

15. Consideration of the appropriateness of the category red system in view of the new clientele should be reviewed.

16. All BAC staff should have regular inservice training about risk management.

17. Orientation of new staff should include risk management.

18. There should be clarity about the status of the unit in relation to it being an open (and therefore unlocked) unit; such changes to the status of the unit will have legal implications.

**(3) Over arching recommendations that relate to the continuation of funding of the BAC and the motivation and enthusiasm of staff to implement change.**

It is the opinion of the review team that a significant amount of money is required to be spent on the BAC environment. Further significant emotional investment in changes of policies and practices is required. Given this burden:

19. Senior BAC and Park management should, as a matter of some urgency, advance with Queensland Health the issue of the continued funding and support of the BAC. Whilst the current work environment of the BAC may be therapeutic to adolescents, the staff milieu is not promoting motivation and enthusiasm to review risk management and other procedures at the BAC.

20. With contemporary understanding of the burden of youth homelessness and school exclusion, the BAC provides an excellent opportunity for youth with mental health and challenging behaviour to live in a safe environment and receive high quality educational and psychological input. For these reasons the review team recommend advocacy for the BAC.

21. However the review team recommend further work in the delineation of the BAC in the continuum of care of adolescent mental health services in SE Queensland. Tasks include the current evidence base for adolescent inpatient care and whether the current broad admission brief should not be changed to focus on a more limited diagnostic range or alternatively to focus on particular challenging behaviours such as individuals with internalising conditions

and mild externalising behaviour or individuals with severe and ongoing suicidality and self harm.



## **1. BACKGROUND**

### **1.1 HISTORICAL CONTEXT OF THE BAC**

The BAC was established in 1983. The unit was established with an overarching treatment ethos of milieu therapy and this has been a unifying treatment theme over the last 20 years. The last 5 years have seen a significant expansion in the number of inpatient child & youth mental health beds across south east Queensland. This includes the opening of inpatient units at The Royal Brisbane Hospital, Mater Children's Hospital, Logan, Gold Coast and Toowoomba, as well as a significant expansion in the community CYMHS clinics. It should be noted that for the new inpatient beds were conceptualised as acute beds, aimed at providing brief admissions around clarification of an individual's mental health diagnosis, the initiation of treatment and movement of the patient back to the community with follow-up by a CYMHS clinic or private practitioner. No other inpatient unit for adolescents has been established with a long stay brief. The Day Program of Mater CYMHS is potentially long stay (1 to 2 school terms) and includes the ability to attend the Mater Children's Hospital school, but has no residential capacity.

With the increase in inpatient beds in south east Queensland the commitment to fund the Barrett Adolescent Centre has become less certain, and indeed at one point it was widely thought the BAC would close. Whilst this clearly did not happen it is true that there is significant ongoing apprehension amongst BAC staff about the continuing funding of the BAC. Further there is considerable discussion amongst staff about how, if it is to continue, the BAC will function within the current South East Queensland continuum of adolescent mental health care.

### **1.2 Terms of Reference of the current review**

- To review the incident profile of the unit over the last four years and to consider the nature and extent of the risk associated with the profile
- To consider the relationship between risks and the current target population, associated diagnostic profile and service model
- To consider the organisational response to the incidents

- To consider the risk management approach in terms of individual risk identification and response efficacy
- To suggest strategies which may reduce the likelihood of further serious incidents.



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Children's Hospital Brisbane

**Kids in Mind**  
Mater Child and Youth Mental Health Service

## **2. VIOLENCE AND AGGRESSION: DEFINITIONS, PREVALENCE, DETERMINING FACTORS AND IMPACT ON STAFF.**

**Definitions of Aggression:** Multiple definitions for aggression have been suggested. Definitions include 'any threatening verbal or physical behaviour directed toward self or others,' (Owen, 1998), "an act whose goal-response is injury to another organism," (Dollan et al., 1989). Many authors have subdivided aggression type, including O'Leary-Kelly and colleagues. In a review of the literature, they found that terms such as hostile aggression, violent aggression, affective aggression, angry aggression, bullying, emotional and instrumental aggression, impulsive and reactive aggression, environmental aggression and enraged aggression or enraged violence dominate the literature (1996); the schema of Rippon states, "aggression can be physical or verbal, active or passive, and can be focused on the victim(s) directly or indirectly" (2000). Several authors have noted instrumental aggressive "does not have strong emotional basis and yet can be extremely violent" (Buss, 1961).

**Definitions of Violence:** Steinmetz (1986) defined violence as, 'an act carried out with the intention, or perceived as having the intention, of physically hurting another person'. Steinmetz included a broad range of incidents from minor common assault to premeditated murder as violent acts. Others including Strasburg (1978) included legal concepts in a definition of violent behaviour, 'illegal use or threat of force against a person'. Strasborg included a range of crimes such as assault, robbery, sexual impositions and sexual assault, arson, threatening behaviour, kidnapping, burglary and murder. Rippon stated that "by definition, violence is synonymous with aggression", then went on to suggest a distinction by severity, "however, violence is reserved for those acts of aggression that are particularly intense, and are more heinous, infamous irreprehensible" (2000). The Department of Employment, Training and Industrial Relations, in its April 1999 brochure on 'Violence at Work' defined violence as 'the unwarranted or unjust use of force or power'.

