

# INTERIM PROGRAM IMPROVEMENTS

for

## BARRETT ADOLESCENT CENTRE at THE PARK – CENTRE FOR MENTAL HEALTH

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## PROJECT DEFINITION

Identify initiatives to improve the clinical program and environment of the Barrett Adolescent Centre during an interim period prior to the Centre's redevelopment. Improvements would enable staff to better manage the consumer population, both in the prevention and management of critical incidents.

The three areas for consideration are:

1. effective utilisation of staff to manage higher acuity levels
2. environmental modifications to reduce risks and improve both safety and containment capacities, and
3. reduction of acuity to more manageable levels through admission, transfer and therapeutic processes

The "interim period" is expected to be a period of not less than three years but not more than five years. It will be until such time as the new purpose-built adolescent centre is built and occupied.

The costs and resources for the improvement are to be considered.

## Disclaimer

This project has been completed within the specified available timeframe of 20 working days. As such the time available for research, consultation and administrative matters has been limited. The author is also responsible for the methodology, data collection, analysis and conclusions drawn from this data.

## Acknowledgements

I thank the Executive Management at the Park for initiating this project. I would like to thank the many people who have provided me with input into this document. I could not have produced this document without the technical assistance of Elaine Ramsey and Debbie Mill. I would also like to thank Elizabeth Edge for her valued mentorship

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## EXECUTIVE SUMMARY

The timeline for the Barrett Adolescent Centre to be rebuilt remains a very open one. The nursing staff profile has not changed since the late 1990's when staff numbers were reduced in line with the reduction in the bed-state. The Centre provides care to the most vulnerable of patients, some of whom frequently display life threatening behaviour or suffer persistent suicidal ideation. During the past decade the Centre's staff have had to endure the extra pressure of providing much needed care to meet these complex care needs in buildings which are not purpose built. This is evidenced in the 172 Patient Incidents recording in PRIME in 2006, of which four required Root Cause Analysis as near miss sentinel events. Increasingly, the use of continuous observation is relied upon as a means to maintain patient safety. Reports over the past five years from Queensland Health, the Commission for Children and Young People and the Australian Council for Healthcare Standards have repeatedly identified the inadequate staffing levels and environment as items requiring urgent attention.

These issues have necessitated an examination of current problems and the need to identify measures to enhance the Centre's capacity to provide optimal patient care. This report explains the background and identified problems regarding these issues. Possible options to remedy these problems during this interim period are presented for further consideration.

Section One deals with the issue of increased staffing requirements for the purpose of managing higher acuity. It is proposed that an extra three suitably skilled nursing staff be employed on a roster covering shifts which have historically required the use of extra staff on an almost regular basis. Additional options which relate to skill mix are mentioned for further consideration.

Section Two deals with the issue of the non-purpose built environment. To alleviate environmental problems the choice of three options for environmental upgrades are proposed. All options include similar basic upgrades. In addition, each upgrade includes options for the better management of high acuity patients. The first option includes a proposal for a doorway to allow staff to temporarily close off the female dormitory wing to prevent patients absconding. The second option includes the installation of a High Dependency Unit. The third option requires the installation of a High Dependency Unit adjacent to the nurses' station and the construction of a small extension to accommodate a kitchen and dining area. Each option has considerable advantage over the previous one, but at additional cost.

Section Three deals with the issue of increased acuity levels. To alleviate the problem of increased use of Continuous Observations, it is proposed that admissions of 'High Acuity' patients be limited to two in-patients at any one time, that transfer processes with Acute Units be formalised and program initiatives be implemented to make greater use of Outdoor Adventure Therapy and diversional activities in the evenings.

## Section One

### INTERIM STAFFING UPGRADE OPTIONS

#### Summary and Recommendations

The Nursing Staff profile at the Barrett Adolescent Centre (BAC) has not changed since the late 1990's when nursing numbers were reduced in line with a reduction in bed-state. Since this time, extra pressures have been placed on the staff to deal with a more complex and clinically demanding patient group. With higher levels of acuity and the need for increased hours of Continuous Observation the Centre now regularly uses extra nursing staff to cover this heightened clinical demand. The extra staff are provided mainly through casual employment and the use of overtime.

While the use of casual staff is cost effective it is often problematic due to the lack of skill and familiarities these staff have with the patients to effectively meet their clinical requirements. The use of regular staff on overtime is not cost-effective and can lead to fatigue.

An alternative staffing profile is proposed. This option requires the employment of three additional and suitably qualified nurses. Deficits have previously been identified in the number of Registered Nurses employed at the Centre. A new roster would provide higher numbers of staff on shifts which have been identified as historically requiring the use of extra staff to meet the clinical needs of the patients.

#### Background

The staffing profile for the Barrett Adolescent Centre has not been reviewed since the bed state for inpatients was reduced to its current level of fifteen in-patients and five day-patients. This was prompted by Queensland Health's decision to open acute units to care for adolescents who had previously been treated in adult centres. Their purpose was not as a replacement for the BAC program. During the past decade Queensland Health has opened five acute inpatient adolescent and children's units. During this same period, acuity levels of patients being treated at BAC has increased, as has the demand for beds for patients with Eating Disorders. This has resulted in a significant increase in the need for closer observation of patients and in the actual usage of nursing staff to perform this responsibility.

Adolescents now admitted to the Barrett Adolescent Centre are those with the most severe and complex mental illnesses, with continuing high levels of acuity. All have severe impairment in their day to day function. Their levels of distress and severe functional impairment are often associated with increasing levels of parental abuse, abandonment or inadequacy. This group of adolescents have had limited response to acute care, either requiring frequent short term admissions or longer term in-patient care beyond the therapeutic scope of acute programs. They have often had sporadic or long histories of engagement with outpatient clinics (CYMHS) with limited benefit as well. This is commonly due to the fact that they are in pre-contemplation stages of seeking help to deal with their problems and lack adequate supports in the home environment.

### Background cont'd

Barrett Adolescent Centre articulates a strong recovery model which takes a more progressive, longer term approach to patient care. During this decade BAC has significantly enhanced rehabilitation programs to adolescents with severe eating disorders and social anxiety. It has also developed the first comprehensive rehabilitation program in Australia for adolescents with recurrent, severe self-harm and suicidal behaviour, usually with histories of abuse and trauma. Adolescents in this group are more than a hundred fold more likely to be successful in completing suicide. These programs require a range of more intensive therapeutic interventions, which staff are stretched to provide within the current staffing profile.

The increasing levels of acuity are reflected in the increasing use of Continuous Observations to preserve life due to the high risk of severe recurrent self-harm and repeated suicide attempts. Continuous Observation usage has increased from 738 hours in 1997 to 7914 hours in 2005 and 6433 hours in 2006. (See Appendix 1.) This figure does not include the extra supervision time spent by nursing staff in managing post-prandial observation of naso-gastric feeding of physically resistant patients with Eating Disorders. This extra drain on nursing staff resources has led to the need for extra staff for some escorts that previously would have been conducted within establishment numbers.

These higher acuity levels are also reflected in the number of incidents reported in PRIME. In the past year 172 serious incidents have been recorded, four of which were near miss sentinel events which required Root Cause Analysis. Reports over the past five years from Queensland Health, the Commission for Children and Young People and the Australian Council for Healthcare Standards have repeatedly identified the inadequate staffing levels to match the levels of acuity requiring urgent attention. To date, these have not been addressed.

