 7 nurses on a morning shift, 7 on an evening shift and 3 overnight. In addition, there is the Nurse Unit Manager. There has been some work done in matching staffing to activity with some of the morning shift nurses commencing work at 0900 hours and staggered starts on the late shift, with staff commencing at 1230, 1430 and 1730, and this is to be commended.

The nursing staff are allocated in the following manner on morning and afternoon shifts. One nurse performs the triage role, one nurse is allocated to the observation unit, one nurse is referred to as "back-up triage" and also manages the dressing clinic, and 4 nurses are allocated to the acute area of the department. It was not clear which of these 7 staff had the responsibility for the shift coordination role. It was generally accepted that this would be the clinical nurse on the shift, but this person may be the triage nurse, and as such would have no role in overseeing resuscitations, liaising with the after hours nurse managers in respect of the staffing and management issues, and management of the workflow on the shift. Recently there has been a change in the way that nurses are allocated to patients in the acute area. At the time of the review, this process was undergoing a one month trial, and as such, no decision had been made as to whether it would continue. The Review Team would suggest the following, in terms of the use of the available nursing resources within the department.

There should be a designated shift coordinator. This person should be a senior ED nurse, but not necessarily the clinical nurse depending on the skill mix on that particular shift. This nurse should have the overall responsibility for management of the department for that shift. This would include workload and workflow management, in collaboration with the nurse managers and senior medical officer on the shift. The shift coordinator should not have allocated patients.

One nurse should be allocated to triage and one to the observation unit as is currently the case. The process of triage is further discussed in the work practices section of this report. The nurse currently referred to as the back-up triage nurse should be seen as the coordinator of the sub-acute area of the department. This nurse should be responsible for the management of all sub-acute patients, including those who are waiting to be seen and for the initiation of treatment as appropriate for this patient group, such as nurse-initiated X-rays, first aid management of injuries, and nurse initiated analgesia. This process has been well established in New South Wales in the form of the Clinical Initiatives Nurse. Appropriate management of this group of patients has been shown internationally to reduce waiting room aggression.

There are six cubicles in the acute section of the department. These cubicles should be allocated to the three remaining nurses on the shift. The allocation should be explicitly clear, such that each individual nurse is clearly accountable for the care given to patients. For example, nurse A is responsible for cubicles 4 and 5. This responsibility would extend to ensuring that the area is stocked and equipped appropriately. These three staff would be able to relieve each other for meal breaks, with the necessary clinical handover occurring.

Education for nursing staff was raised as an issue by many of the interviewees. There is no dedicated nurse educator for the ED, however there is a nurse educator shared between ICU, CCU and ED. The Clinical Improvement Unit staff are very keen to support the development of educational processes in the ED, and this should be encouraged and supported. As discussed in Chapter 4, the Triage Education Work Book has been recently introduced into the department, and this is to be commended.

Not all of the clinical nurses within the department have designated portfolios of responsibility. A lack of available time was given as the predominant reason for this occurrence. This is not an unusual circumstance in regional areas. Other areas have dealt with this issue by utilisation of a proportion of the nurse unit manager's time. For example, the nurse unit manager may work clinically for a shift, or part thereof, and replaces the clinical nurse on the floor, enabling that nurse to have the necessary time to meet the portfolio responsibilities.

Administrative staffing

On a positive note, the Central Admission Process (CAP) has made a significant improvement in the admission of patients since its inception in January of this year. Where formerly there were 11 admission points throughout the hospital, the CAP has reduced that to two, namely ED and Day Surgery. Furthermore, patient information services report a solid working relationship with all levels of Emergency Department. It is a belief that the advent of the CAP has played a significant factor in the strengthening of said relationship.

It must be noted that the administration staffing situation is non-existent, bar from the triage clerks. It is advisable for an increase in administration staff through an AO3 or several AO2's to alleviate current workload for triage clerks or more noticeably the removal of administration tasks currently performed by Nursing staff in the emergency department. Currently, the process of triage clerks "chasing" medical staff for information required to enter into HBCIS is a significant impediment in the AO's ability to remain at the triage desk to perform their tasks competently. The current AO staffing situation does not provide 24hr cover in the ED and additional staff is required to cover the shortage which is presently covered by Medical Records. The Rockhampton ED protocol of patients retrieving their own chart from Medical records post triage, is not in keeping with Queensland Health policy and should cease immediately. Patients are not to have access to their own records without the correct FOI procedures in place.