In summary, the literature in this area is hampered by significant differences in the definitions of the core constructs. One useful theme is that violence is the act or the behaviour that often follows aggression, whereas aggression is the intent to commit a violent act or forms of behaviour. Examples of these include verbal abuse and physical intimidation that fall short of a physical act against another person.

The following discussion briefly considers violence and aggression prevalence, determining factors and impact on staff. The current literature in this area is predominantly derived from studies of adult mental health units. Generalising these findings to child and adolescent units requires caution.

**Prevalence:** Many studies have reported the prevalence of mental health staff being involved in acts of violence and aggression. The US Department of Justice statistics report (1992-1996) that 79.5 out of 1000 mental health workers have experienced nonfatal workplace violence. The British Columbia workers compensation board received 600 claims from nurses and health care workers for time lost from acts of violence or force, 10 times more than that from any other occupation. More than half of these are injuries suffered by nurses, care aides and other health care workers while working in long term care facilities, psychiatric hospitals, group homes and acute care hospitals. (Duxbury 2002).

Verbal aggression and threats of violence appear more prevalent than acts of violence, although research reports vary widely. Duxbury (2002) reported that incidents of patient aggression (an expression of hostility or intent to do harm) accounted for 70% of incidents (n= 157) and involved verbal abuse and verbal threats in total, whilst violence accounted for only 13.5% (n=30) of the incidents recorded. However, Nolan et al (1999) reported that 18% of staff had been threatened verbally and that 50% of psychiatric staff have been physically assaulted at some time during their careers. Similarly, Ruben et al., (1980) and Madden et al., (1976) concluded that approximately 50% of psychiatrists had been assaulted during the course of their work and in a multinational survey Poster (1996) found that 75% of mental health nurses had been physically assaulted at least once in their careers. The Poster report is in accordance with Whittington and Wykes (1994) who found 65% of nurses in their study had been violently assaulted by patients and led to their conclusion that there is overwhelming evidence that nurse are more likely to be physically

assaulted, threatened or verbally abused that any other health professional group. (Whittington et al 1996).

Clearly not all patients are violent, indeed, Weiser (1994) estimated that approximately 10% of psychiatric patients are violent towards staff. This includes perpetrating the most serious acts of violence with several documented cases of mental health clinicians being murdered in Australia by current or former patients. There is a poverty of research on aggression and violence by child and adolescent mental health clients, with most studies focusing on adults.

**Determining Factors:** Studies of adults with mental illness finds a range of illnesses associated with an increase in aggression and violence, including mania (Lion et al, 1981,) schizophrenia (Pearson et al., 1986), borderline personality disorder (Hansen, 1996) antisocial personality disorders and psychotic disorders (Whittington 1997). Other factors include male gender (Duxbury, 2002; Morrison et al, 2002), age ranging from 15 to 30 (James et al; Noble and Rogers, 1989; West, 1974), a previous history of violence (Flannery et al., 1994; Whittington, 1998; Owen et al., 1998 b) and patients who were on a high level of medications (Duxbury, 2002; Lion et al., 1981; Pearson et al., 1986; Finke 2001). Others report substance abuse (Lanza, 1988; Flannery et al 1994; Royal College of Psychiatrists, 1988) as a key indicator for potential for violence.

Length of stay has been reported as being an influential factor with long stay adult patients most likely to be violent (Morrison et al., 2002; Barber, Hundley, Kellogg, 1988). Studies on adolescents concur with these findings (Finke, 2001; Owen et al., 1998). Involuntary status under a mental health act was found to be a factor in patients most likely to be violent. Other precursors to violence and aggression were confusional states, non-compliance with medication (Whittington et al., 1996) and short hospital stays in overcrowded wards (Edwards and Reid).

Staff factors were seen to be important by Duxbury, "Factors including staff gender, experience, training and grade are also believed to have some impact upon the incidence of patient aggression and violence" (2002). Vanderslott found that male nursing staff were more commonly attacked than female staff, possibly because they are frequently involved in containing aggressive outbursts (1998). Hatch and colleagues postulated that, "female staff might also use non-aggressive strategies to de-escalate tension and aggression rather than the traditional male, "police-like"

techniques that could generate a power struggle instead of diffuse anger" (2002). This opinion has not been universally replicated with some studies suggesting that women are at higher risk (Binder, Ednie, Lanza and Wykes). However, in a general review the consensus appears to be that women in mental health care settings are not at increased risk for patient assault.

A caveat may be the pregnant female staff member. Binder (1991) reviewed this literature and concluded that pregnancy remains a significant mental health work-related issue. The literature repeatedly reports instances of patients experiencing envy, abandonment, rejection maternal transference and aggression toward the therapist, including fantasies of hurting or killing both the therapist and the infant. Overall the literature in this area points to pregnancy as a significant risk factor for women, particularly in violence prone environments such as acute care wards, emergency rooms and forensic settings.