### Identified Problems

In the "Safe Staffing and Patient Safety Literature Review" prepared in 2003 by The Australian Resource Centre for Hospital Innovations the relationship between patient safety and staff utilisation was examined. It reported a number of salient points:

- Contributing factors for adverse events were found to be high workload due to high acuity of patients and inappropriate staffing mix (pg 41). This concern was expressed with regard to the use of registered and non-registered nurses.
- Staff performance is not only dependant on them having knowledge and skill to do their job. Their performance is also influenced by a number of other factors (pg 113)
- Research in the health industry also found that inexperienced or temporary staff pose an increased risk to patient safety if not adequately supervised (pg 70)
- Staffing models that use a rostering system that is conducive to continuity of care promotes patient safety and contributes to safe staffing. The practice of using staff who do not have sufficient experience or knowledge but merely to fill vacancies is a system of providing a carer rather than providing continuity of care (pg 69)

### Identified Problems cont'd

An extra staff-member is regularly required to be rostered to the Barrett Adolescent Centre. This occurs on the majority of shifts. This is commonly needed due to higher acuity because a patient is to be managed on Continuous Observation as ordered by the treating Doctor. At other times the staff-member may cover absence due to sick leave, an existing vacancy on roster or to escort a patient. Hospital policy dictates the process for covering extra staffing requirements. Firstly, a "spare" nurse above shift establishment numbers in another ward is to be utilised. Casual staff-members are then brought in for the shift. Once these avenues are exhausted, Overtime may be used.

While this may be the most cost-effective method, it may not always achieve the safest outcome. Staff that are least familiar with patients and their needs are routinely utilised before familiar staff. Not unexpectedly, this has contributed to critical incidents occurring at the Centre, including two near miss sentinel events in the past year. Child and Adolescent Mental Health is a specialised area. Staff-members who do not have good knowledge of patients, their histories and their care needs can unintentionally say and do things which impact negatively on the patient. On some occasions it has led to critical incidents, eg. patients' self-harming.

The use of unfamiliar staff also contributes to extra workload for regular ward staff thus increasing levels of fatigue. This is because unfamiliar staff:

- Require a great deal of input and direction from regular staff. This detracts from the time they have for their normal duties. Staff coming to BAC are not required to have an orientation prior to commencing their 8 hour shift.
- Have limited capacity to perform the more specialised duties of the regular staff, eg Care Coordination, counselling, providing clinical input, etc which are routinely performed. As such, these staff-members can only be used to perform limited duties, eg patient observations, minor escorts and supervision of activities of daily living. At times they are being employed for an 8 hour shift yet are only able to contribute 4 hours of productive employment.
- Can only perform limited hours of Continuous Observation. Regular nursing staff are still required to perform Continuous Observation (usually a minimum of 2 hours per shift) in addition to their routine duties.
- Have limited capacity to de-escalate difficult situations or to deal with adverse incidents, eg when a patient is emotionally disturbed and either has already or has the intention to self-harm. These patients, at this time, require direct care staff with whom they have a therapeutic relationship. Regular nursing staff are also required to follow through on procedures which may include entry into PRIME, noting the incident and interventions in the clinical file, notifying other agencies such as the Police, liaising with medical staff and contacting the patient's carer to advise of and discuss the incident.

### Identified Problems cont'd

Additionally, this method of covering staffing shortages is unreliable. There is often a shortage of Casual staff available as there are insufficient numbers to meet the demand across the facility. Regular staff are then required to do Overtime. This further contributes to their fatigue levels which can manifest in increased sick leave, increased error rates and decreased capacity to deal effectively with patients.

### Suggested Remedies

The Barrett Adolescent Centre requires a rostering model which is both cost efficient and provides continuity of care. To do this it needs to increase the use of regular staff to cover increased staffing requirements.

The Centre's budget allows for 76 rostered shifts for nursing staff to provide 24/7 care. This number plus ADO's, leave periods, the NUM and CLP positions equates to a base nursing FTE of 20.9 staff. Additional to this budget is an allocation of funds for extra nursing hours to cover higher acuity, sick leave, escorts and other vacancies. A randomised study of one week per month during the 2004 to 2005 financial year showed that actual usage of nursing staff equated to a minimum of 84 shifts per week. During the 2005 to 2006 financial year this minimum number increased to 93 shifts per week. Current use for the 8 weeks surveyed this financial year has that figure at 98 shifts per week. Using the available DSS database, the financial year totals for nursing staff FTE's were 23.4 in 04/05, 24.0 for 05/06 and 23.7 thus far in 06/07.

### Options

Using funds presently available to the Centre for the purpose of casual and over-time payments, three additional staff could be employed by the facility. Two staff would be incorporated into the BAC roster on morning and afternoon shifts. The third staff-member would be employed within the facility nursing 'pool' and routinely work at BAC if needed.

The new baseline establishment would be 22.9 FTE. The purpose of these staff would be to cover the first extra staffing requirement (eg Continuous Observation, escort or higher acuity) or vacancy (eg sick leave). An extra staff-member would be rostered to 7am to 3pm shifts and 3pm to 11pm shifts which have historically required an extra staff-member. (See roster requirements - Appendix 2).

The employment of two additional Registered Nurses on the BAC nursing roster would be safer and of greater benefit due to the increased need for staff with higher levels of skills. The complexity of care required by patients, who often present with high risk behaviours, involves the provision of advanced psychological and physiological interventions. These extra staff would decrease the workload of current staff by taking on a clinical caseload. Their familiarity with patients and level of skill also allows them to deal effectively with patients who are distressed.

### Options cont

Using this option of extra staff on roster will not do away with the need to regularly use 'Spares' from other wards, Casual staff or Overtime. Although one extra staff-member on the morning and afternoon shifts is a common requirement, the Centre has often needed an extra nurse on the night shift and 2 or more staff on any given shift. What it does do, however, is ensure that a staff-member who is suitably skilled and familiar with the patients and ward routine will be utilised to cover the first need on the majority of shifts.

It also lessens the possibility that Overtime would be needed, thus reducing the risk of fatigue. This ultimately provides safer staffing and a continuity of care for patients.

BAC has also suffered from an inability to attract and retain nursing staff due to the stressful and demanding nature of their work. It has also seen a high turnover of staff in recent times. (The Centre presently has 5 nursing vacancies.) Having a staffing establishment to match these demands will place the Centre in good stead to recruit and retain an experienced nursing workforce as it prepares for the next phase of an expanded service when the Centre itself is redeveloped.

To make this option more cost-effective, as per custom practice in other units at The Park, a 'spare' could be utilised to work in another unit on occasions when the extra staff-member is superfluous to the needs of the unit. Unfortunately this detracts from the overall effectiveness of providing both continuity of care and safer staffing within the facility. Additionally, it does not reduce workloads which have significantly increased due to higher levels of acuity.

### Other staffing options for longer term consideration are:

- At an additional cost of \$9,098.39 per year, one RN position could be converted to a CN with specialised skills in Outdoor Adventure Therapy. This nurse would be available to work shifts and carry a clinical case-load. (This option is of highest priority as a means of enhancing the clinical program and reducing acuity as per discussion in Section 3 of this report).
- At an additional cost of \$9,098.39 per year one RN position on the day shift could be converted to a CN position. This would have a positive impact on the wellbeing of the ward CN by the reduction of stress and enhance clinical practice by giving the CN more time for case management, line management and individual program initiatives. The doubling-up of some CN shifts would improve consistency of care which has the positive impact of reducing the risk of adverse incidents. It would also assist with staff development, attraction and retention.
- At an additional cost of \$9,361.65 per year one RN position could be converted to a CN position seven nights per week. This would give a more appropriate skill mix on this shift.
- A formal Staffing Profile Review in the event that extra funding is not forthcoming for the above option.
- A compulsory orientation for all staff prior to being allocated any shifts at BAC. This would include BAC specific orientation for all new Casual employees.

Options cont'd

- The introduction of a 12 hour shift (as recommended by some research)
- The employment of an additional NO4 to allow the NUM/CNC role to be managed by two nursing staff with specific leadership roles. The CNC would not only provide clinical leadership, but also Clinical Supervision to support a nursing team which is dealing with complex care patients. (Current remuneration value up to \$88,075 p/a.)

## Section Two

### INTERIM ENVIRONMENTAL UPGRADE OPTIONS

#### Summary and Recommendations

The timeline for BAC to be rebuilt remains very open. The problems associated with managing adolescents, who at times can be very emotionally and behaviourally disturbed, in a building not fit for this purpose is an ongoing concern. This report looks at possible solutions via an interim upgrade of the ward building ("D" block).

Three main options have been considered as key possibilities to a range of improvements.

- Option 1: A bare minimum upgrade including the capacity to temporarily close off the female dormitory wing.
- Option 2: A better use of internal space which includes the installation of a High Dependency Unit.
- Option 3: A 6x10 metre extension to provide a purpose built High Dependency Unit, kitchen and dining area.