Other issues

It is outside the terms of reference of this review to make recommendations about the organisational structure of Rockhampton Hospital. Nevertheless, there are two issues that warrant comment. The first is that the ED Director is the only medical Director within the Division of Surgery who is not a member of the Divisional Management Committee. It is difficult to imagine how issues concerning the ED are discussed, and how the ED is involved in the broader clinical and management issues within the Division and the Hospital. It may be that this circumstance is the result of the previous Director's management style. The second is the finding that neither the ED Director, the Co-chair of the Division of Surgery or the Executive Director of Medical Services were able to identify the reporting line for the ED Director position.

Chapter 5 Emergency Department Facility

All staff interviewed made mention of the extremely poor ED facility and the Review Team would endorse this view. The department has two distinct sections and is a crowded and small facility. The cubicle used for resuscitation of patients is a very small and extremely cluttered environment. It would be hard to imagine how a trauma team would be able to effectively operate in such a space. The acute area is very crowded and patient privacy and confidentiality must be compromised. The store areas are inadequate in size and this is further exacerbated by the current practice of only having a stores delivery once per week. While it is unfortunate the ED was not rebuilt as part of the redevelopment of the Rockhampton Hospital, it is hoped that finances will become available in the near future. In the interim, a number of changes could be made.

There are two triage points, with patients who arrive via Queensland Ambulance Service (QAS) entering via a different point to ambulant patients. A two point triage system produces a number of difficulties. Firstly, most departments find it a difficult process to appropriately redirect patients to the waiting room, once they have made their way into the department. This situation may occur when the QAS transports low-acuity patients to the Emergency Department. Secondly, it makes it almost impossible for the triage nurse to have an understanding of what activity is occurring in the Emergency Department. Accordingly, this makes communication regarding waiting times difficult with waiting room patients. The geographical design of this Emergency Department would currently allow ambulant and ambulance patients (except for major resuscitations) to be triaged at the reception/triage area, and the Review Team believe this would be a preferable work practice. Resuscitation patients would appropriately continue to bypass the triage area and be delivered directly to the resuscitation area of the Department. This could be achieved by relatively minor changes to the entrance area adjacent to the triage/reception desk.

The second theatre area is utilised now as a staff tutorial area. The Review Team would suggest that this room be formally converted to a staff tearoom/tutorial area. This would enable the current small space utilised as a staff tearoom and relatives' room, to be used solely for distressed relatives, with appropriate furnishings. If there is a need to use the current second theatre area for any procedural work, for example suturing, the Review Team would suggest that a portable light be purchased to enable suturing to be undertaken in the acute and sub-acute areas.

The current plaster room should be relocated to the orthopaedic outpatient area of the facility. This relatively large space could then be utilised for the sub-acute patients. This may require curtains to be erected in the area to afford the patients some privacy. Doing this would also improve resource efficiency of both medical and nursing staff. Furthermore, it would give the Senior Medical Officer and the shift coordinator an enhanced ability to manage the workflow of the department. Even if this suggestion is not taken up, the sub-acute area should be closed between the hours of 2300 and 0700, and those ambulatory patients should be seen in the plaster room. The Review Team believe that the joint reductions currently undertaken in this area should be carried out in the resuscitation area of the department.

The Review Team were able to view the current plans for the redevelopment and are supportive of many of the proposed changes. We would suggest further consideration of a couple of issues. Given the suggestion elsewhere in this document that the ED concentrate on its core business, it would seem unnecessary to have two rooms identified for dressing clinic. Additionally, the planned procedure room is an area that would seem no longer relevant in an Emergency Department. Procedures such as suturing can be undertaken in any area, providing there is a suitable light source and, as previously discussed, procedures undertaken utilising conscious sedation should be performed in a resuscitation environment. The size of the current cubicles is very small and it would be hoped that the new plan would provide for care delivery areas of a suitable size. Finally storage solutions, such as compacters, should be explored to reduce the amount of floor space required.

