

# National Mental Health Benchmarking Project

## REDUCING 28-DAY READMISSIONS

## PROJECT REPORT

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# Executive Summary

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## Background

Australia's National Mental Health Strategy has consistently recognised the importance of assessing the performance of mental health services, in order to ensure that they are delivering high quality care. This report describes a project designed to inform best practice guidelines for reducing 28-day readmissions to adult acute inpatient mental health services.

The 28-day Readmission Rates Project was conducted by the Adult Benchmarking Forum, one of four forums established to assess the potential benefits of benchmarking services against each other on a range of performance indicators. The forum had representation from the following mental health service organisations:

- Western Sydney Area Health Services – Blacktown Adult Mental Health Services (NSW);
- South Eastern Sydney Illawarra – St George Hospital and Community Services (NSW);
- Barwon Health (VIC);
- Bayside Health (VIC);
- Rockhampton Mental Health Services (QLD);
- South Metro Area Health Services - Fremantle (WA);
- Noarlunga Health Services (SA); and
- ACT Adult Mental Health Services (ACT)

The project's aims were as follows:

- To consider the usefulness of 28-day readmission rates as a key performance indicator in mental health;
- To identify factors that influence 28-day readmission rates;
- To identify strategies to reduce 28-day readmission rates; and
- To develop a set of best practice guidelines for reducing readmission.

## Method

The project drew on various data sources, including a review of the international literature, opinion pieces prepared by the eight mental health service organisations comprising the Adult Benchmarking Forum, and site visits to four of these organisations.

## **Key findings**

### ***Usefulness of readmission rates as a key performance indicator in mental health***

Data from the literature review and the opinion pieces suggested that 28-day readmission rates are a potentially useful key performance indicator, but that they must be interpreted with caution. Readmission may not always be an undesirable outcome, and readmission rates may not always be a good proxy for service quality. In addition, readmission rates may require risk adjustment (statistical adjustments may need to be made to cater for differences between given services' populations) in order to ensure comparisons are fair.

### ***Factors that influence readmission rates***

The literature review and opinion pieces also identified a number of consumer-based and service-based factors that are likely to influence readmission rates. The consumer-based factors included: age and gender; ethnicity; diagnosis; level of functioning; severity and persistence of symptoms; stress and psychosocial problems; psychiatric service history; other clinical factors; life circumstances; housing; employment; socio-economic status; and family/social support. The service-based factors included: bed occupancy; length of stay and service capacity; discharge planning; community follow-up and support; community workers' caseloads; supply of clinical staff; degree of consumer engagement; medication issues; and availability of non-clinical support services.

### ***Strategies for reducing readmission rates***

The literature review and opinion pieces also pointed to a number of strategies that might be helpful in reducing readmission rates. In the main, these related to improving discharge planning, improving community follow-up and support, and improving data management systems. The site visits identified 'on the ground' practice related to reducing readmission rates in the areas of: business rules and governance; interface between inpatient and ambulatory services; consumer flow decisions; discharge planning; purpose of admission/readmission; length of stay, occupancy and readmission; consumer and carer communication; and illness influences.

## **Towards best practice guidelines**

The project's findings point to some areas of practice that are likely to reduce 28-day readmission rates, listed below. Some of these strategies and activities involve a system-wide approach, whereas others target points in the continuum of care where particular problems may occur (e.g., in the discharge planning process or in community follow-up).

- Good governance is required to reduce 28-day readmission rates. This requires strong clinical leadership from psychiatrists and other medical staff and clearly articulated expectations and business rules.
- Consumer engagement is crucial, and should occur at all stages in the continuum of care. This relies on good two-way communication between

inpatient and ambulatory service providers and consumers, and should focus on recovery.

- Family members and carers should be involved throughout the care continuum. Again, this relies on good two-way communication.
- Provision of care across inpatient and ambulatory services should be 'seamless', irrespective of the overarching organisation's model of service delivery. In some cases, this may mean joint staff appointments across the two settings. In others, it may involve co-location of an ambulatory team within an inpatient unit. In still others, it may involve ambulatory case managers retaining a role in the consumer's care during an admission, and leading discharge planning.
- Articulated systems should be put in place to monitor and manage inpatient lengths of stay, bed occupancy, admissions and readmissions. These systems should be proactive rather than reactive.
- Discharge planning should be systematic and thorough. It should give weight to the consumer's clinical status, as well as to the circumstances to which they will return (e.g., availability of appropriate housing). It should involve input from the consumer, his or her carer(s) and multidisciplinary inpatient and ambulatory staff. Ideally, it should also involve workers from relevant non-government organisations who may play a crucial part in promoting recovery after discharge. Wherever possible, the planning process should involve nominating and working towards a date of discharge. Assessing readiness for discharge should also occur in many circumstances.
- Community follow-up should be proactive and occur within seven days of discharge.

## **Conclusions**

The current project provides a platform from which to consider 28-day readmission rates as an indicator of service quality. It suggests that monitoring 28-day readmission rates is a worthwhile exercise, but that care should be taken to ensure that given services are appropriately compared with their peers (e.g., those with similar casemix). It also suggests that steps can be taken to reduce 28-day admission rates in an effort to improve service quality. These steps involve taking a system-wide approach to addressing the key consumer-based and service-based factors that influence 28-day readmission rates.

# Chapter 1: Background

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Australia's National Mental Health Strategy has consistently recognised the importance of assessing the performance of mental health services, in order to ensure that they are delivering high quality care. This report describes a project designed to inform best practice guidelines for reducing 28-day readmissions to adult acute inpatient mental health services, setting it in the context of current developments in quality improvement and monitoring occurring in Australia.

## Key performance indicators for mental health services

In 2004, the National Mental Health Working Group Information Strategy Committee's Performance Indicator Drafting Group published *Key Performance Indicators for Australian Public Mental Health Services* (National Mental Health Working Group, 2004). The report proposed a set of key performance indicators for use in Australia's public sector mental health services organised around nine domains advocated by the National Health Performance Framework. These were: effectiveness; appropriateness; efficiency; responsiveness; accessibility; safety; continuity; capability; and sustainability. The report further specified each of these domains into sub-domains, again drawing on the National Health Performance Framework. The report then developed key performance indicators for these sub-domains, concentrating on 13 'Phase 1' indicators for initial trial, on the grounds that these were suitable for immediate introduction based on available data collected by all States and Territories.<sup>a</sup> The report noted that these indicators would require ongoing review, modification and refinement over time. The indicators, and the domains and sub-domains within which they fall, can be found at Appendix 1.

The first of the 13 indicators focused on unplanned early readmissions to hospital within 28 days following discharge from acute inpatient services. This indicator is the subject of the current report, and received attention in *Key Performance Indicators for Australian Public Mental Health Services* (National Mental Health Working Group, 2004) because it was seen as useful for assessing services' effectiveness. The rationale for this was that because acute inpatient services aim to provide treatment that enables individuals to return to and remain in the community, unplanned readmissions (either to the unit of the index admission or to other acute inpatient units) may indicate that this treatment, or the subsequent community follow-up, was sub-optimal. *Key Performance Indicators for Australian Public Mental Health Services* (National Mental Health Working Group, 2004) selected 28 days as the appropriate period for examination on the grounds that this has been used elsewhere (e.g., in various jurisdictions in the United States, the United Kingdom and Canada) and that, clinically, one month is a reasonable time period within which to expect no readmission to occur.