Research supporting the argument that staff grade may be correlated with the incidence of patient aggression or that less senior nursing staff are more commonly the victims of aggression and violence is inconclusive. Hodgkinson and colleagues 1985 found that student nurses were assaulted more often than trained or qualified staff (1985). Vanderslott reported that care assistants who are most at risk (1998). Other studies suggest students are at greater risk. In one study student nurses making up 19% of staff, but sustaining 24% of assault caused injury (doc 15). In another study physical assaults were higher among student nurses especially those with no training in conflict resolution (Grenade and Macdonald 1995). Nursing seniority may confer protection through experience and competent. Alternatively less senior staff may spend more time with patients and this in turn may make them more vulnerable to acts of violence and aggression. (Whittington and Wykes 1994b; Vanderslott 1998). With psychiatrists age and experience also appear to be linked with risk; younger clinicians with less experience were at a significantly greater risk for patient assault than older more experienced psychiatrists.

**When:** The literature is varied as to when violent and aggressive incidents occur. Results differ markedly with reports showing time periods for incidents are across the day (Cottrell, 1980; Whittington and Wykes, 1994b; Vanderslott 1998), with fewer incidences at lunch or after midnight. Low levels of staffing, such as when handovers occur (Carmel & Hunter 1993) and when staff are handing out medication and around meal times (Owen et al., 1998; Carmel & Hunter, 1993) are other predictive factors for increases in violence and aggression.

**Where:** Issues that have been examined include building deficits such as limited space or provisions for privacy, overcrowding, hospital shifts, the timing of assaults, raised temperature and additional poor environmental provisions (Nijman et al 1999). However, Blair and New argue that most studies in this area are inconclusive (1991). Recent guidelines by the royal college of psychiatrists (1998) recommend that hospital environments should be comfortable, safe, private, homely and free from noxious environmental factors as far as possible. Staff most commonly identified factors contributing to the development of patient aggression as problematic interactions and restrictive environments. The latter was deemed to cause over one-quarter of all incidents reported. High-risk areas, include bathrooms and bedrooms, ward corridors and dayrooms.

**Why:** Human resource issues are a common theme. Reduced numbers of staff, and an overuse of casual staff (Turnbull and Patterson 1999), inexperience, increased workload and low levels of training are probable factors. Management of the milieu has been implicated, mediated by numerous factors: the impact of varying staff, controlling styles, negative interactions, poor or limited communication and interaction with patients, authoritarian management approaches, and punitive management and interventions (Morrison, 2002; Anderson & Roper 1991; Garrison et al., 1990; Goren, Singh & Best, 1993).

The issue of negative staff interactional styles and limited communication skills is a cause for concern, particularly given the evidence of staff lack of awareness about the impact of these deficits. In one research project (staff) when surveyed did not view their interaction with patients to be problematic despite finding that almost one fifth of incidents of the incidents in practice (MSOAS) were reported to be the direct result of staff-patient interaction. Concomitant with poor staff insight may be lack of training in precursors to patient aggression such as self presentation and self awareness (Farrell and Gray 1992) to limited interaction with patients prior to incidents (Whittington and Wykes 1994a, 1994b.)

**Impact on staff:** There is an ever prevailing theme of a cultural acceptance of violence and aggression in mental health facilities. Most nurses believe that violence and assault are part of the job, and also that workplace violence has a normative effect, meaning that violent acts and aggression become accepted as a normal part of the workplace culture (Erikson & Williams Evans, 2000; Thomas, 1995; Scott, 1999). One reason for denial may be that mental health care

provider's overestimate their ability to remain objective toward their patients in the face of personally disturbing incidence and deal with their assault at a cognitive rather than emotional level. (Wykes & Whittington 1998)

Workplace violence literature notes that the issues of cost to the organization remains of paramount concern (Wykes & Whittington 1998). Cost is typically conceptualized in terms of the individual worker (physical/physiological and mental/emotional issues) and the organization. At the individual level, physical cost refer to consequences of workplace violence such as disrupted sleep, cardiopulmonary problems, fatigue, hypertension, and susceptibility to illness, while emotional costs encompass issues such as depression, loss of self esteem, family conflict, cynicism, anger and impaired coping. At the organizational level, costs are associated with decreased worker productivity and morale, lost working days, legal liability costs, employee turnover and resources allocated to rehiring and retraining. (Barrett et al., 1997).

Wykes & Whittington (1998) found that of the psychiatric intensive care nurses who had reported being recently assaulted, 25% reported feeling jumpier, overly alert, and bothered by recurrent thoughts about the incident. One third of the assaulted nurses indicated they experienced significant psychological distress and anger following the incident. Assault victims see themselves as weak and often continue to fear the patient after the assault. Threats were reported to be as likely to cause psychological distress and disruption of service delivery in staff as were physical or sexual assaults (Flannery et al., 1995). There is evidence that increasing numbers of nursing and other health professionals are suffering the effects of PTSD (Rippon 2000), anxiety, impaired work performance (Robbins, 1997) and difficulties with sleep as a result of hostility and violence in the workplace (Fisher et al., 1995).