It is notable that each option has considerable advantage over the previous one, with increase in efficiency but also in cost.

Advice regards options to make modifications and their costs were done in consultation with Larry Hales (Facility/Project Manager), Ron Hassett (Facility Manager) and Robert Wood (Project Coordinator/Electrician) from the West Moreton and South Burnett District Building Engineering and Maintenance Service. It should be noted that any prediction of cost is a WAG (wildly aimed guess). Advice is yet to be obtained from building specialists, eg architect, structural engineer, electrical engineer, etc. Further work would need to be undertaken by Project Services (Qld Gov Dept of Works)

#### Background

BAC was initially designed to provide transitional care for a low acuity adult inpatient service which opened in 1977. Since 1983, both 'C' and 'D' blocks have had relatively minor modifications to adapt them for use as an adolescent service. The building now used as a ward ("D" block) remains unsuitable for the treatment of adolescents who present with higher acuity and require intensive care, support and containment.

As previously mentioned in Section One, during the past year there have been 172 serious incidents as reported in PRIME. The great majority of these incidents (>95%) have occurred in the ward area. The environment is not suitable for the safe management of adolescents who display complex, life threatening psychopathology and pose a high risk to themselves or others. The use of continuous observation is too heavily relied upon for the purpose of containment.

### Background cont'd

Doing numerous hours of Continuous Observation on any given shift greatly detracts from the nursing staff-member's capacity to provide optimal care and perform their own duties, eg effective case management. It is also very costly. Based on the current average cost of casual and overtime usage, the cost of the 7914 hours of Continuous Observation used in 2005 would equate to approximately \$232,839. The cost of this level of care is beyond the budgeted establishment and erodes expenditure in other areas which may have otherwise improved patient care.

The loss of access to other buildings due to The Park's redevelopment has caused changes which have placed greater strain on the ward environment, removed venues which provided better patient care and eroded staff's capacity to either prevent or manage higher acuity. These included the loss of access to:

- the BCA High Dependency Unit
- the nearby auditorium in BCB for diversional activities at night
- the kitchen and dining area at BCB
- a house on site for limited leaves with family
- the Medical Centre for the management of Eating Disorders, and
- a maintained tennis court and recreational oval

The Centre has also become more isolated with staff from the closest wards now having to travel a considerable distance to respond to Code Blacks or Code Blues. This may lead to greater risk to patient and staff safety due to the greater delays in response times to emergency situations.

In July 2004, The Mental Health Unit Corporate Office commissioned Project Services, Department of Public Works to undertake an options study to consider the ongoing suitability of the existing buildings. A decision to rebuild a purpose built facility was supported by the District and Zonal Executive Management. This recommendation has now been included in the 5 year State Mental Health Plan (2006 -2011).

Given the possibility that it will be another 3 to 5 years before this purpose-built facility will be completed, it is imperative that options now be considered for the upgrade of the present building for this interim period.

### Identified Problems

- o Adolescents who present as a high risk of absconding and suicide are presently managed in a time-out room. They are not easily contained within this area and often have attempted to abscond due to the ward being open (unlocked). Being youthful, they have easily evaded staff on numerous occasions and at times placed themselves at much greater risk. Escalation in this behaviour also places both patients and staff at risk of injury due to the need to physically restrain the patient to prevent them from absconding, return them to the ward and continue to restrain them in the time-out/seclusion room until they are reasonably settled.

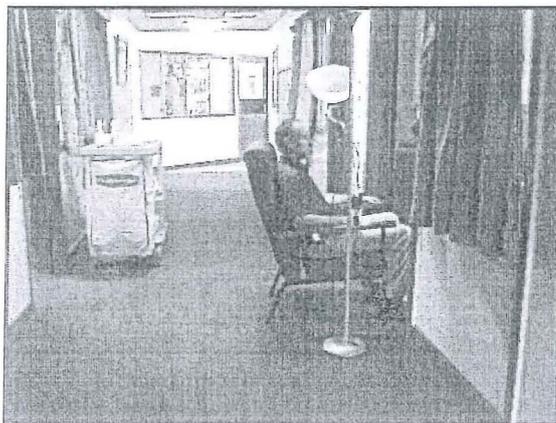
### Identified Problems cont'd

Some patients who are managed in the open ward environment report a feeling of not being adequately contained. They display a tendency to escalate their attempts to abscond in order to act on their suicidal intent. Managing patients in time-out rooms also allows for only a limited range of diversional activities to be used to further settle the patient.

- The Time-out/seclusion rooms are not suitable for the accommodation of adolescents who are at risk to themselves. These rooms are not purpose built to contain patients who are at risk to themselves or others. They were originally designed as single bedrooms. They have hard walls, protruding boards and window ledges. Observation of patients is obstructed by the door and wall panelling when patients are in seclusion.



- For a number of reasons nurses are required to observe the patient from a chair in the hallway. The time out/seclusion rooms are too small to allow observation of patients from within the rooms. Also, it is often safer for the nurse to be positioned just outside the door.



This creates the problem that the chair can partially block the hallway which is a fire egress route. Lighting is inadequate. The positioning of chairs and lamp shades in doorways can be hazardous when escorting aggressive or resistive patients to the time-out/seclusion rooms.

- The Centre cannot be secured because the entry/exit and fire doors are not of a standard to prevent patients breaking them. Previous attempts to "lock" the Centre to contain patients have failed. Attempts to modify entry/exit doors have proved futile. For example, patients can open front sliding door by tipping it and pulling it apart; patients have dislodged the perspex sheeting on the front sliding door to abscond; patients have pushed open hinged fire exit doors.

Identified Problems cont'd

- Disturbed behaviour of co-patients is upsetting to other residents. There is a lack of private space to avoid, or be separated from, disturbing incidents. The time-out/seclusion rooms are in the girls' dormitory wing. The "blue room" which had previously been used as a games room and visitors room, is now used as an extra room to deal with patients who are quite disturbed. Most accommodation is 4 bed dormitory-type (12 of possible 17). This leads to a difficult mix of patients in the dormitory which is often detrimental. For example, a dormitory may have 3 patients with the same problems, eg. Self-harm or Anorexia, which can lead to a deterioration in the patient's presentation due to a contagion effect.



Blue Room



Four Bed Dormitory

- Lack of access to an arena to participate in sporting activities at night leads to increasing levels of agitation during the evenings when consumers can be more upset and less able to cope with the distressing behaviours of co-patients due to a lack of space. Leisure activities in the evenings generally take place in an open, noisy activities/day area on the ward.