Chapter 6 The Way Forward

As outlined in this report, there are a number of issues that require addressing within the Rockhampton Emergency Department. The Review Team felt that addressing these issues required an overall strategic plan for the Emergency Department endorsed, and if necessary, enforced by the District Executive. The main points for consideration are:

- Recruitment of a critical mass of FACEM staff
- An education plan for all disciplines and all levels
- A performance management plan for all disciplines and all levels
- The introduction of quality initiatives, clinical indicators and process measurement, to drive practice change
- Strategies to reduce the professional isolation for staff within the ED

Recruitment of a critical mass of FACEM staff

The goal for medical staffing has been referred to elsewhere in this report, and work should actively begin on achieving this goal.

An education plan for all disciplines and all levels

There needs to be an educational framework for the department for all disciplines and at all levels. The Clinical Improvement Unit is in the ideal position to develop and implement such a program. The Review Team would suggest that a plan be developed that would see the following achieved in the next 12 months:

- all staff should complete the mandatory training requirements
- all staff should attend front-line customer skills and aggression management training

In addition to this basic framework, the following discipline specific education should be provided. All medical staff should undertake ALS training, and all PHO and SMO staff should complete Advanced Paediatric Life Support (APLS) and Emergency Management of Severe Trauma (EMST).

There needs to be the development of a competency based process for nursing staff. All nursing staff need to progress through this process and it should be supported by appropriate education. All nursing staff should undertake the Trauma Nursing Core Course (TNCC), Advanced Life Support (ALS) and complete the Triage Education Work Book, once they are deemed ready for this stage of development. Staff who are undertaking the *Queensland Health Transition to Emergency Nursing* should be appropriately supported through this process.

The Review Team recommend that there be the development of an educational framework for all disciplines and all levels of staff within the ED. This would encompass mandatory training including customer focus education, discipline specific emergency education, and a competency program for nursing staff. This program should be developed by the Clinical Improvement Unit and endorsed by Executive.

A performance management plan for all disciplines and all levels

In addition to the education framework, the department needs to have a robust performance management system implemented. All staff need a current performance appraisal and development plan, which guides their performance and development in line with departmental goals. This process can only be used as a management tool if the application is multi-disciplinary and multi-level. In the case of the nursing staff, the Nurse Unit Manager should complete the PA&Ds for the clinical nurses, each of whom should be responsible for the development plans of a group of registered nurses. It is quite clear to the Review Team that there needs to be attitudinal change within some members of the senior nursing staff to allow this to occur. As implementation occurs, this process will require a significant amount of education and support.

The Review Team recommends the implementation of a mandatory performance management framework that is multi-disciplinary and multi-level.

The introduction of quality initiatives – clinical indicators and performance measurement – to drive practice change

Analysis of clinical performance and service delivery will also need to occur. A quality framework needs to be developed that will allow examination of a number of clinical and process indicators. Currently this is limited to the work being undertaken as part of Rockhampton's involvement in the Queensland Trauma Registry. This process is working very well, and the concepts need to be expanded to include waiting times and admission rates per triage category, pathology and radiology result review, unplanned admissions to ICU, admission rate from the observation unit, and time to thrombolysis. The DNW rate should not only be monitored, with a goal to reduce, but follow up should occur for all high risk DNW patients, such as mental health, children, and any DNW patient who is a triage category 1, 2 or 3. The analysis of these indicators will drive improvement in the areas that it is required.

Strategies to reduce the professional isolation for staff within the ED

The Rockhampton ED is geographically and professionally isolated. This is further exacerbated by the lack of specialist medical staff. This aspect of the development of the department must not be overlooked. The Review Team would recommend a range of options to help address this isolation.

The Australian Resource Centre for Hospital Innovation (ARCHI) offers email discussion groups. There are discussion groups on bed management, emergency department, change management and improving patient safety, all of which would be relevant. Access is available via the ARCHI website, which is a Queensland Health allowed internet site.

The National Institute of Clinical Studies (NICS) manages the Emergency Care Community of Practice. Membership of the community is free and members receive monthly newsletters which outline recent research findings and other items of interest. A monthly teleconference is conducted which discusses a range of relevant topics. NICS also manage specific projects, the next one concerning the interface between ED

and mental health, and members are able to participate in these projects. Again, access is available via the NICS website, which is a Queensland Health allowed internet site.

The Review Team recommend that strategies be introduced to reduce the professional isolation of staff within the ED at Rockhampton Hospital.