## The National Mental Health Benchmarking Project

Within the context of implementing and evaluating the above performance indicators, the National Mental Health Benchmarking Project was funded as a collaborative initiative between the Australian Government and State/Territory governments. The project aimed to establish demonstration benchmarking forums

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<sup>a</sup> It also proposed areas for 'Phase 2' indicator development, which covered sub-domains identified as important for monitoring overall mental health service performance but for which lack of available data precluded immediate development of relevant indicators.

across the four main program areas of public sector mental health services (adult, child and adolescent, older persons and forensic), in order to assess the potential benefits of benchmarking services against each other on a range of performance indicators. The project's core objectives were as follows:

- To promote the sharing of information between organisations to increase understanding and acceptance of benchmarking as a key process to improve service quality;
- To identify of the benefits, barriers and issues arising for organisations in the mental health field engaging in benchmarking activities;
- To understand what is required to promote such practices on a wider scale; and
- To evaluate the suitability of the national mental health performance framework (domains, sub domains and key performance indicators) as a basis for benchmarking and identifying areas for future improvement of the framework and its implementation.

Each forum consisted of between four and eight mental health service organisations from across six jurisdictions (see Appendix 2). The Adult Benchmarking Forum, which is responsible for the current report, had representation from the following organisations:

- Western Sydney Area Health Services – Blacktown Adult Mental Health Services (NSW);
- South Eastern Sydney Illawarra – St George Hospital and Community Services (NSW);
- Barwon Health (VIC);
- Bayside Health (VIC);
- Rockhampton Mental Health Services (QLD);
- South Metro Area Health Services - Fremantle (WA);
- Noarlunga Health Services (SA); and
- ACT Adult Mental Health Services (ACT)

## **The 28-day Readmission Rates Project**

Amongst its various other benchmarking activities, the Adult Benchmarking Forum chose to conduct a special project focusing on 28-day readmission rates. The importance and usefulness of this indicator had been the subject of ongoing debate by the Adult Benchmarking Forum, which held the view that any targets associated with this indicator should be based on best practice and expert opinion.

The Forum had observed varying patterns of 28-day readmission rates in three financial year data collection cycles (see Appendix 3). When readmissions to the same acute inpatient unit were considered, the average 28-day readmission rates



across the eight organisations were 11% (range = 4%-16%) in 2004-05, 12% (range = 7%-19%) in 2005-06 and 12% (range = 7%-20%) in 2006-07. Using the more accurate indicator of effectiveness – i.e., readmissions not only to the acute inpatient unit of the index admission, but also to other acute inpatient units – the average 28-day readmission rates across the eight organisations were 14% (range = 9%-16%) in 2004-05, 15% (range = 12%-19%) in 2005-06 and 14% (range = 10%-20%) in 2006-07. In 2006-07, the average 28-day readmission rate of 14% was almost three times the average 7-day readmission rate (5%) and about half the average 180-day readmission rate (30%).

This observed variability led the Adult Benchmarking Forum to explore whether the indicator might acquire greater utility when contextualised by other service-level variables such as bed occupancy.

The 28-day Readmission Rates Project drew on a range of data sources to address the following aims:

- To consider the usefulness of 28-day readmission rates as a key performance indicator in mental health;
- To identify factors that influence 28-day readmission rates;
- To identify strategies to reduce 28-day readmission rates; and
- To develop a set of best practice guidelines for reducing readmission.

## **The current report**

The current report describes the 28-day Readmission Rates Project. The project drew on various data sources, including a review of the international literature, opinion pieces prepared by the eight mental health service organisations comprising the Adult Benchmarking Forum, and site visits to four of these organisations. Chapter 2 provides more detail of each of the data sources used to inform the project. Chapters 3 and 4 presents the key findings from the literature review and the opinion pieces, respectively, organising these findings around the first three aims of the project (usefulness of 28-day readmission as an indicator, factors influencing these rates and strategies to reduce them). Chapter 5 presents the key findings from the site visits, organising them around the third aim (strategies to reduce 28-day readmission rates). Chapter 6 synthesises these findings, and discusses them in terms of the fourth project aim (what they might mean for best practice in reducing readmissions).

## **Chapter 2: Method**

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As noted in Chapter 1, the 28-day Readmission Rates Project drew on various data sources, including a review of the international literature, opinion pieces prepared by the eight mental health service organisations comprising the Adult Benchmarking Forum, and site visits to four of these organisations. Each of these is described in more detail below.

### **Review of international literature**

A structured search of MEDLINE and PSYCINFO was conducted, using a selection of search terms related to the notion of readmission as an indicator of service effectiveness. Only studies from the psychiatric literature were included in the review, but some additional journal articles and reports from the general literature were retrieved and used to clarify definitional and conceptual issues as relevant. Studies were not limited to those that considered 28-day readmission rates as an indicator, because international and national precedents exist for monitoring differing post-discharge periods.

Potentially relevant journal articles and reports on unplanned readmissions as an indicator of service effectiveness were retrieved by the above search strategy, and their reference lists scanned for further pertinent articles and reports. Journal articles were given precedence in this process, on the grounds that they had generally been subject to peer review.

Each journal article and report was critically analysed and their findings were synthesised, in order to inform questions about the usefulness of readmission rates as an indicator of service effectiveness, factors that influence readmission rates and strategies to reduce readmission rates.

### **Opinion pieces**

Representatives from each of the eight organisations comprising the Adult Benchmarking Forum were asked to submit opinion pieces describing their service delivery context and seeking the views of staff, consumers and carers about their current 28-day admission rate. The proforma used to collect the opinion piece information can be found at Appendix 4.

It should be noted that the opinion pieces from some organisations represent only part of that organisation, rather than the full complement of services within it. It should also be noted that in some cases the Adult Benchmarking Forum representative took responsibility for preparing the opinion piece, whereas in other cases the opinion piece was prepared by someone else who was considered to have an overarching view of the organisation. Either way, the opinion piece drew on information provided by others within the organisation.

The opinion pieces served two purposes. In addition to informing questions about the usefulness of readmission rates as an indicator of service effectiveness, and factors and strategies that might shape these rates, the opinion pieces also provided contextual information for the site visits (see below).

## **Site visits**

A subset of four of the eight organisations that provided opinion pieces (see above) were invited to participate in site visits. Sites were chosen on the basis of their having particularly low 28-day readmission rates, or because they had put in place relevant strategies to reduce their rates.

Members of the Adult Benchmarking Forum visited each of the four sites, spending a full day with staff in their workplaces, and reviewing relevant documentation and data. A framework for the site visits was developed on the basis of the findings from the literature review (see above) and the information provided in the opinion pieces (also see above). Detail regarding the framework and prompt questions for the site visits can be found at Appendix 5.

In total, the site visits yielded information from approximately 140 staff from a range of disciplines and levels of seniority, as well as from 22 consumers and carers.

# Chapter 3: Key findings from the literature review

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## Scope of the literature review

As noted in Chapter 2, the literature review drew on national and international journal articles and reports concerned with readmission rates as an indicator of service quality. In the main, the review was restricted to the psychiatric literature, but reference was made to the general literature as relevant.