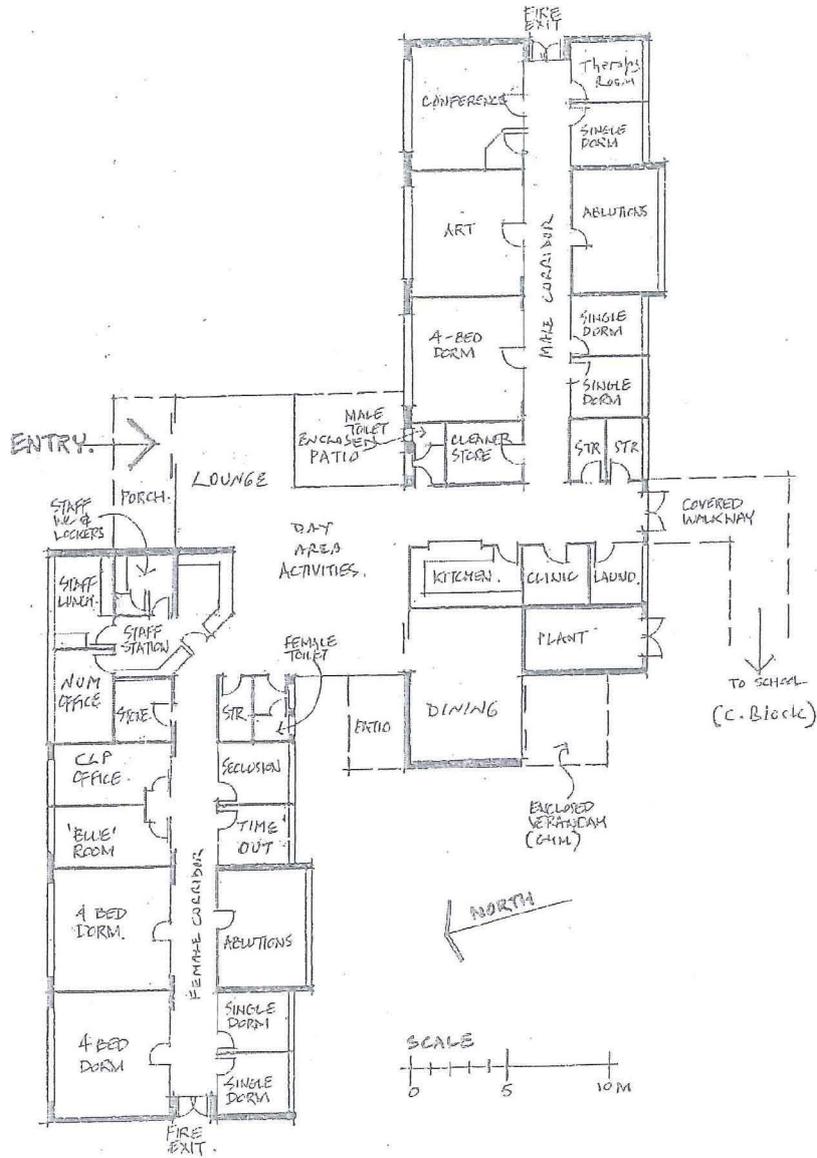
Basketball Half Court



Dilapidated Tennis Court

- There is a need to make greater use of outdoor space for leisure and relaxation purposes. The Centre has not adequately taken advantage of the more peaceful outdoor surrounds. There has been a lack of funding for such improvements to the physical surrounds in recent years. This was in part due to the extra drain on the Centre budget caused by the need to manage higher acuity (extra staffing for Continuous Observation) and a conscious decision not to spend money on a building which was due to be either closed down or replaced in the very near future.

Barrett Adolescent Centre  
Options Study



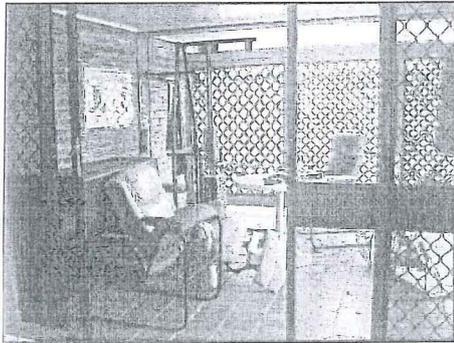
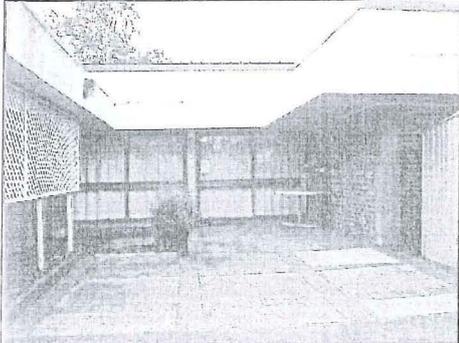
Barrett Adolescent Centre 'D' Block Floor Plan :  
as existing March 2007

### Suggested Remedies

There are a number of remedies to be considered depending on available finance and the time span of operating as an interim service.

It is a given that potential hanging points have been addressed and air-conditioning of the day area has been considered separately to these options.

The priority is to make environmental improvements which make the Centre safer for patients and enables staff to more safely manage the more disturbed consumers. There is also a need to make the environment more pleasant to reside in to minimise the effect of the environment on patient's psychological wellbeing. To create a more peaceful environment the Centre requires separate leisure areas, smaller bedrooms and a better use of outdoor space.

- A High Dependency Unit or seclusion suite which could safely accommodate two consumers on a medium term basis under closer observation by staff would be of most benefit when dealing with higher acuity patients. This would be in addition to the current time-out/seclusion rooms.
- The conversion of all four bed dormitories to two bed dormitories would greatly benefit the wellbeing of the consumers. It is not contemporary to have 4 bed dormitory style accommodation. Having 2 bed dormitories would help prevent a contagion effect. Adolescents become disturbed by the actions of other consumers with whom they share the 4 bed dormitories. It can also be quite detrimental to have adolescents with similar psychopathology sharing the same bedroom.
- An upgrade of gym equipment kept in the partially enclosed patio area adjacent to the current dining room would provide patients with a better opportunity to occupy their leisure time away from the noisy day area space. The area could also store games plus art and craft materials which could be more freely used in the dining room for leisure purposes.
 
- The outdoor space would be enhanced by the inclusion of paved areas shaded by sails. These areas would be used for leisure activities or to provide some relief from the ward environment for those adolescents with lower acuity. A double doorway leading to the outside from the art room would provide better space for these activities outdoors.
 

### Suggested Remedies cont'd

- An enclosed TV lounge would make the activities area less noisy and provide some separation for patients.



### Options:

This report does not deal with the issue of wear and tear to the building. It is appropriate that consideration also be given to upgrading the aesthetics of the building as part of an interim upgrade. This would include internal paintwork, restoration of the buildings facias, and the replacement of floor coverings in the day area. Consideration also needs to be given to the replacement of breakable glass with Perspex, particularly in more high risk areas. Due to the lengthier stay of patients it would be appropriate to replace the single cupboard and set of drawers with wardrobes for each bed. The Centre lacks a bathtub for therapeutic interventions. A shower in "C" block could be converted to a bathtub. Total cost (WAG): \$190,000.

The Centre requires a flood-lit multi-court so that patients can enjoy recreational activities at night. The cost as quoted by Deuce, a Q'Build registered company, is \$66,000 plus the additional cost of minor earthworks (< \$70,000 in total).

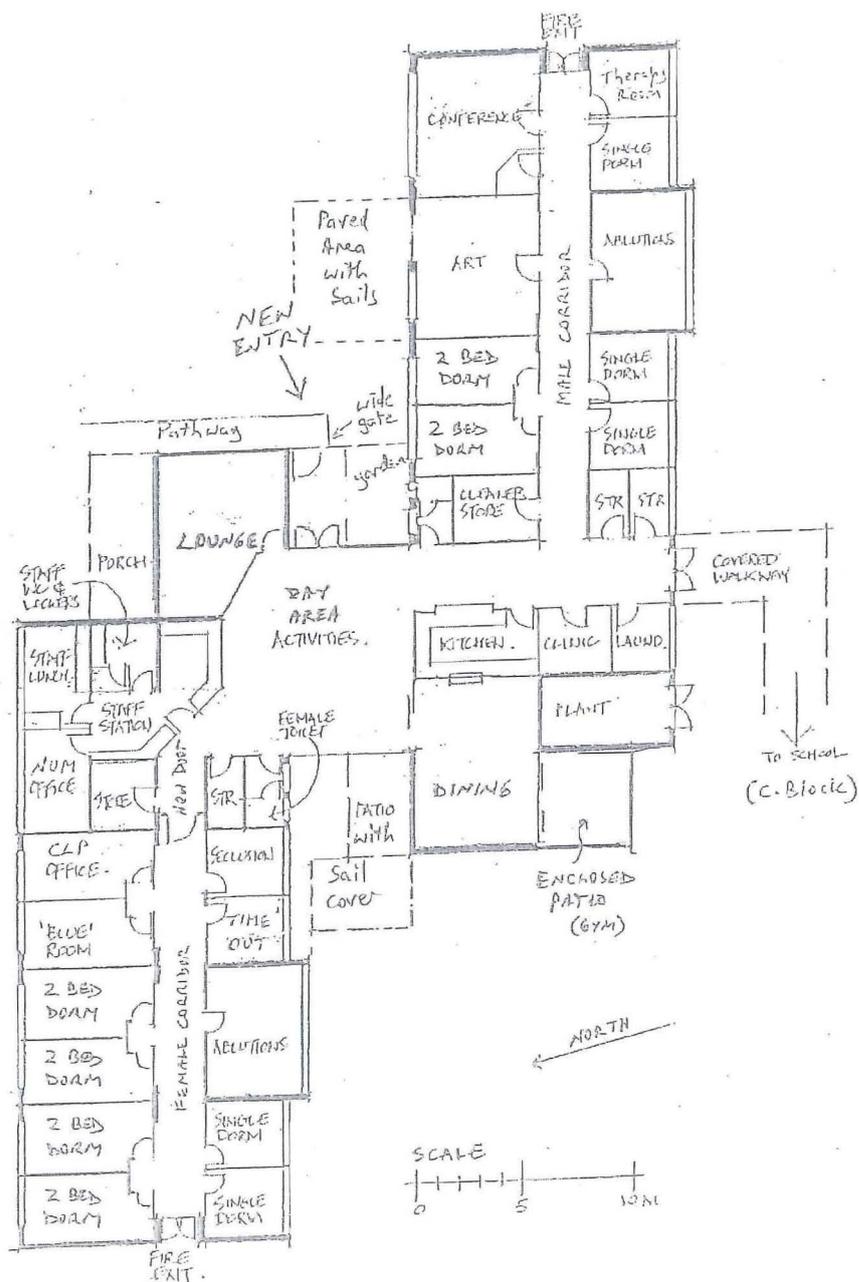
Alternatively, the present basketball half-court located within the Centre's grounds could be extended and up-graded to suit this purpose (WAG - \$50,000).