### 3. INTRODUCTION TO THIS CONSULTATION

The review team consisted of Melissa Kyte, consumer consultant at the Barrett Adolescent Centre, Ms Karen Gullick, Manager of The Hollywood Clinic, Hollywood Private Hospital in Perth, Western Australia and Dr Jacinta Powell from the Mental Health Unit, Queensland Health. Associate Professor McDermott, Director of the Mater Child and Youth Mental Health Service was the Chair of the Review Team. Context expertise in child and adolescent mental health was provided by members Gullick and McDermott. Ms Gullick has many years experience in various roles within child and adolescent mental health, and for 7 years managed an inpatient child and adolescent mental health unit. Dr Powell has extensive experience in reviews of risk management including recent reviews of adult mental health units. Melissa Kyte's consumer experience of child and adolescent mental health services included admission at the Barrett Adolescent Centre.

#### 3.1 Staff and consumers consulted

The review team worked for three days at the BAC, and during this period, consultation time was offered to all staff members. Staff appeared very interested in the review and were open and helpful during the process. They were consulted individually and in small groups and whilst no staff member requested confidentiality per se, the review team consider it more appropriate to indicate the professional background of staff consulted rather than a list of individual staff members.

Table 3.1: Professions of staff consulted.

BAC Medical Director
BAC Nursing Practice Coordinator
Senior nursing practitioner (level 3) ?Nursing Unit Manager
Nursing staff (level 2)
Specific nurses involved in critical incidents
Community Liaison Officer
Adventure therapy coordinator
School teachers
Occupational Therapist
Consumers (specifically consulted by the consumer representative of the review team)
Police liaison officer
Social worker

The consultation included two meetings with the Executive Director and Clinical Director of The Park.

### 3.2 Access to documentation

Access to policy manuals, orientation information, standard forms and patient records was provided as requested by the review team.

The review team specifically considered the patient medical records of four critical incidents. These incidents were considered by staff to have conferred a high degree of risk to staff and/or patients of the BAC. Such charts were reviewed initially against BAC policies and procedures as given by existing BAC documentation and then against current best practice (as agreed by the review team). A number of charts randomly drawn from current BAC patients were also considered.

### 3.3 Access to Data

Summary data on critical incidents presented in graphical form was made available to the review team and is included in the appendices of this report.

The review team were interested in the whether the critical incident data was of sufficient quality for more detailed analysis. All critical incident forms completed at the BAC were obtained from 2000 until June 2003, entered and analysed. Details of this analysis are in section 4.1.b.





#### 4. CURRENT STATUS OF RISK ON THE BAC

##### 4.1. Client Profile of the BAC

The review team were informed that the current bed platform of the BAC was 15 beds with an additional 5 outpatient places. Occasionally there are more inpatients and indeed during the week of the consultation, there were [REDACTED]. A presentation from the Director of the BAC delineated the type of clientele seen at the BAC. Diagnoses of patients attending the BAC are listed below.

Table 4.1: Range of diagnostic groups admitted to the BAC

Psychosis, Depressive disorders, Avoidant anxious disorders, OCD, Tourette's Syndrome, Eating disorders Traumatic stress disorders, Asperger's Syndrome.
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From this presentation it was noted that the BAC accepted a wide range of individuals with a wide range of presentations and would generally give many individuals "a go" to see whether they could use the therapy offered at the BAC. This philosophy was stated by most senior clinicians, and they were clear that the admission criteria were quite open, i.e. from 13 to 17 years of age with a clear psychiatric illness, and suitable to be on an open unit and with evidence of client and family commitment. Individuals with substance abuse, with a diagnosis of only conduct disorder or who had moderate or severe intellectual handicap were excluded from the BAC.

There was a clear perception from all levels of clinical and management staff that the type of clients seen at BAC has changed over recent years. Many clinical staff noted there was a mismatch of recently referred adolescents with the original treatment philosophy at the unit, mainly manifest by an increase in the amount of disturbed behaviour including increased client histories of aggression and social problems. Some clinicians felt there were more patients with co-morbid drug and alcohol problems or adolescents from geographically remote locations, including Darwin. Some clinicians noted that the recent occurrence of finding several patients in possession of weapons was very unusual in the long history of the BAC. Lastly, many staff felt that the unit was under increasing pressure from external stakeholders to accept children whose presentations did not meet the admission criteria for the unit, and who in fact would previously have been excluded because of those presentations. Examples included adolescents on remand from the Brisbane Youth Detention Centre.

#### **4.2 Risk Profile: Review of existing data analysis**

The review team were provided with a powerpoint presentation of the incident profile of the BAC from January 2001 to March 2003. This information is found in Appendix 1, Figure A1 The Adolescent Incident Profile 2001-03, in which incidents have been aggregated into aggressive incidents, absent without leave (AWOL), self harm and 'other' incidents. In the 28 months graphically represented, 12 months have incidents from all 4 different categories recorded. Ten months have 3 different types of incidents, 6 months have only 2 types of incidents, no month has only one type of incident. There is no month at the BAC without a recorded incident. The range of incidents over this period is from 26 incidents occurring in June 02 and March 03 to a low of 3 incidents occurring in February 03. There is no significant seasonal variation with all types of incidents evenly spread across the reporting period. The most frequent type of incident by month was aggression and self harm. Both categories were represented in 24 of the 28 month reporting period, followed by 'other' (22 of 28 months) and AWOL (20 of 28 months).