## Conceptual and definitional issues

In general terms, the operational definitions adopted by Australian and international studies regarding readmissions are similar. Typically, they define readmission rates in terms of the proportion of all discharges from psychiatric inpatient care within a 12-month period (denominator) which are followed by a readmission within 28 days or some other defined time period (numerator) (Hermann et al., 2004). Although not always explicitly stated, the definition assumes that these readmissions are unplanned and/or avoidable.

## Usefulness of readmission rates as a key performance indicator in mental health

Most studies of readmission rates either implicitly or explicitly focus on the phenomenon as a proxy for complications and/or relapse which disrupt community tenure following an inpatient stay, interpreting it in the same way as the *Key Performance Indicators for Australian Public Mental Health Services* (National Mental Health Working Group, 2004) report. The literature suggests that high readmission rates may indicate premature discharge or lack of co-ordination between inpatient and ambulatory care, and that this has led some inpatient facilities to examine remediable factors associated with readmissions and put in place strategies to address these (see below). To this extent, the indicator would appear to be useful.

Having said this, the literature indicates that, in practice, there may be several problems associated with using readmission rates as an indicator of quality. Firstly, readmission may not always be perceived as a negative experience either by the consumer or his/her family. Downs-George and Cobb-Howell (1996) explored the meaning of readmission for consumers and carers in a qualitative study, and found that some experienced rehospitalisation as a safe course of action which led to stabilisation of symptoms and promoted recovery. Others, however, expressed frustration over their lack of control with respect to readmissions. The latter finding was reiterated by Fetter and Lowery (1992) in a quantitative study which employed structured interviews with consumers and staff of mental health services.

Secondly, there are questions about the extent to which the readmission rates are a good proxy for quality of the initial admission, which is the assumption upon which the indicator is based. In a large-scale study conducted in 121 Veterans Administration psychiatric inpatient units, Druss et al (1999) considered the relationship between consumers' satisfaction with care (effectively taken as the 'gold standard' assessment of quality of care) and their likelihood of readmission. They found no relationship between satisfaction and early readmission.

Thirdly, readmission rates are likely to be influenced by the casemix of a service, since the likelihood of readmission varies by factors like diagnosis and severity of illness (Hermann et al., 2004). In order to ensure that comparisons of readmission rates across services are fair, statistical adjustments may need to be made to cater for differences between given services' populations. This process is known as 'risk adjusting' (Hermann et al., 2007).

Finally, there are practical issues regarding the observation period. As noted in Chapter 1, 28-days was selected as the relevant period within which to observe unplanned readmissions in the Australian context, on the grounds that there are international precedents and that it makes sense in terms of clinical expectations. Various authors have noted, however, that the measure is susceptible to the time period chosen. In other words, the identified proportion of readmissions judged to be related to the care provided during an earlier admission will be sensitive to the interval chosen (Heggstad and Lilleeng, 2003).

## **Factors that influence readmission rates**

As alluded to above, the literature suggests that a range of factors may influence readmission rates. Some of these factors are consumer-based and others are service-based (Montgomery and Kirkpatrick, 2002). The consumer-based factors relate to socio-demographic characteristics such as age and gender, and clinical characteristics such as diagnosis and previous mental health service history. The service-based factors relate to issues like bed occupancy. The list below is not exhaustive, but is designed to give an indication of the breadth of factors that may influence readmission rates, and the research evidence that supports them.

### ***Consumer-based factors***

**Age and gender:** Geller et al (1998) examined the characteristics of frequently readmitted consumers in Massachusetts, and found that they were particularly likely to be young females. Other studies have also found young people to be over-represented among readmissions, but have yielded conflicting findings regarding gender (Roick et al., 2004, Dayson et al., 1992).

**Ethnicity:** The research evidence with regard to ethnicity and readmission is equivocal. Yamada et al (2000) found that African Americans were more likely to be readmitted than Caucasians in a United States study of retention in the community. By contrast, the frequently-readmitted consumers in Geller et al's (1998) study were more likely to be Caucasian than their counterparts who made less use of inpatient services.

**Diagnosis:** Several studies have found different diagnoses to be important predictors of readmission:

- **Substance use disorders:** Hendryx et al (2003), who conducted a study using administrative datasets in Washington State, found substance use disorders to be particularly important in their predictive model. Geller et al's (1998) Massachusetts study also identified substance use disorders as predictive. In other studies in the United States, Olfson et al (1999) and Craig and Bracken (1995) also found comorbid substance use to be a key predictor of readmission. By contrast, Lay et al (2006), who conducted a

study in Switzerland, found that people with substance use disorders were no more likely to be readmitted than people with other disorders.

- **Personality disorders:** Geller et al (1998) found personality disorder diagnoses to be associated with frequent readmissions, as did Korkeila et al (1998) in a national study of mental health consumers in Finland.
- **Psychotic disorders:** Korkeila et al (1998) found psychotic disorders to be an important predictor; so too did Zibler et al (1990), Roick et al (2004) and Thompson et al (2003).
- **Mood disorders:** Olfson et al (1999) found major depression to be associated with readmissions.

**Level of functioning:** Hendryx et al (2003) and Geller et al (1998) observed low levels of functioning to be predictive of frequent readmissions, as did Lyons et al (1997) who conducted a study in the Chicago area, Swett (1995) who undertook a prospective follow-up of public sector consumers from across the United States, and Nicholson and Feinstein (1996) who considered readmissions to a single acute facility. Olfson et al (1999), however, found no relationship between level of functioning at the index admission and subsequent readmission.

**Severity and persistence of symptoms:** Lyons et al (1997) found that severity and persistence of symptoms increased the likelihood of readmission, as did Roick et al (2004) and Thompson et al (2003). Olfson et al (1999), however, did not observe this relationship.

**Stress and psychosocial problems:** Geller et al (1998) and Nicholson and Feinstein (1996) found high levels of stress and/or greater psychosocial problems were implicated in readmissions.

**Psychiatric service history:** Kisley et al (2000) observed the importance of lifetime psychiatric service use, finding that a history of previous inpatient admissions was predictive of 'not being successfully discharged' in a study of mental health consumers in Perth. The finding that the number of prior psychiatric hospitalisations is a significant predictor of readmission has been echoed by a number of other international studies (Lyons et al., 1997, Swett, 1995, Zibler et al., 1990, Korkeila et al., 1998, Postrado and Lehman, 1995, Schalock et al., 1995, Song et al., 1998, Monnelly, 1997, Walker et al., 1996, Olfson et al., 1999, Roick et al., 2004, Yamada et al., 2000, Nicholson and Feinstein, 1996).

**Other clinical factors:** Additional clinical factors that have been identified in various studies include a history of violent, disruptive or criminal behaviour, motor retardation, elevated mood, disordered thinking, unstable or prognostically poor clinical condition, and medication non-compliance or discontinuation (Nicholson and Feinstein, 1996, Craig and Bracken, 1995, Prince, 2006, Craig et al., 2000).