Additionally, the existing key system is no longer restricted due to the expiry of patent. The use of keys is also inconvenient and insecure in comparison to electronic swipe card access. Consideration needs to be given to upgrading the system in line with other Centres within the facility. The personal duress system also needs to be upgraded in line with other Centres. The instalment of annunciators would enable staff to identify the exact location of a Code Black. This would enhance the response times of the duress response teams. Total cost (WAG): \$60,000.

These considerations apply to all three options at an additional cost.

Option 1: Locked Female Corridor

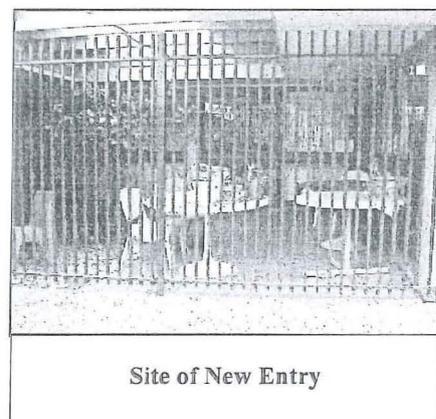
Barrett Adolescent Centre  
Options Study



Barrett Adolescent Centre 'D' Block Floor Plan: Option One

Option 1: Locked Female Corridor cont'd*Scope:*

- All 4 bed dorms converted to 2 x 2 bed dorms using partitioning (not floor to ceiling due to air-conditioning).
- Sliding door entrance to be removed and replaced with solid panelling.
- New entry via redundant smoking court yard with locked gate and doorway entries for dual security,
- New pathway from car park area to entry (including lighting and signage).
- Doorway installed at top end of current female corridor. Door able to be locked from within corridor but to have drop down latch to allow access to designated fire egress route.



(Work-practice guideline to allow for door to be locked only when a staff-member is within the corridor and for purpose of preventing patients absconding).

- Lounge area to be walled off with doorway to create separate space to day area.
- Servery to be installed between kitchen and dining room. Kitchen cupboards to be re-positioned.
- Patio area between dining room and female wing to have sail cover.
- Doorway to be installed in Art Room leading outside to sail covered paved area.

Cost (WAG): \$66,000

Further consideration at additional cost to be given to:

- Upgrade of aesthetics (internal).
- Restoration of facias.
- Replacement of floor coverings.
- Replacement of breakable glass.
- Replacement of bedroom cupboards with wardrobes.
- Upgrade of key, duress and swipe card access systems.

*Scope cont'd*

- Bathtub in "C" block.
- Replacement of 2 other glass panel sections around lounge with solid walls.
- Current basketball court to be extended and made into a multi-purpose court for basketball, tennis, badminton and volleyball.

Option 1*Advantages:*

Apart from cost the main advantages to Option 1 are:

- Reduction in risk of patients absconding when managed in time-out rooms on continuous observation due to ability of staff to secure the female wing.
- Secure entry.
- Separate TV lounge leading to less noise in activities area and more privacy/separate space for patients to enjoy.
- Improved bedroom accommodation.
- Better use of outdoor area's for leisure.
- Minimal disruption to Centre program while construction is done.

*Disadvantages:*

- The need for a High Dependency Unit is not met.
- Problems associated with continuous observation being conducted from hallway are not alleviated (chairs and lamp stand in fire egress route).
- Distressed patients are managed in an area which can cause further distress to co-patients (noise, viewing distressing incidents when walking past rooms).
- Ongoing risk that time-out rooms, which are not locked and readily accessible to all patients throughout the day, are not safe due to unsupervised access (self-harm objects, eg razor blades can be easily hidden in rooms when open).
- Time-out/seclusion rooms are not purpose-built. Present problems of hard walls, window ledges, protruding boards remain problematic when dealing with patients who self-harm.
- Lack of access to secure outdoor area for patients being managed in time-out rooms for lengthy periods.

Option 1 – *Disadvantages cont'd*

- Loss of small pets enclosure.
- Does not go far enough to compensate for loss of assets, eg. HDU, kitchen and dining facility, caused by The Park's redevelopment.
- The day/activities area will be less well lit by natural light when the lounge is enclosed.

*Concerns:*

- Can corridor have door installed while still meeting fire safety standards and Queensland Health policies?

Would WPG document stating limited and specified use of locked door in corridor address these concerns?

- Would door require electronic fire release to meet fire safety standards?

Is the BAC fire system capable of being modified to allow for this mechanism if required?

Preliminary advice by the District Fire Safety Officer is that this decision would need to be made by the Fire Service Building Certifier.



*Scope:*

- All 4 bed dormitories converted to 2 x 2 dormitories using partitioning (not floor to ceiling due to air-conditioning).
- Sliding door entrance to be removed and replaced with solid window/panel.
- New entry via redundant smoking court yard with locked gate and doorway entries for dual security.
- New pathway with lighting and signage from car park to new entry.
- Construction of High Dependency Unit utilising the CLP Office and Blue Room. HDU to include 2 bedrooms, single ensuite and a lounge area. The estimated cost for this internal modification is \$80,000.

A doorway leading to a secure courtyard with external entry and pathway is also to be considered at the extra cost of \$32,000.

- CLP office to be relocated to the room presently used as the school library.
- Patio adjacent to Teaching Area 3 to be enclosed to house the school library.
- Servery to be installed between kitchen and dining room. Kitchen cupboards to be repositioned.
- Remainder of current TV area to be fully enclosed with sliding door entry.
- Patio area between dining room and female wing to have sail cover.
- Doorway to be installed in Art Room leading outside to sail covered paved area.

Cost (WAG): Without secure courtyard : \$161,000

With secure courtyard : \$193,000

Further consideration at additional cost to be given to:

- Upgrade of aesthetics (internal).
- Restoration of facias.
- Replacement of floor coverings.
- Replacement of breakable glass.
- Replacement of bedroom cupboards with wardrobes.
- Upgrade of key, duress and swipe card access systems.

*Scope cont'd*

- Bathtub in "C" block.
- Replacement of glass panels around lounge with solid walls.
- Current basketball court to be extended and made into a multi-purpose court for basketball, tennis, badminton and volleyball.

*Advantages:*

- Secure entry.
- Improved bedroom accommodation.
- Access to High Dependency Unit:
  - (1) reduces distress to other patients due to capacity to manage disturbed consumers in more private area
  - (2) reduces the risk of the area being contaminated by implements of self-harm due to locked access to High Dependency Unit area
  - (3) allows patients to be managed in safe area and also attend to all ADL's and leisure activities
  - (4) is located within close proximity to nurses' station for ease of access

## HDU with Secure Courtyard:

- (1) allows management of more disturbed consumers in an area which is directly accessible from the outside (due to entry in secure court yard)
  - (2) allows outdoor access for patients being managed for longer periods of time in a confined area
- Patients will have a proper TV lounge separate to the activities area, leading to reduction of noise and greater privacy.
  - Elimination of risk of fire egress route being blocked by chairs and floor lamp.
  - Better use of outdoor space for leisure.