Some analysis is provided in the BAC briefing material. The relationship between assault and aggression and absconding can be found also in Appendix 1 page 2. It is reported that [REDACTED] adolescents who absconded from the unit were also involved in aggression. Reasons for

absconding varied. Some absconding behaviour was driven by [REDACTED] peer pressure and a desire to obtain drugs. [REDACTED] individuals used alcohol or substances when they absconded. Some comment is also included on page 3 of the relation to prior aggression stating that the group with the highest incidence of aggression prior to admission were a group who were reported as "violent at home", had perpetrated "physical attacks on parents" or demonstrated "excessive violence towards siblings". However, it was reported that only one of this group was involved in aggression at BAC. [REDACTED] adolescents involved in incidents of aggressive assault had antecedent conduct disturbance. The analysis does not mention the type of statistical test employed or the level of significance of the finding.

#### **4.3 Risk profile: new data analysis**

Critical incident reports were available on 93 patients. The mean patient age during the admission was 15.37 years (SD 1.25yrs), ages ranged from 13 to 18 years. There was a non significant over-representation of female patients (52.1% versus 47.9%). The majority of patients involved in critical incidents were Australian born (94.5%), all spoke English in the family home. No patient in this sample identified their ethnicity as Aboriginal or Torres Strait Islander.

**Table 4.1:****total number of incidents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	42	45.2	45.7	45.7
	2.00	14	15.1	15.2	60.9
	3.00	5	5.4	5.4	66.3
	4.00	5	5.4	5.4	71.7
	5.00	4	4.3	4.3	76.1
	6.00	3	3.2	3.3	79.3
	7.00	2	2.2	2.2	81.5
	8.00	3	3.2	3.3	84.8
	9.00	1	1.1	1.1	85.9
	10.00	2	2.2	2.2	88.0
	11.00	2	2.2	2.2	90.2
	13.00	2	2.2	2.2	92.4
	16.00	2	2.2	2.2	94.6
	18.00	1	1.1	1.1	95.7
	19.00	1	1.1	1.1	96.7
	29.00	1	1.1	1.1	97.8
	37.00	1	1.1	1.1	98.9
	70.00	1	1.1	1.1	100.0
	Total	92	98.9	100.0	
Missing	System	1	1.1		
Total		93	100.0		

An important consideration about this analysis is that the results presented are indicative only. The analysis does not at present meet a research standard, given the need to further review and clean the data. Most variables have between 5-15% of missing data and this could be improved with further work.

Table 4.1 above highlights that out of 463 incidents 45.7 percent of patients accounted for only one incident, 60.9 percent account for 2 incidents. However, there is a substantial minority of patients would are involved in repetitive critical incidents, and indeed 12% of this sample were involved in 10 or more incidents.