**Housing:** Browne, Courtney and Meehan (2004) found that people with schizophrenia who were discharged to boarding houses were significantly more likely to be readmitted to a local psychiatric inpatient unit than their counterparts with the same diagnosis who were discharged to their own homes. Similarly, Martinez and Burt (2006) found that providing permanent supportive housing to homeless people with mental health problems in San Francisco reduced their use of inpatient services. Yamada et al (2000) found that discharging an individual to somewhere with

supports (e.g., a relative's home or supported housing) was protective against readmission. In Australia, there are also indications that housing is a significant issue that may have an impact on patterns of inpatient occupancy. For example, results from the Western Australian arm of a housing snapshot survey found that the percentage of inpatients who could have been discharged had accommodation options been available was as high as 51% (Mental Health Division, 2007).

**Socio-economic status:** Dekker et al (1997) conducted an area-based analysis in Amsterdam and found that socio-economic deprivation was correlated with the rate of readmissions.

**Family/social support:** Zibler et al (1990) undertook a nationwide study in the United States and found that consumers who were single were more likely to be readmitted than those who were married. More generally, Olfson et al (1999) found that a lack of family supports was predictive of readmission.

### ***Service-based factors***

**Bed occupancy:** Heggstad (2001) examined data from 30 acute programs in 20 facilities in Norway and found that high consumer turnover (annual discharges per bed) was significantly associated with an increased likelihood of readmission.

**Length of stay:** The data regarding length of stay as a predictor for readmissions are equivocal. Some studies have found shorter lengths of stay to be associated with readmissions – for example, Figueroa et al (2004) found that length of stay was directly and inversely related to readmission rates in the United States, as did Wickizer and Lessler (1998). Others have found longer lengths of stay to be associated with risk of readmission (Korkeila et al., 1998, Lyons et al., 1997). Still others have found no relationship (Thompson et al., 2003).

**Discharge planning:** A lack of discharge planning has been shown to be associated with heightened risk of readmission. For example, Olfson et al (1999) found that where a family meeting with inpatient staff did not occur prior to discharge, readmission was relatively likely to occur. Similarly, Craig and Bracken (1995) found that individuals who were returned to the community with inadequate discharge planning with respect to housing, finances and a formal treatment program were more likely to be readmitted.

**Community follow-up and support:** There is some evidence from the literature that community follow-up militates against readmissions. For example, Nelson et al (2000) found that consumers discharged from inpatient psychiatric care had lower rates of rehospitalisation if they were offered and kept an outpatient appointment. Similarly, Heggstad's (2001) Norwegian study found that individuals who were discharged with minimal access to community care were at heightened risk of being readmitted. Not all studies report findings in this direction, however. For instance, a study by Gill et al (2003), found that readmission was significantly more likely when an outpatient visit was made after hospital discharge, even after controlling for demographic and clinical variables. Similarly, Thompson et al (2003) found that referral to aftercare increased the risk of readmission.

**Medication issues:** Primary studies and reviews by Olfson et al (1999) and Csernansky and Schuchart (2002) have suggested that second generation antipsychotics such as clozapine can reduce relapse and readmission rates in consumers with schizophrenia and related disorders.

## **Strategies for reducing readmission rates**

The literature cites some examples, though not many, of strategies designed to reduce readmission rates. Those that are cited tend to be designed to address two of the above service-based factors (poor discharge planning and suboptimal community follow-up and support).

### ***Improved discharge planning***

There is a paucity of well-documented initiatives described in the literature that are designed to facilitate consumers' transition from inpatient to community settings in order to improve their outcomes (including to reduce their readmissions). One example is the Transitional Discharge Model, which has been implemented in countries like Canada and Scotland and includes peer support and an extension of relationships with inpatient service providers (Forchuk et al., 2007).

### ***Improved community follow-up and support***

There is also a dearth of literature describing efforts to improve community support for people discharged from inpatient mental health services. The United Kingdom provides an example of Crisis Resolution and Home Treatment Services, which are similar to Australian Crisis Assessment and Treatment Teams and have been funded to provide acute/crisis care for consumers living in the community, with a view to reducing the need for admissions (and readmissions). These teams have been evaluated positively (Bourne, 2007).



# Chapter 4: Key findings from the opinion pieces

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## Scope of the opinion pieces

As noted in Chapter 2, opinion pieces were sought from the following mental health service organisations:

- Western Sydney Area Health Services – Blacktown Adult Mental Health Services (NSW);
- South Eastern Sydney Illawarra – St George Hospital and Community Services (NSW);
- Barwon Health (VIC);
- Bayside Health (VIC);
- Rockhampton Mental Health Services (QLD);
- South Metro Area Health Services - Fremantle (WA);
- Noarlunga Health Services (SA); and
- ACT Adult Mental Health Services (ACT)

## Contextual information

The eight mental health service organisations providing opinion pieces varied considerably in terms of the size of the populations they served, largely depending on whether they were located in urban or rural areas. The largest service provided for a population of 1,400,000 people, whereas the smallest served 100,000. The make-up of these populations also differed (e.g., in terms of the proportion of the population accounted for by people from culturally and linguistically diverse backgrounds, by people of Aboriginal and Torres Strait Islander descent etc).

The organisations shared in common a multi-disciplinary, integrated service delivery model which provided both inpatient and ambulatory care across the age spectrum, although the degree of integration varied across organisations. In some organisations staff worked across both inpatient and ambulatory settings, which enabled consumers to have the same treatment team across the two. More commonly, however, inpatient and ambulatory services had their own dedicated staff but good continuity of care between the two settings was promoted by co-location of inpatient and ambulatory teams and/or sound communication systems. Not surprisingly, the larger organisations offered a broader range of inpatient and ambulatory services than the smaller ones.

There was also significant variation across the eight organisations in terms of the housing options available for consumers discharged from inpatient care. Some had access to a range of community residential beds within their own organisations, other supported accommodation options provided by non-government organisations, dwellings provided by state Departments of Housing, privately-operated boarding

houses and private rentals. Others had limited access to any of these options (e.g., one organisation had a single boarding house within its catchment). Respondents from all organisations, including those with relatively greater housing options available, indicated that the lack of appropriate housing for people with mental illness was a critical concern.

The organisations also differed in the way in which they managed demand for acute inpatient beds, although there was a common theme of increasing sophistication in bed management processes across all organisations. A number of services had instituted dedicated staff positions with responsibility for monitoring and improving the flow of consumers, particularly those presenting via the emergency department. Some had also put in place short-term alternatives to acute inpatient stays of up to 48 hours (e.g., psychiatric emergency care centres), and others had developed reporting systems which provided information on the status of beds across the area on a daily basis.

Discharge processes also varied across organisations, although again all recognised the importance of co-ordination between inpatient and ambulatory care. In most services, the discharge decision was made by the treating psychiatrist in collaboration with other service providers, the consumer and his/her carer(s). A number of services explicitly involved a social worker in the discharge process, and one had a dedicated staff member assigned to conducting discharge planning activities in the inpatient unit. All services had systems in place to ensure that individuals were seen by a clinician or case manager within seven days of discharge; for one there was a financial incentive designed to encourage this practice. Some services had instituted innovative practices to make the discharge process as smooth as possible, including systems to track progress. One service had an early discharge case management system which involved a Crisis Assessment and Treatment Team (CATT) intensively managing at-risk consumers for up to two weeks post-discharge.