*Disadvantages:*

- Cost.
- Loss of second seclusion/time-out room.
- The High Dependency Unit is not purpose-built but merely an adaption of other rooms. It is not of optimal configuration.

*Disadvantages cont'd*

- The day/activities area will be less well lit by natural light.
- Loss of small pets enclosure.

*Concerns:*

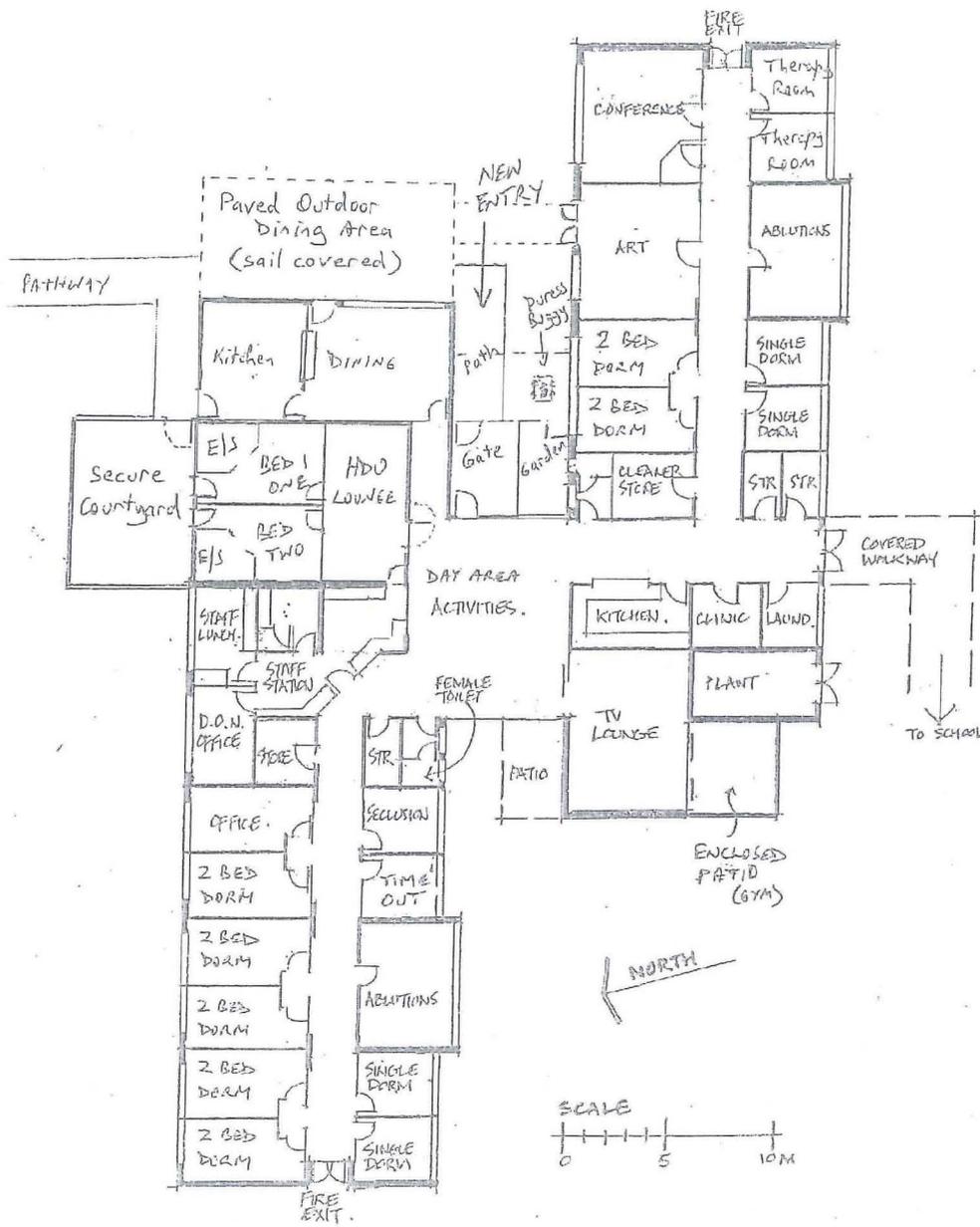
An effective High Dependency Unit would require a secure courtyard.

Extra cost would make this less attractive as an interim measure.

CLP relocated to 'C' Block would be less available to deal with incidents which may occur in ward area.

Option 3: Extension for High Dependency Unit

Barrett Adolescent Centre  
Options Study



Barrett Adolescent Centre 'D' Block Floor Plan: Option Three

*Scope:*

- All 4 bed dormitories converted to 2 x 2 dormitories using partitioning (not floor to ceiling due to air-conditioning).
- Sliding door entrance to be removed and replaced with solid window/panel.
- New entry via redundant smoking court yard with locked gate and doorway entries for dual security.
- New pathway with lighting and signage from car park to new entry.
- A second male single bedroom to be converted into a therapy room (? Snoezelen room).
- Current lounge and entry porch to be converted to purpose-built 2 bed High Dependency Unit with ensuites, lounge and secure court yard with external entry. Area to have high ceilings and ducted air conditioning.
- Approximately 6x10 meter extension to be added beyond new HDU for patients' kitchen and dining room. Area to be air conditioned. Dining room to have door leading outside to sail covered paved outdoor dining area. Space also to be utilised from Art Room and for other leisure activities. (As an alternative, the TV lounge could be extended for this purpose).
- Doorway for direct outdoor access to be installed in Art Room with pathway across to paved outdoor dining area.
- Provision to be made for undercover parking of duress buggy near entry as part of extension work.

Cost (WAG): \$645,000

Further consideration at additional cost to be given to:

- Upgrade of aesthetics (internal).
- Restoration of facias.
- Replacement of floor coverings.
- Replacement of breakable glass.
- Replacement of bedroom cupboards with wardrobes.
- Upgrade of key system.
- Bathtub in "C" block.

*Scope cont'd*

- Current basketball court to be extended and made into a multi-purpose court for basketball, tennis, badminton and volleyball.

*Advantages:*

- Secure entry.
- Separate games room and TV lounge leading to less noise in activities area and more privacy/separate space for patients to enjoy. Large TV lounge again able to be used more easily for meetings.
- Improved bedroom accommodation.
- Access to High Dependency Unit to:
  - (1) manage more disturbed consumers in an area which is accessible from outside (due to entry in secure court yard).
  - (2) allows outdoors access for patients being managed for longer periods of time in confined area.
  - (3) reduces distress to other patients due to capacity to manage disturbed consumers in more private area.
  - (4) less chance of area being contaminated due to locked access to High Dependency Unit area.
  - (5) patients can be managed in safe area and also attend to all ADL's and leisure activities.
  - (6) High Dependency Unit located next to nurses station for ease of access.
- Patients will have a proper TV viewing area.
- Eliminates problem of fire egress route being blocked by chairs and floor lamp.
- Rectifies previous loss of some assets caused by development at The Park.
- Centre has purpose-built kitchen and dining areas.
- Centre has purpose-built High Dependency Unit.
- Centre's bed ratio of 2 girls to 1 boy (12 vs 6) more in line with referral and waiting list requirements.
- Gain of extra therapy room.
- Gain of kitchen for living skills program (Could also be used as staff kitchen for all BAC staff).
- Building of extension can be done in a timely manner with minimal disruption to the Centre's clinical program.

*Disadvantages:*

- Cost.
- Loss of small pets enclosure.
- The present day/activities area will be less well lit by natural light.

*Concern:*

- Granting of funding for this upgrade may be seen as a longer term interim measure and could defer the plan for a new Centre to be built. Extra funding would be needed to bring systems up to standard of other services at The Park yet still not meet contemporary standards for new Mental Health services. Essentially, substantial parts of the building are 30 years old. It looks dated and would require extra maintenance for it to continue to be used beyond its intended life span.