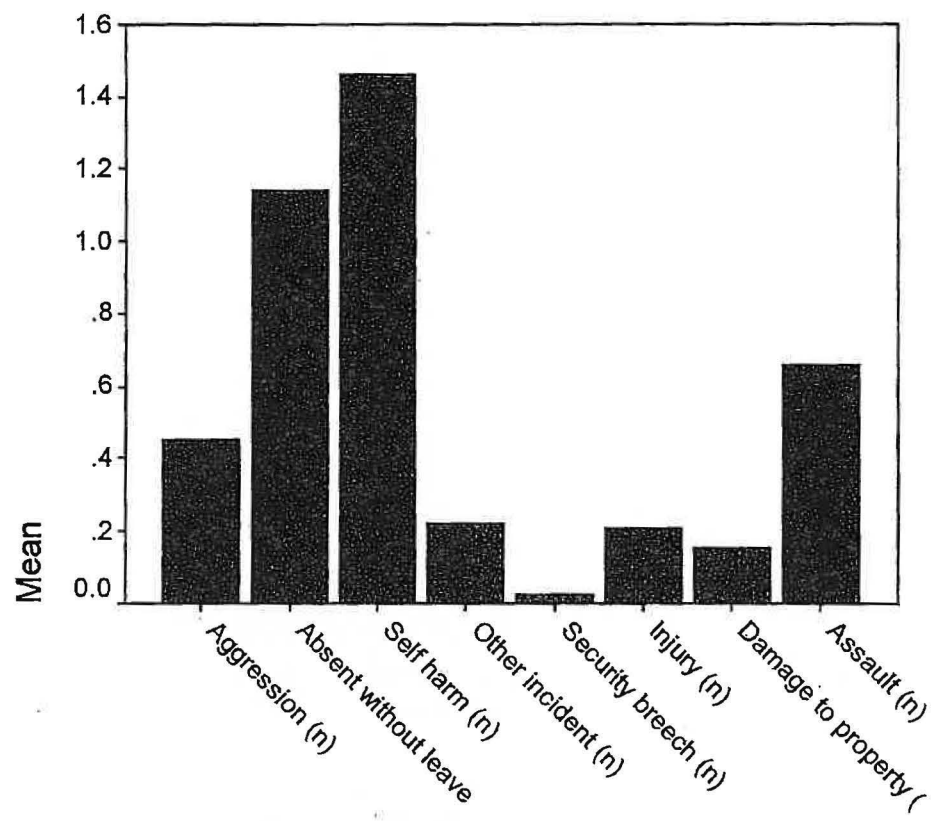
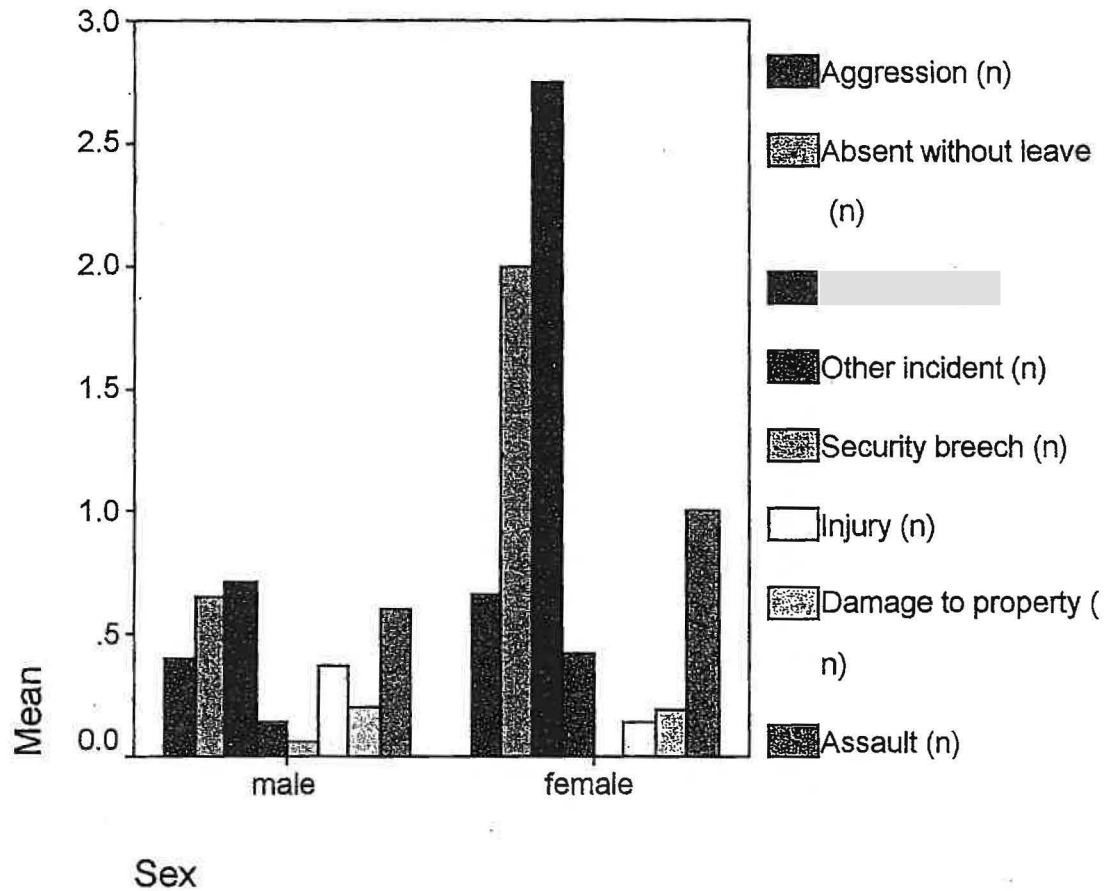
**Figure 4.1: Relative frequency of Critical Incident Type**

Figure 4.1 above depicts critical incident by incident type.

**Self-harm**

**Figure 4.2 Critical Incident category by Gender**

An **absent without leave (AWOL)** critical incident was recorded 104 times during the reporting period. 41 individuals were involved in one or more AWOL incidents, 22.2% of the CI sample had at least one AWOL incident. AWOL incidents were less likely to be multiple than self harm incidents: 54% of AWOL patients did so on only one occasion, 83% between 1 and 3 occasions and only 15% on more than 6 occasions. Significantly more female patients were involved in AWOL incidents (mean female AWOL = 2.000, male = 0.657,  $T_{69} = -2.470$ ,  $p = 0.016$ ). There was a trend ( $p = .076$ ) for AWOL incidents to involve older patients.

An incident of **assault** was recorded 50 times during the reporting period. 33 individuals were involved in one or more assault incidents, 25.3% of the CI sample had at least one assault

incident. Similar to the AWOL data, multiple incidents of assault was uncommon, 69% of patients were involved in one assault incident rapidly declining to 12% involved in two assaults and 18% in more than 2 assaults. The data suggests some tolerance to an act of assault: 2 patients were involved in 4 assaults, 3 patients in 5 assaults, 1 patient in 6 assaults. There was no gender or age difference in patients involved in assault incidents.