## **Usefulness of readmission rates as a key performance indicator in mental health**

Staff (clinicians and managers) and consumers and carers who were surveyed to inform the opinion pieces were not explicitly asked about the usefulness of 28-day readmission rates as a key performance indicator in mental health, but some of their responses incidentally informed this question. Most equated unplanned readmissions with sub-optimal mental health care, validating the indicator as a proxy for quality. Having said this, they readily commented on the factors that might shape readmission rates for a given service (see below), thereby implicitly suggesting that the indicator needs to be risk-adjusted in the light of a range of contextual variables. In addition, one respondent noted that having a readmission rate of zero may not necessarily be a good thing, because this may indicate an unresponsiveness of services to high-risk consumers who unavoidably relapse after discharge.

## **Factors that influence readmission rates**

Survey respondents expressed a range of views about their given organisation's 28-day readmission rate. Consistent with the literature reviewed in Chapter 3, the factors these survey respondents mentioned as likely to influence these rates can be categorised as consumer-based or service-based.

## ***Consumer-based factors***

**Diagnosis:** Some respondents commented on the interaction between mental illness and substance use, noting that individuals with drug and alcohol problems might be particularly likely to be readmitted. Substance use featured prominently among the disorders cited as being most commonly present in those who were readmitted, as did schizophrenia, mood disorders and personality disorders.

**Other clinical factors:** Some respondents commented on other clinical factors that might influence the likelihood of an unplanned readmission. Previous traumatic experiences were cited, as was seclusion during the index admission. The suggestion was also made that consumers experiencing a first episode of mental illness might be more likely to be readmitted than consumers with longer histories of mental health care. In addition, some mentioned non-adherence to medication as a problem, suggesting that this might increase the likelihood of readmission, especially in circumstances where the medication regime had been changed and/or the consumer had not been stabilised prior to discharge.

**Life circumstances:** Several respondents made the point that consumers' life circumstances are related to their likelihood of readmission. Those who are able to make positive changes to their life circumstances during or after their inpatient stay have a lower chance of being readmitted than those who return to unchanged and/or stressful situations.

**Housing:** A number of respondents made explicit reference to housing, noting that people who are discharged to inappropriate residential circumstances are particularly likely to be readmitted.

**Employment:** Several respondents commented that lack of employment may also be related to unplanned readmissions.

**Family/social support:** Some respondents also observed that lack of social support may constitute a risk factor for readmission.

## ***Service-based factors***

**Length of stay and service capacity:** A number of respondents suggested that unplanned readmissions are likely to occur in circumstances where the consumer is discharged too quickly, before he or she is well enough to return to the community. Several perceived an inverse relationship between length of stay and likelihood of readmission. Others indicated that it was not length of stay per se that was predictive of readmissions, but rather the capacity of the service to effectively and efficiently meet the needs of the consumer with respect to discharge planning, community support etc.

**Discharge planning:** Respondents blamed poor discharge planning for many readmissions. They noted that if discharge is hurried and/or handover from inpatient to community staff is not done properly, consumers are likely to be returned to inpatient care prematurely.

**Community follow-up and support:** Several respondents also commented that even when discharge processes are in place, they do not always work optimally. For example, some commented that allocation of case managers is sometimes delayed

and community follow-up is not always timely, and these factors can contribute to readmissions.

**Community workers' caseloads:** Respondents also cited the high caseloads of community workers as being implicated in high readmission rates, because they result in fewer visits and less support being offered to any individual. Some observed that community teams with relatively low caseloads (particularly those with a focus on early intervention) have commensurately low readmission rates. Others noted that with lower caseloads, case managers can be more responsive to consumers who are discharged with high levels of need.

**Supply of clinical staff:** Some respondents observed that staff shortages can play a role in increasing the likelihood of readmissions. In particular, respondents mentioned that where services lack sufficient social workers, medical staff and/or nurses, consumers may 'fall through the cracks'.

**Degree of consumer engagement:** Respondents observed that the degree to which clinicians establish a rapport with consumers can have an impact on the likelihood that they will be readmitted. They viewed the level of engagement, as well as the quality of engagement, as crucial.

**Medication issues:** A number of respondents suggested that medication issues can influence the probability of a consumer being readmitted. In particular, several discussed the therapeutic benefits of particular drugs such as clozapine, noting that in many cases these maximise community tenure.

**Availability of non-clinical support services:** Respondents commented on the fact that where psychiatric disability rehabilitation and support services are available, recovery is promoted and the likelihood of unplanned readmission is mitigated.

## **Strategies for reducing readmission rates**

Survey respondents made a number of recommendations regarding strategies to be implemented to reduce unplanned readmission rates.

### ***Improved discharge planning***

Respondents noted that some of the discharge planning strategies that have been put in place by their own organisations (described above) appear to be working well. These include addressing issues at home that may have contributed to the original inpatient admission and putting in place early discharge management plans.

### ***Improved community follow-up and support***

Respondents stressed the need for improved clinical and non-clinical support for people discharged into the community. They suggested that a more assertive community response from ambulatory mental health teams was required, focusing on relapse prevention and early intervention. They also noted that GPs and carers can have an important role to play in maintaining a consumer in the community and recognising early warning signs of a relapse.

### ***Improved data management systems***

Respondents also observed the importance of good data management systems in tracking the progress of consumers from inpatient to community care.

# Chapter 5: Key findings from the site visits

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## Scope of the site visits

The following four organisations participated in the site visits:

- South Eastern Sydney Illawarra – St George Hospital and Community Services (NSW);
- Bayside Health (VIC);
- Rockhampton Mental Health Services (QLD); and
- Noarlunga Health Services (SA).

## Developing a framework to examine strategies to reduce readmissions

The literature reviewed in Chapter 3 and the opinion pieces reported in Chapter 4 pointed to a range of consumer-based and service-based factors that might influence readmission rates, and to a number of strategies which might have potential for reducing these rates. The site visits were designed to explore strategies that have actually been put in place 'on the ground' to reduce readmission rates.

Findings from the literature review and the opinion pieces were used to develop a framework within which to explore sites' strategies for reducing readmission rates. As an example, both the literature review and the opinion pieces suggested that discharge planning can have an influence on readmission rates, so discharge planning processes were explored in the site visits.

In total, the framework included the following eight dimensions:

- Business rules and governance;
- Interface between inpatient and ambulatory services;
- Consumer flow decisions;
- Discharge planning;
- Purpose of admission/readmission;
- Length of stay, occupancy and readmission;
- Consumer and carer communication; and
- Illness influences.

## **Strategies for reducing readmission rates**

### ***Business rules and governance***

Key informants from all four organisations indicated that they considered good business rules and governance important in addressing 28-day readmission rates, but differed in terms of how they interpreted the terms. Many could broadly articulate the philosophy of the organisation and the direction in which they were working, but few could reference a framework on which governance and business rules were based.

All four organisations emphasised a continuum of care across inpatient and ambulatory services, although their articulation of their models of care across these settings varied considerably. All had in place clinical flow pathways across the continuum, although they did not necessarily identify these pathways as such. All had in place examples of relevant documentation related to the continuum of care (e.g., referral and transfer forms), but these were standardised to varying degrees.

Very few organisations offered standardised treatment, although all provided what might be regarded as a core set of treatment options and staff pointed to a range of evidence-based guidelines to which they adhered (e.g., early intervention guidelines). One organisation had attempted to standardise its clinical approach by offering all staff training in cognitive behavioural therapy.