### Section Three

## REDUCTION OF ACUITY

### Summary and Recommendations

There has been an increase in the acuity and risk profiles of the adolescent patients being cared for at the Barrett Adolescent Centre resulting in a significant increase in the use of Continuous Observation during the past decade. The opening of acute in-patient units within the Child and Youth Mental Health network and the formalisation of admission criteria as recommended by the Child and Youth Beds Report, 2003, has seen an increase in adolescent patients within the mental health system that includes the Barrett Adolescent Centre.

Those patients requiring considerable amounts of Continuous Observation are identified as sharing “the 4 common factors of Higher Acuity.” These are Post Traumatic Stress Disorder (PTSD), high risk of self-harm, pre-contemplation or contemplation phase of change and either an Eating Disorder or high risk of aggression or absconding.

This “challenging group” of patients requires high level nursing care for extended periods of time leading to fatigue amongst the staff providing this service. The use of Continuous Observation within the current environment and staffing profiles has led to resource problems. There are also limitations in the clinical program which could decrease or prevent higher levels of acuity given the lack of a purpose built environment and the lack of an appropriately skilled staffing profile.

It is recommended that processes be implemented to:

- 1) Limiting the High Acuity patient numbers to a maximum of two
- 2) Formalise transfer processes to return patients to Acute Units
- 3) Increased use of Outdoor Adventure Therapy
- 4) Increased use of diversional activities in the evenings

### Background

The Barrett Adolescent Centre is now approaching its 24<sup>th</sup> year as a service which cares for a particularly challenging group of adolescents with mental health problems. It would be correct to say some would be considered “extremely challenging”. This group who often present with higher levels of disturbance have increased in number in recent times leading to periods when the level of care they required was practically unsustainable. Of concern has been the increasing trend towards higher reliance on Continuous Observation during the past ten years.

The beginning of this decade was marked by the opening of acute inpatient units and the expansion of the Child and Youth community mental health network across the state. These units have significantly benefited the greater majority of patients who present with psychiatric problems. However, along with a 30% increase in population within the state, there has been a greater number of adolescents identified within the network who require admissions to BAC.

Background cont'd

The establishment of a child safety network by DOChS has also placed further pressure on the Centre's waiting list through the referral of victims of childhood abuse who require long stay integrated treatment and rehabilitation. Patients can now be on the Centre's waiting list for seven months. This deferment of therapeutic intervention within a more appropriate model of care can adversely affect the outcome for the patient.

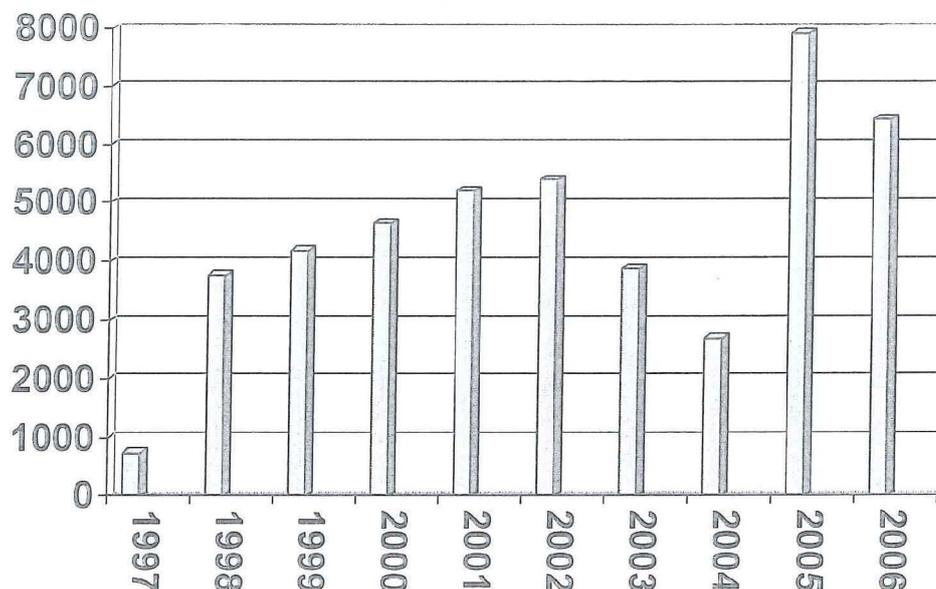
The release of the "Child and Youth Beds Report 2003" by the Mental Health Unit Corporate Office has also had a major impact on BAC's function. The report used occupancy data to make recommendations for the possible closure of the Centre. It had not given proper consideration to the fact that the treating team had previously attempted to manage higher acuity within the restrictions of a budget that was defined for lower acuity patients. This prompted the BAC Executive to place higher priority on providing a clinical service with occupancy rates according to the established bed numbers and clear justification for the extra expenditure required to manage higher acuity.

Possibly of greater significance was the report's recommendation that all Child and Youth inpatient units were to draft their own admission criteria. This document, for the first time, clearly indicated to services the intended client groups and models of care each unit provided. BAC had a clearly stated Integrated Treatment and Rehabilitation model of care which admitted "the most vulnerable consumers".

The admission criteria stated:

"Admissions occur when the presenting behaviour presents an ongoing risk to safety which cannot be safely managed in the community, or when there is significant impairment for which treatment at a less intensive level cannot incorporate appropriate rehabilitation to ensure optimal recovery from the mental illness." Admissions were to be prioritised according to clinical criteria, the level of instability, degree of impairment and the probability of assisting with recovery. Highest priority was given to those patients who required "close monitoring and supervision" for life threatening behaviours and to prevent deterioration in functioning.

Since this occurred BAC has experienced a significant increase in its use of Continuous Observation to ensure the "close monitoring and supervision" of high risk adolescents. Since 1998 the average hours of Continuous Observation per calendar year has been 4690 hours. In the past two years alone this yearly average has increased to 7173 hours. A study of patients requiring this higher level of observation found this group to have four common elements. Firstly, they are diagnosed with PTSD as a result of complex trauma during their childhood. Their presentation may include dissociation, aggression, depressed mood or affect regulation problems, anxiety, poor self esteem and a sense of hopelessness.

Background cont'd

Secondly, they have high ratings for risk of deliberate self-harm. They commonly self-harm as a means of punishing themselves or in attempts to end their lives. Thirdly, they are not seeking to find ways of coping with their problems in a more effective manner. Using DiClemente & Prochaska's 'Model of Change,' this is referred to as being in either the 'Pre-contemplative' or 'Contemplative' phases. It is only through effective engagement in therapy that patients move to the safer and more therapeutically aligned 'Action' phase. Fourthly, they have one of the following – an Eating Disorder; a 'High' rating for risk of absconding; or a 'High' rating for risk of aggression.

Identified Problems

- While acuity could be reduced through the reduction of occupancy, this is presently unacceptable as a solution due to the high demand for beds and the current crisis facing the Child and Youth Mental Health Acute Units where District decisions to reduce beds has been implemented.
- Waiting list times have significantly increased during the past 5 years.
- During the past two years there has been much higher usage of Continuous Observation. This has been due to the increase in the number of patients with the 4 common High Acuity factors being treated at the one time. During a time when the Centre has also been required to deal with higher numbers of Eating Disorder patients, the Centre has reached crisis points with the need for extra staff to meet this demand. In recent years it has become routine to have at least one patient on Continuous Observation in the ward. Frequently there are two. This is difficult to resource consistently. Also, it greatly detracts from the regular staff's capacity to do their normal duties. The Therapeutic Milieu fails to function as it should.

### Identified Problems cont'd

The Centre is at crisis point when three or four patients are on Continuous Observation at the one time. This has been occurring more frequently during the past 2 years than ever before. Though this situation may only last for 24 hours it has led to occasions when staff could not be found to meet this extra demand.