An incident of **aggression** was recorded 41 times during the reporting period. ■ individuals were involved in one or more aggressive incidents, 17.4% of the CI sample had at least one assault incident. Similar to the AWOL and assault data, multiple incidents of aggression was uncommon, 67% of patients were involved in one aggressive incident declining to 21% involved in two assaults and 12% in more than 2 assaults. ■ individuals accounted for 4, 5 and 6 aggressive incidents respectively. There was no gender or age difference in patients involved in assault incidents.

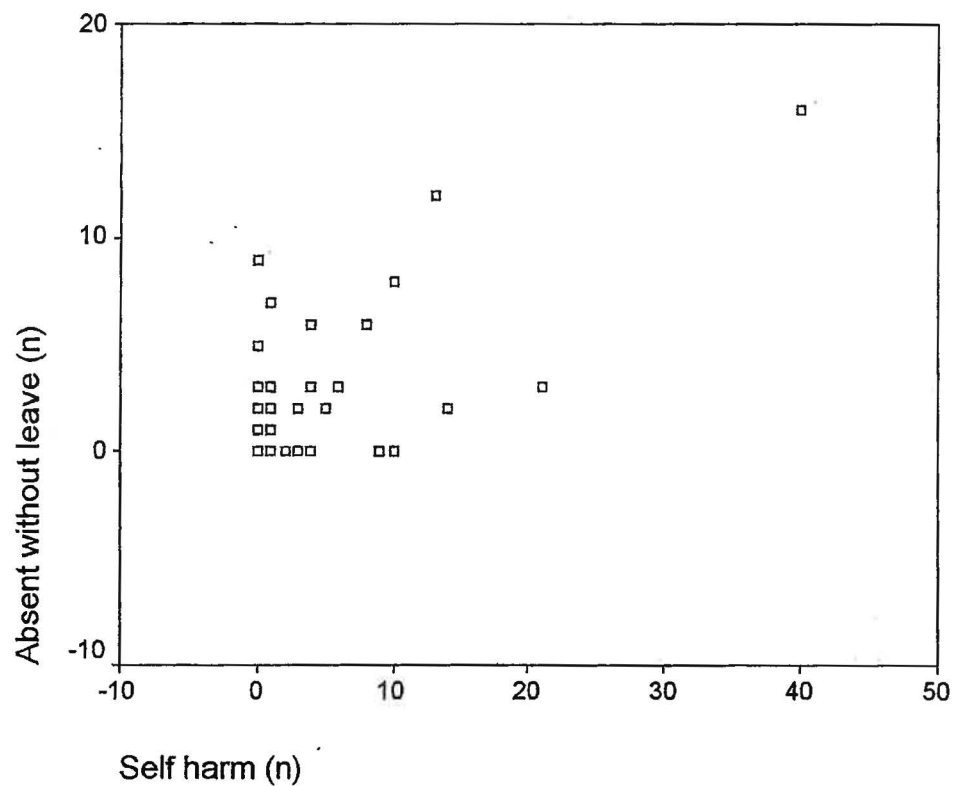
No separated analysis was performed on low prevalence incidents such as injury (n = 20, 4.3% of all incidents), 'other' (n = 20, 4.3% of all incidents), property damage (n = 19, 4.1% of all incidents) and security breach (n = 2, 0.4% of all incidents).

Table 4.2 below, highlights the significant relationship between the most common variables with significant bivariate correlations between incidents reported as aggression and assault, AWOL and self harm, assault and AWOL and self harm and AWOL. The example of self harm and AWOL is graphical depicted in Figure 4.3. Whilst a higher order factor such as gender may be found following multivariate analysis with a larger sample size these results suggest that multiple forms of critical incidents cluster in individuals. The clinical implication is that if a patient is involved in one form of critical incident, the clinical staff should be aware of the potential for further incidents in that as well as in other domains of critical incidents.

**Table 4.2 Summary of Bivariate analyses (Pearson's correlation) of the four most common critical incidents**

	Aggression	Assault	AWOL	Self harm
Aggression: p (2-tailed)		.000	.000	.000
Assault			.033	NS (.183)
AWOL				.000

**Figure 4.3 Simple Scattergram of AWOL versus Self-harm incidents**





#### **4.4 Current service delivery model**

The BAC model was described to the review team as a milieu therapy model with adjunctive therapy mainly in the form of adventure therapy, individual therapy and psychopharmacology. The medical support to the BAC and hence the medication prescribers were the BAC Director and a psychiatry registrar. Individual therapy was provided formally primarily by allied health professionals. The form of individual therapy depended on the therapist: cognitive – behavioural and psychodynamic approaches were cited. It was not clear whether all adolescents were offered individual therapy, and on what grounds it was offered. The nursing case management role is also central to the therapeutic process, and during the course of an admission, would constitute a significant long term relationship for the adolescents admitted. Several staff members noted the current limited family therapy capacity due to an unfilled allied health position.

Certain aspects of the therapy programme seemed unclear to some staff. An example of this is the two week assessment period. Several staff were unsure about whether that still happened or not. In any case, there did not appear to be a formal review following the two week assessment, and nor was the outcome made overt to any of the relevant parties.