Monitoring of clinical flows and treatment patterns occurred to varying degrees, including monitoring of 28-day readmissions. Several organisations routinely held multidisciplinary team meetings at which unplanned readmissions (and outlier lengths of stay) were discussed. Three produced and distributed monthly management reports which, amongst other things, provided data on 28-day readmission rates at an individual unit or team level. Several organisations indicated that they explicitly monitored 28-day readmissions in one way or another with a view to creating 'learnings' for future discharges.

All four organisations displayed proactive clinical leadership across medical and nursing structures, and two showed similar leadership in allied health. Leadership and management groups reported using data on 28-day readmissions in the day-to-day running of their service, although there were few instances of documentary evidence of this. There was a suggestion that business decisions were more likely to be made on the basis of financial and activity data than on key performance indicators, due to managers being unaccustomed to using the latter to support business decisions. Some staff indicated a concern that key performance indicator data might be used by management in a punitive fashion, although they could not cite instances in which this had happened.

### ***Interface between inpatient and ambulatory services***

The literature review and opinion pieces suggested that the interface between inpatient and ambulatory services (including community-based mental health teams, primary care providers and non-government services) exerts an important influence on 28-day readmission rates. The site visits shed light on how this interface operated within the four selected organisations.

All four organisations had systems for referral of consumers from the inpatient unit to an ambulatory team which might be co-located with the inpatient unit or might be

stand-alone. All referral systems were paper-based and included a system of review by the receiving team. Typically, the referral to the ambulatory setting involved the allocation of a case manager. There was considerable variability in terms of the timeliness for acceptance of referrals by a case manager, with six weeks being the norm in some instances. Two organisations prioritised the allocation of a case manager (e.g., to consumers who were discharged on community treatment orders). Organisations differed in terms of the function of the case manager, with relatively long-term (more than three months) assertive community care of some description being the most common.

The interface between inpatient units and primary care providers (specifically general practitioners) appeared to be suboptimal in all four organisations. Although all organisations routinely sent discharge summaries to a consumer's general practitioner within 24 to 48 hours, general practitioners had little involvement at the point of discharge (or, for that matter, when the consumer was admitted). Most organisational activity aimed at increasing the involvement of general practitioners was targeted at specific elements of care (e.g., equipping them to prescribe clozapine or manage consumers' physical health needs) or at managing consumers with particular diagnoses (e.g., borderline personality disorder). There was, however, one example of a program designed to transfer the care of consumers to general practitioners within a defined timeframe.

All four organisations recognised the importance of non-government organisations in promoting recovery for consumers discharged from inpatient care, as evidenced by their having memorandums of understanding with a number of non-government organisations within their catchments. However, there was little evidence that this translated into operational processes that were consistent or sustained. Having said this, there were some examples of good practice, such as a housing pathway enabled by the routine involvement of a housing worker in discharge planning meetings.

### ***Consumer flow decisions***

The literature review and the opinion pieces both suggested that consumer flow decisions may have an impact on readmission rates. Across all four organisations involved in the site visits, consumer flow decisions were largely seen as the responsibility of medical staff, with approval of any admission or discharge being dependent on an assessment by a psychiatrist. Pressures on beds at all four organisations have led to some innovative practices to co-ordinate patient flow.

The first example occurred in two organisations. These organisations have taken a proactive approach to discharge which involves the treating psychiatrist nominating a predicted discharge date which all staff involved in the consumer's care work towards. In some instances, nursing staff were also involved in 'flagging' consumers whom they considered ready for consideration for discharge. Key informants at these sites commented that the process was helpful in focusing care on discharge planning. However, they noted that because many consumers are admitted with quite severe symptomatology, it was sometimes difficult for medical staff to accurately nominate a date. It was also noted that the process was influenced by the personal preferences of medical staff regarding optimal lengths of stay.

The second example was adopted by several organisations, and involved the appointment of a dedicated bed flow co-ordinator with responsibility for co-ordinating bed access across several units.



The third example took the form of weekly length of stay meetings. These meetings were attended by staff from a range of disciplines, and considered obstacles to discharge and how these should be addressed for individual consumers. The outcomes from these meetings were clear, articulated into care planning and evaluated. These multidisciplinary reviews were a feature in all organisations. In three of the four, steps had been taken recently to broaden the attendance at the meetings to include staff from relevant ambulatory services, either by telephone or face-to-face.

### ***Discharge planning***

As noted above, the literature review and the opinion pieces both cited discharge planning as an important factor in shaping readmission rates. The site visits expanded on this, and suggested a range of strategies for improving discharge planning processes. Some of these have been mentioned above under 'Interface between inpatient and ambulatory services' and 'Consumer flow decisions' (e.g., involving a housing worker in discharge planning, nominating and working towards a specified discharge date). Others are described below.

Multidisciplinary review of individual cases was cited as a mechanism for improving discharge planning at all sites. In two sites, allied health professionals (particularly social workers) were included in the review if relevant needs were identified. In the other two sites, allied health professionals were routinely involved in all reviews. Indeed, in one of these two sites, all discharge planning activities were co-ordinated by a social worker.

Another common approach to improving discharge planning was the use of a mapping tool. The nature of this tool varied across organisations, but it always involved articulation of the roles and responsibilities of different services and individual providers and identification of goals or outcomes to be achieved.

A graduated approach to leave, mentioned in the opinion pieces, was used as a formal strategy in two of the four organisations, and as an informal one in the other two. This approach has been designed to enable an assessment of readiness for discharge. Key informants from the sites indicated that this approach was valuable in reducing readmission rates but that it relied on bed occupancy and length of stay profiles that could accommodate such a staged approach.

Another cited strategy involved ongoing monitoring of discharge planning arrangements. One organisation, for example, routinely assessed the current status of discharge planning arrangements and automatically delayed discharge by a further 24 hours when doubts arose about the preparedness of the consumer or the suitability of his/her emotional and environmental supports.

### ***Purpose of admission/readmission***

The literature review and the opinion pieces indicated that interpreting 28-day readmission rates requires them to be considered in the light of a range of contextual factors. One of these is the purpose of the original admission and the readmission. The site visits explored the issue of purpose in some detail.

Key informants at the four sites suggested that the purpose of an admission was to manage risk. Acuity of symptoms was also seen as important, but the high demand

on beds meant that a consumer's risk to him or herself or to others was seen as paramount.

Key informants made some subtle distinctions between the purpose of admission and the purpose of readmission. They indicated that risk would also play a large part in a decision to readmit someone, but the notion of risk might be interpreted more broadly. In addition to risk of self-harm or harm to others, the decision might be influenced by perceived risk of 'accommodation failure', lack of adherence to treatment regimes, risk of exploitation, financial risk and risk of carer burden. Some of these risks relate to social deprivation and are likely to be associated with substance use, two factors which key informants cited as underlying many readmissions. All of the organisations had some systems in place to monitor these risks, including assertive follow-up of consumers who did not attend an ambulatory appointment after discharge, and early identification of deterioration.

Key informants also commented on the role that the culture of an organisation plays in decisions to readmit someone to an inpatient setting. All four organisations, like the majority of their counterparts across Australia, take the view that, as far as possible, care should be provided in the least restrictive environment. Key informants noted that different organisations interpret this service imperative in various ways, effectively applying different thresholds for determining that an inpatient stay is required. Several key informants commented that organisational leadership often exerts an influence here, dictating the way that individual levels of risk are balanced against the organisational view of the most appropriate care setting.