Attachment A

Terms of Reference

ROCKHAMPTON HEALTH SERVICE DISTRICT

TERMS OF REFERENCE

REVIEW OF THE ROCKHAMPTON HOSPITAL EMERGENCY DEPARTMENT TO PROVIDE ADVICE TO THE DISTRICT MANAGER & EXECUTIVE MANAGEMENT COMMITTEE ON PRIORITY ISSUES RELEVANT TO THE OPTIMISATION OF SERVICES

Background

The need to examine processes and systems within the Rockhampton Hospital Emergency Department has been highlighted over recent months. In order to support the staff and optimise the provision of this service, a review of the Emergency Department has been commissioned.

Purpose

The purpose of the review is to ensure quality services to clients and a safe working environment for staff. Systems and processes need to be examined to ensure overall efficiency and effectiveness of the service.

The Review Team is to consider the following:

- Current systems and procedures that are examples of "best practice", particularly those practices or processes which may be appropriate for application in the department;
- Strategies to improve performance;
- Strategies to improve management of, and processes in the department; including identification of resource issues;
- Medical, nursing and administrative staff levels and skill mix;
- Strategies to improve the quality of data collection and the usage of this data;
- Significant issues, which impact on the effective management of quality patient care within the department; and
- The physical environment and equipment of the Emergency Department.

Process

The Reviewing Officers will be Dr Peter Miller, Staff Specialist Director, Emergency Department, Toowoomba Hospital, Ms Michelle McKay, Nursing Director, Toowoomba Hospital and Mr Tim Williams, Administrative Officer, Emergency Department, Gold Coast Hospital, under Section 52(1) of the Health Services Act 1991, to conduct this review.

The review team will undertake the following:

- Examine data relating to the emergency department;
- Conduct a site visit on 15 & 16 June 2004 to review the facilities, work practices and staff of the department;
- Interview relevant personnel within the Emergency Department and other key stakeholders where appropriate;
- Prepare a comprehensive report that provides an analysis of the findings from the review and providing recommendations for service enhancement.

Attachment B

List of Interviewees

Ms Sandra Thomson	District Manager
Dr Adrian Groessler	Executive Director of Medical Services
Mr Lex Oliver	District Director of Nursing Services
Mrs Jan Randall	Nurse Unit Manger, Emergency Department
Dr Nick Milns	Director of Emergency Department
Junior Medical Officers (As a Group)	Emergency Department
Mr Ian Sullivan	Orthopaedic Technician
Ms Deanne Walls	Nursing Director/Co-Director, Division of Surgery
Ms Lorelle List	Clinical Nurse, Emergency Department
Mr Greg Andrews	Clinical Nurse, Emergency Department
Ms Cherry Sedgman	Clinical Nurse, Emergency Department
Ms Hazel Voss	Nurse Unit Manger, Medical Imaging Department
Mr Kerry Lynam	Director of Medical Imaging
Dr Sue Roberts	Senior Medical Officer, Royal Flying Doctor Service
Mrs Lee-anne Bierton	Hotel Services Manger
Ms Michelle Jorgensen	Operation Services Supervisor
Mr Cam Crothers	Patient Information Services Manger
Ms Cheryl Jaggars	Patient Record Manger
Nurse Unit Managers (as a Group)	
Ms Trish Hardy	Bed Management Coordinator
Ms Debbie Carroll	Nursing Director, Clinical Improvement Unit

Ms Hayley Horan	Support Officer/Complaints Officer, Clinical Improvement Unit
Mr Kevin Flockhart	Social Worker, Emergency Department
Ms Maureen Tobane	Aboriginal and Islander Liaison Officer
Dr Don Kane	Chairman, Rockhampton Medical Staff Association
Dr Michael Shoeman	Director of Medicine
Dr Melanie Nicolson	Director of Anaesthetics
Ms Barbara Swadling	Medical Education Officer
Dr Lou Davies	Director of Clinical Training, Rockhampton Hospital, Acting Head of the Rural Clinical School, University of Queensland
Dr Peter Reynolds	Senior Medical Officer, Emergency Department
Dr Darryl Hawken	Senior Medical Officer, Emergency Department
Nursing Staff (As a group)	Level 1 and Level 2, Emergency Department
Dr Peter Roper	Director of Paediatrics
Ms Fiona Bridges	Manager, Medical Support Services Unit
Dr Andrew Montague	Registrar, Medical Administration