#### **4.5 Current Admission Pathway**

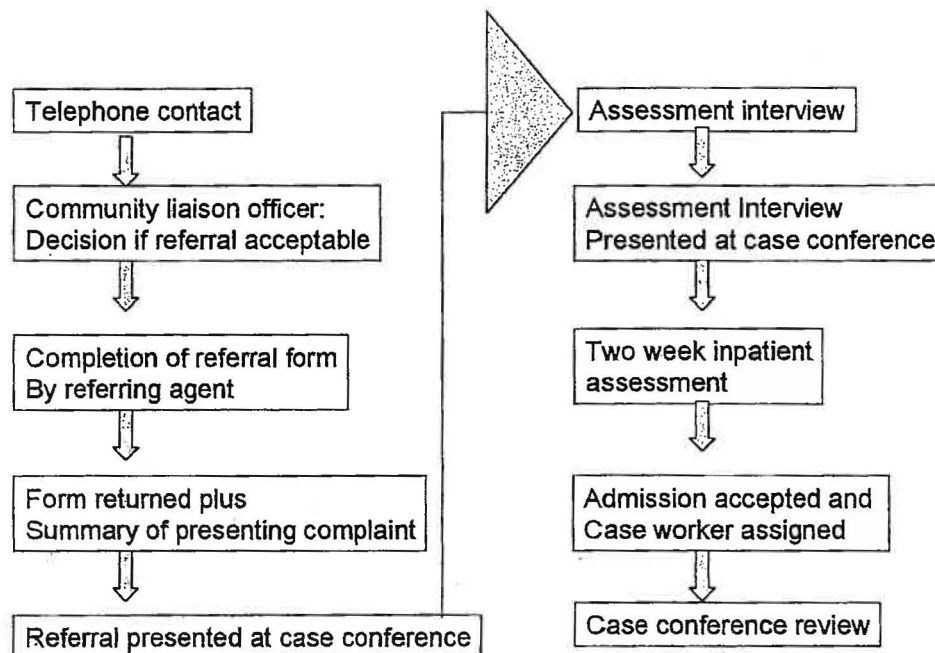
Figure 4.4 below, highlights the BAC clinical and administrative pathway from the first telephone contact with the BAC until a patient is accepted for an inpatient treatment stay.

Central to this process is the Community Liaison Officer's role. The role includes (1) Triaging telephone referrals, including the initial decision as to whether the patient seems acceptable, (2) presenting the case at the referral meeting, (3) completing the assessment interview with the registrar and (4) presenting the case at case the conference. The centrality of this worker clearly provides some consistency to the process, but may at some level not be appropriate. Issues include potential differences in the understanding of suitable referrals between the Community Liaison Officer and nursing staff or senior clinical staff.

Secondly, there is the potential for idiosyncratic practices or detailed understanding of systemic issues and processes residing in one individual and not generalising to the broader clinical team.

Another issue noted by several staff was that referrals were often considered at the end of the case conference. The identified problems arising from this process included staff having to

**Figure 4.4: BAC Referral and Admission acceptance pathway**



leave the meeting prior to discussing new referrals, time constraints on this item of discussion and fatigue at the end of an otherwise busy meeting. Given the importance of selecting appropriate adolescents for the milieu, it would appear that this process needs to be managed differently.

#### 4.6 Treatment Model

Most staff stated that the BAC had an over-arching theme of working in a milieu therapy model with an adjunctive individual, group, family and adventure based therapy. A recent staff vacancy had diminished the availability family therapy. It was the opinion of the reviewing team that a more indepth understanding of the milieu model was not easily accessible either from staff or from the documentation provided. It was also apparent that whilst the senior and long serving

members of the team appeared to have a common understanding of the meaning of this model, newer staff felt that they hadn't been orientated to this, and felt that they were expected to learn on the job. Given the importance of staff roles in 'maintaining the milieu', this would need to be addressed.

#### 4.7 Specific risk strategies

The **A1-A7 programs** are a series of behaviour management programs employed at the BAC. They are well documented, available to all staff as typed sheets and have been in use for many years. The review team noted the programs were developed before the current clientele with the more recent emphasis on externalising behaviour and consider the relevance of these programs to this client group is untested and there is no documented evidence that these programs change/effect behaviour. The programs could be seen to create a consistent response to behaviour, however, individual patients contexts differ, and a patient centred response that requires an adolescent to accept responsibility and participate in negotiating consequences may be useful. The review team felt that compliance with the 'A' program could be erroneously seen as the young person accepting responsibility.

Programs are a very 'public' response to behaviours. Some programs require restrictions to be in place for up to 48 hours. The review team were unsure that this fits with 'short, sharp and meaningful' consequences to behaviour. Further, the program would be 'monitored' by a number of staff over that period, leaving it open to interpretation. Indeed, some staff mentioned that they make modifications to the programmes when implementing them. Some consequences seem dissonant with the 'offence'; for instance a 48-hour response for a consistently untidy bedroom (A3).

More broad responses (other than A1-7) include 'suspension' from BAC. Staff were of the opinion this was used more in the past, but homelessness and patients from geographically isolated areas make that impossible in some instances. Suspension was seen as a valuable response to some situations, as it allowed some "cooling off" and reflection on the part of the adolescent, and enabled a re-negotiation of expectations on return. The other advantage was that