### ***Length of stay, occupancy and readmission***

The literature review and opinion pieces suggested that length of stay and bed occupancy may be intertwined with 28-day readmission rates, although the evidence was not clear-cut. The site visits offered further perspectives on these related phenomena, and provided some examples of strategies to address these issues.

As with the other data sources, the evidence from the site visits regarding the impact of length of stay on readmissions was equivocal. Consumers, carers and staff of ambulatory services tended to emphasise this as an important contributor to readmission rates, whereas inpatient staff were less inclined to do so. Again, service capacity featured as more important than length of stay per se. None of these key informant groups placed great weight on bed occupancy as a factor influencing readmission rates.

The site visits uncovered a range of approaches to balancing length of stay, bed occupancy and readmissions, most of which have already been mentioned above under 'Interface between inpatient and ambulatory services' and 'Consumer flow decisions'.

### ***Consumer and carer communication***

The site visits elucidated various issues regarding communication with consumers and carers which were flagged in the literature review and the opinion pieces.

Some of the consumers interviewed during the site visits commented on the need for explicit strategies to improve communication with them. In particular, they felt that their concerns regarding their basic needs (e.g., housing, finances) were often not

heard, that services often did not 'step in' until a crisis point had been reached, that inpatient stays could be quite traumatic, and that they were often not sufficiently involved in planning for their own discharge. They suggested that inpatient staff, case managers and general practitioners could all be better trained in communication skills.

Some carers also expressed dissatisfaction with the extent and nature of communication. They felt that at best this communication was 'one-way', and did not feel 'engaged'. They observed that often their input was not sought during the discharge planning process. They also noted that many readmissions could be avoided if their concerns about their family member's progress were heeded earlier. Again, carers commented that inpatient and ambulatory mental health staff could be better trained in listening skills.

### ***Illness influences***

Both the literature review and the opinion pieces identified a number of consumer-based factors that potentially have an impact on 28-day readmission rates. For the purposes of the site visits, these factors were broadly called 'illness influences'. Information from key informants and data from admission systems at the four organisations confirmed some of these factors as important. For example, they noted that people with a diagnosis of schizophrenia are particularly likely to be readmitted, as are those with co-morbid substance use and/or physical health problems, and housing problems. More generally, key informants observed that these factors often operate together and commented that this, combined with the chronic and episodic nature of many mental illnesses, means that there is increasing pressure on mental health services which has implications for readmissions.

There were several examples across the organisations of interventions targeted at particular groups of consumers which aimed to reduced readmissions. For instance, one organisation provided an example of a dialectical behavioural therapy (DBT) program for people with schizophrenia which showed promising early results in decreasing readmissions among this cohort.

# Chapter 6: Discussion

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## Summary of key findings

Data from the literature review and the opinion pieces suggested that 28-day readmission rates are a potentially useful key performance indicator, but that they must be interpreted with caution. Readmission may not always be an undesirable outcome, and readmission rates may not always be a good proxy for service quality and will require risk adjustment if they are to be interpreted correctly.

The literature review and opinion pieces also identified a number of consumer-based and service-based factors that are likely to influence readmission rates. The consumer-based factors included: age and gender; ethnicity; diagnosis; level of functioning; severity and persistence of symptoms; stress and psychosocial problems; psychiatric service history; other clinical factors; life circumstances; housing; employment; socio-economic status; and family/social support. The service-based factors included: bed occupancy; length of stay and service capacity; discharge planning; community follow-up and support; community workers' caseloads; supply of clinical staff; degree of consumer engagement; medication issues; and availability of non-clinical support services.

The literature review and opinion pieces also pointed to a number of strategies that might be helpful in reducing readmission rates. In the main, these related to improving discharge planning, improving community follow-up and support, and improving data management systems. The site visits identified 'on the ground' practice related to reducing readmission rates in the areas of: business rules and governance; interface between inpatient and ambulatory services; consumer flow decisions; discharge planning; purpose of admission/readmission; length of stay, occupancy and readmission; consumer and carer communication; and illness influences.

## Strengths and limitations

The current project had a number of strengths that make it unique and enable it to make a significant contribution to knowledge. It combined scientific evidence presented in the international literature with expert opinion from passionate, committed individuals from local services. In particular, the opinion pieces and site visits explored the views of managers, clinicians, consumers and carers with an intimate understanding of the way in which their services operate. The opinion pieces were elicited from services that provide broad representation of services around Australia. The site visits involved a subset of these services which were explicitly chosen because they had particularly low 28-day readmission rates and/or were undertaking innovative activities designed to reduce these rates. Both the opinion pieces and the site visits involved a systematic, comprehensive data collection protocol.

Having said this, some limitations must be acknowledged. Specifically, some key publications may have been missed in the literature review, and some selection biases may have operated in the opinion pieces and the site visits.

## Towards best practice guidelines

The above caveats aside, the project's findings point to some areas of practice that are likely to reduce 28-day readmission rates, listed below. Some of these strategies and activities involve a system-wide approach, whereas others target points in the continuum of care where particular problems may occur (e.g., in the discharge planning process or in community follow-up).

- Good governance is required to reduce 28-day readmission rates. This requires strong clinical leadership from psychiatrists and other medical staff and clearly articulated expectations and business rules.
- Consumer engagement is crucial, and should occur at all stages in the continuum of care. This relies on good two-way communication between inpatient and ambulatory service providers and consumers, and should focus on recovery.
- Family members and carers should be involved throughout the care continuum. Again, this relies on good two-way communication.
- Provision of care across inpatient and ambulatory services should be 'seamless', irrespective of the overarching organisation's model of service delivery. In some cases, this may mean joint staff appointments across the two settings. In others, it may involve co-location of an ambulatory team within an inpatient unit. In still others, it may involve ambulatory case managers retaining a role in the consumer's care during an admission, and leading discharge planning.
- Articulated systems should be put in place to monitor and manage inpatient lengths of stay, bed occupancy, admissions and readmissions. These systems should be proactive rather than reactive.
- Discharge planning should be systematic and thorough. It should give weight to the consumer's clinical status, as well as to the circumstances to which they will return (e.g., availability of appropriate housing). It should involve input from the consumer, his or her carer(s) and multidisciplinary inpatient and ambulatory staff. Ideally, it should also involve workers from relevant non-government organisations who may play a crucial part in promoting recovery after discharge. Wherever possible, the planning process should involve nominating and working towards a date of discharge. Assessing readiness for discharge should also occur in many circumstances.
- Community follow-up should be proactive and occur within seven days of discharge.

## Conclusions

The current project provides a platform from which to consider 28-day readmission rates as an indicator of service quality. It suggests that monitoring 28-day readmission rates is a worthwhile exercise, but that care should be taken to ensure that given services are appropriately compared with their peers (e.g., those with similar casemix). It also suggests that steps can be taken to reduce 28-day admission rates in an effort to improve service quality. These steps involve taking a

system-wide approach to addressing the key consumer-based and service-based factors that influence 28-day readmission rates.

