APPENDIX - UTILISING ACUTE ADOLESCENT INPATIENT BEDS

Current Utilisation of Adolescent Inpatient Beds

Two trends are readily discernible in bed utilisation in child and youth mental health inpatient units. These trends are apparent in both Australia and the United Kingdom.

- Some young people will be given trial periods of leave with their families prior to discharge. The purpose of this leave in Acute Child and Adolescent Inpatient Units is to ascertain the stability of the young person's mental health in the context of the home environment, and without the support and supervision of staff. In addition, for young people from the Barrett Adolescent Centre, leave enables them the opportunity to maintain or re-establish family, social and local networks.
- 2. Presentations to Acute Child and Adolescent Inpatient Units show seasonal patterns. This is most marked from the last week of school prior to the Christmas New Year holidays to the first week of the new school year. Lesser fluctuations may be apparent in the term and semester holiday periods.

These factors impact on measures of bed occupancy.

The nominal occupancy is measured by Occupied Bed Days. Under new funding arrangements, this is the only measure of activity. Anecdotally, child and adolescent inpatient units report a change in their practices around leave to adjust to these funding arrangements. The actual occupancy is the number of beds allocated to young people – it is the nominal occupancy + those on leave. It is a more accurate indicator of bed utilisation. The difference between nominal and actual occupancy may range from 1% - 10%.

Seasonal changes in bed utilisation commonly show a variation of 30% - 40% between utilisation during terms compared with utilisation over holiday periods.

Consequently, annual average bed utilisation in Child and Youth Acute Inpatient Units based on the nominal occupancy is not a good indicator of the availability of beds throughout the year. For example, a unit which has an annual occupancy of 76% (where the actual occupancy is 82%) may have six months or more where the actual occupancy exceeds 90%. In practice, this translates to an average of only one bed vacant during the month.

Modelling the Use of Acute Inpatient Beds for Adolescents Requiring Extended Treatment and Rehabilitation Services

The availability of adolescent beds at various points during the year is one factor to be considered in modelling the use of Acute Inpatient beds for adolescents requiring extended treatment and rehabilitation. Two other factors are also important – the nature and location of beds and he number of beds required.

1. The nature and location of beds.

Since the mean age of adolescents on admission to Barrett is 15 years and 10 months, beds in the Child and Family Therapy Unit are unlikely to be utilised.

A number of logistical reasons necessitate that regional and supra-regional admissions would occur to the three Acute Adolescent Inpatient units in the Greater Brisbane Area – those at Royal Brisbane and Women's Hospital, Mater Children's Hospital and Logan Hospital. Providing an out of area service in either the Gold Coast or Toowoomba involves more travel for young people to access leave, their families to visit and some limitations in the range of services which can be provided.

For the purpose of modelling the effects on Acute Adolescent Inpatient Units of providing a service to adolescents requiring extended treatment and rehabilitation, the assumption is made that 12 of the 25 – 30 young people referred will require inpatient admission. This is consistent with average actual bed occupancy at Barrett. Based on referrals over the past 5 years, a year would come from and thus receive a service at has come from during that time, and from the from the service for 2 – 3 adolescents requiring extended treatment and rehabilitation. The three units at Royal Brisbane and Women's, Mater Children's and Logan Hospitals would need to provide 9 – 10 beds per year, consistent with the current pattern of referrals. This effectively reduces the acute inpatient beds in the Greater Brisbane Area by 9 – 10 beds.

The impacts of this on services can be reasonably modelled. Data is available for all (64) but four week days of the period from 1 November 2012 – 14 December 2012, and 29 January 2013 – 26 March 2013, i.e. most of last term of 2012, and first term of 2013. These are representative of at least the second and third terms of 2012. Thus it is a reasonable representation of trends for most of the year.

With 9 beds in Acute Adolescent Inpatient Units in the Greater Brisbane Area allocated to adolescents requiring extended treatment and rehabilitation services,

- adolescents from the Greater Brisbane Area and north to Rockhampton could be admitted to a bed in the Greater Brisbane Area on 12 of those days. There is no guarantee that the bed would be local to their area, however.
- adolescents from the Greater Brisbane Area and north to Rockhampton would require transfer to either the Gold Coast or Toowoomba on 32 of those days because of the lack of Acute Adolescent inpatient beds in the Greater Brisbane Area.
- adolescents from the Greater Brisbane Area and north to Rockhampton would require admission to either a paediatric bed on an Adult Inpatient bed on 16 of those days because of the lack of Acute Adolescent inpatient beds in South-east Queensland.

Approximately 13% of admissions to the Mater Children's Acute Inpatient Unit are young people 13 years or less. These could be transferred to the Child and Family Therapy Unit, thus freeing up 1 - 2 adolescent beds. This may reduce by a small amount the number of days either requiring transfer to the Gold Coast or Toowoomba, or admission to a paediatric bed or an Adult inpatient bed, depending on the demand for beds.