- There is no process in place to transfer patients to the Acute Adolescent In-patient Units to reduce acuity levels. This has been effective for the appropriate treatment of the adolescent on the rare occasion that it has been used in the past.
- The Redevelopment of the Park site did not consider the needs of the Barrett Adolescent Centre. There has been a significant reduction in the capacity of the 'Therapeutic Milieu' to decrease the risk of higher acuity. BAC has not been able to adjust to the loss of the nearby Barrett Auditorium as a result of The Park's redevelopment. The Auditorium had been used almost nightly for recreation and leisure activities as an essential part of the Centre's evening program. Additionally, the loss of the Outdoor Adventure Therapy position has reduced the Centre's capacity to more effectively engage patients who have not yet moved into the 'Action' phase of dealing with their problems.
- The Centre has reduced its capacity to more effectively assess patients' potential risk for higher acuity through the loss of its designated "Two Week Assessment" beds. This occurred when the Centre's bed state of 17 was reduced to the present 15 in-patients.
- Patients who require medical admissions under Continuous Escort at other hospitals, eg Ipswich Hospital, place enormous pressure on the need for extra staffing. This problem was made worse by the reduction in out-of-hours medical cover and the loss of the Medical Centre when The Park was redeveloped.
- The need to physically restrain while naso-gastric feeding patients with an Eating Disorder regularly required two extra staff to be rostered on. This was unsustainable over the period of time it was required. BAC has been required to increase the number of Eating Disorder patients admitted at any given time due to their increased rate of referrals and number on the waiting list. While it is acknowledged that the management of patients with an Eating Disorder may be time-demanding, not all have high acuity needs. It is noteworthy that those that have required Continuous Observation and physical restraint for re-feeding purposes also presented with the 4 common factors of High Acuity.
- The Centre lacks of a High Dependency Unit to more safely and effectively manage patients. An effective HDU could decrease the amount of time a patient is required to be on Continuous Observation.
- Extra expenditure on staff for Continuous Observation erodes the Centre's budget, thereby restricting the Centre's capacity to fund other program initiatives which would enhance patient care and the environment.

### Options

- The need to consider the significant burden critical incidents posed to staff when dealing with difficult behaviours was previously addressed in the 2003 external review by McDermott et al. Recommendations from this review were effective in increasing the staff's ability to identifying risks, eg aggression, absconding and deliberate self-harm. The recommendations did not specifically address the need to limit levels of Higher Acuity.

The BAC admission process needs to formally operationalise an acuity risk reduction strategy to identify, prior to admission, those patients who may potentially require regular periods on Continuous Observation. The Centre would need to limit admissions to a maximum of two, at any given time, those patients whose presentation features 'the 4 common factors of Higher Acuity'. A dedicated Two Week Assessment bed may also be utilised to better assess the higher acuity needs of those patients suspected of requiring greater levels of Continuous Observation. This process could be coordinated by the Clinical Liaison Nurse who is responsible for managing all referral and admission processes at the Centre.

- Higher levels of acuity may exist due to an acute deterioration in a patient's psychological or physical wellbeing, eg. A recent overdose, increased suicidal ideation and intent or an Eating Disorder patient having reached a state of physical compromise that requires a medical ward admission. While it has routinely been necessary to maintain two patients on Continuous Observation for reasonably lengthy periods of time, this has occasionally led to crises when a third or fourth patient also requires this same level of observation. Finding extra staff at these times has been near impossible and has led to high usage of overtime leading to fatigue management issues. The proposal to increase the nursing establishment by three staff will only partially address this problem.

These times of high staff demand could be managed by transferring the patient to the care of an Acute Adolescent In-patient Unit. This has been effective in the past when patients with an Eating Disorder have been physically compromised and required care at a medical ward. The Acute Unit has initially performed as an outreach service, then provided short term admission for an acute period of stabilisation. Patients requiring Continuous Observation due to the acute deterioration in their mental state could also be transferred to an Acute Unit if not sufficiently engaged in therapy at the Centre. Previously, this has also been used to good effect.

The main problem in arranging these transfers has been the amount of time the process has taken. A transfer process needs to be formalised with the Child and Youth Acute Mental Health Units to allow these transfers to occur during these crisis periods in a timely manner.

- Outdoor Adventure Therapy is a valuable program for the reduction of acuity. It benefits the patient by helping them re-establish an internal locus of control and meeting psychological needs using effective coping behaviours. (Thus moving them from Pre-contemplation or Contemplation phases to an Action phase.) This therapeutic approach needs to be re-established as an integral part of the Centre's program.

### Options cont'd

Presently it is only utilised as a five day group program three or four times per year. This is insufficient given the therapeutic value of the program. Interested staff-members need to be identified and trained to provide this form of therapy on a more regular basis. Consideration by the BAC executive management team needs to be given to a dedicated Outdoor Adventure Therapist Clinical Nurse position within the staffing establishment.

- As reported in the 2003 external review of critical incidents, the use of the Barrett Auditorium for diversional activities in the evenings was imperative to reducing the risk of adverse events. It recommended that "BAC staff should consider programming in the after school and early evening period as a risk management strategy." Most incidents occur in the evenings when patients are not occupying their time effectively. The environment does not allow adequate space and separation for such a large number of adolescents and this contributes to increased levels of disturbed behaviour. The evenings are a time when victims of abuse find it hardest to cope because their psychological disturbance is worse at night.

To date this lack of a suitable space for evening activities has not been sufficiently addressed. Alternative options to address this deficit include:

- 1) Accessing the Recreation Hall and the High Security Gymnasium in the evenings for diversional activities.
- 2) Building a flood-lit multi-court using space within the grounds of the Centre.
- 3) Accessing external community organisations/facilities, eg local gym, YMCA, PCYC.
- 4) Engaging a part time Recreation Officer during evening shifts.

This problem could be addressed by the Leisure Therapist.

- Greater through-put of admissions could be achieved by setting discharge dates or targets for all patients as part of the care planning process. Discharge planning could be discussed at the initial care planning meeting (Intensive Case Work-up) and reviewed there-after as an integral part of this process.

### References

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Appendix 1HOURS OF CONTINUOUS OBSERVATION

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Jan</b>	158	18	533	NIL	118	752	600	170	352	172
<b>Feb</b>	127	65	NIL	168	109	694	692	NIL	795	425
<b>Mar</b>	21	588	255	328	354	827	533	NIL	326	368
<b>Apr</b>	3	210	556	387	254	330	514	16	264	823
<b>May</b>	11	389	817	836	669	28	304	278	1062	376
<b>Jun</b>	14	144	845	962	636	900	314	280	1135	512
<b>Jul</b>	NIL	298	1064	412*	375	652	574	237	1086	508
<b>Aug</b>	NIL	32	54	443*	460	492	NIL	884	878	299
<b>Sep</b>	54	421	NIL	66	249	112	NIL	458	714	76
<b>Oct</b>	NIL	786	58	37	499	251	184	36	133	888
<b>Nov</b>	248	371	NIL	803	748	320	117	130	745	1221
<b>Dec</b>	102	437	NIL	208	732	41	34	202	424	765
<b>Yearly Total</b>	738	3759	4182	4650	5203	5399	3866	2691	7914	6433
<b>Monthly Average</b>	28	313	348	387	434	450	322	224	654	536

- Due to Union work bans effecting recording in ward reports these 2 months July and August, 2000, represent best estimate
- Due to higher acuity associated with the management of Eating Disorders an extra 1000-1200 hrs was used in 2005 (above recorded total)

Appendix 2Nursing RosterTABLE 1: CURRENT BUDGETTED BASE NUMBERS

	MON	TUE	WED	THU	FRI	SAT	SUN
AM	5	5	5	5	5	3	3
PM	5	5	5	5	4	4	5
Nights	2	2	2	2	2	2	2
<b>TOTAL</b>	12	12	12	12	11	9	10

Total shifts worked per week = 78

TABLE 2: ROSTERED NUMBERS AS PER PROPOSED OPTION

	MON	TUE	WED	THU	FRI	SAT	SUN
AM	6	6	6	6	6	4	4
PM	6	6	6	6	4	4	5
Nights	2	2	2	2	2	2	2
<b>TOTAL</b>	14	14	14	14	12	10	11

Total shifts worked per week = 89