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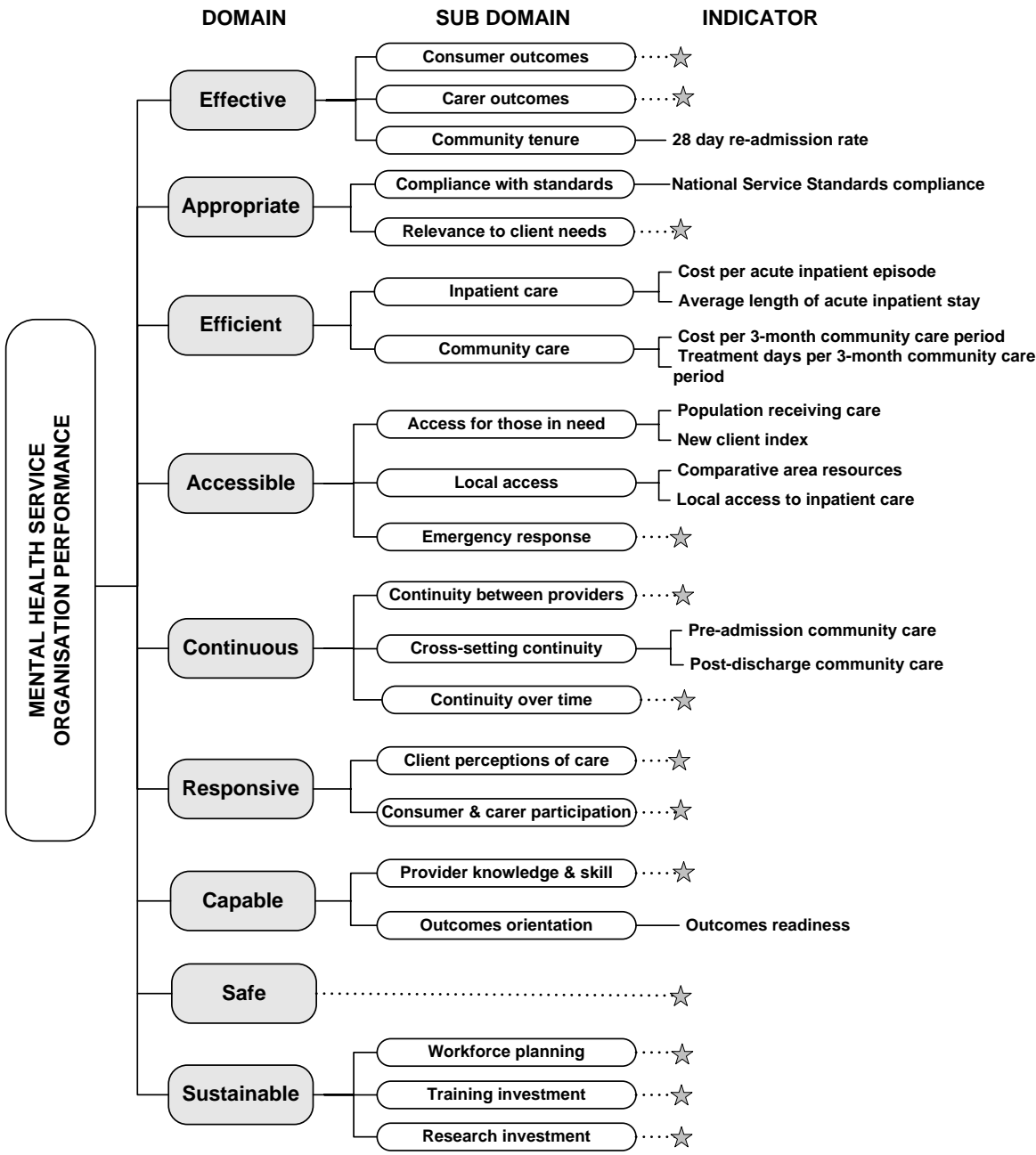
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# Appendix 1: Summary of performance framework and indicators for Australian public sector mental health services



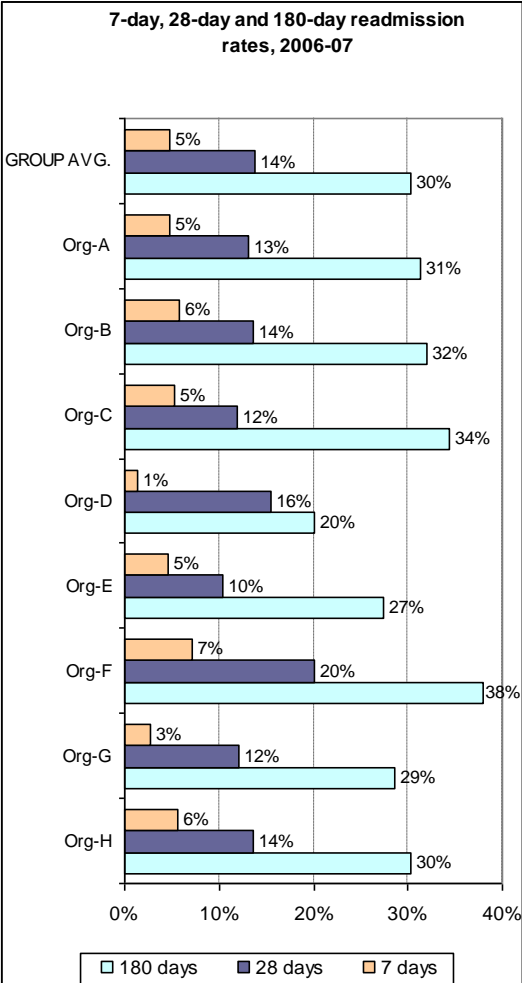
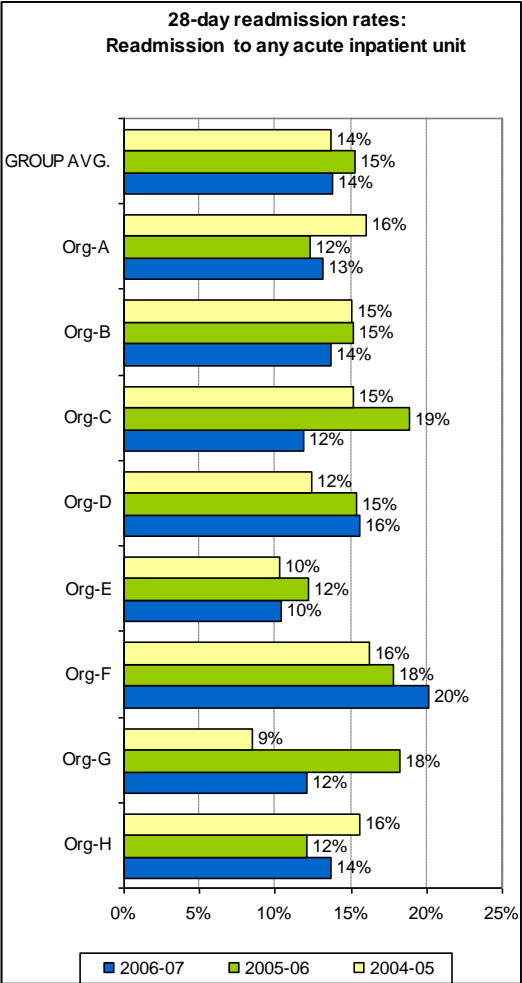
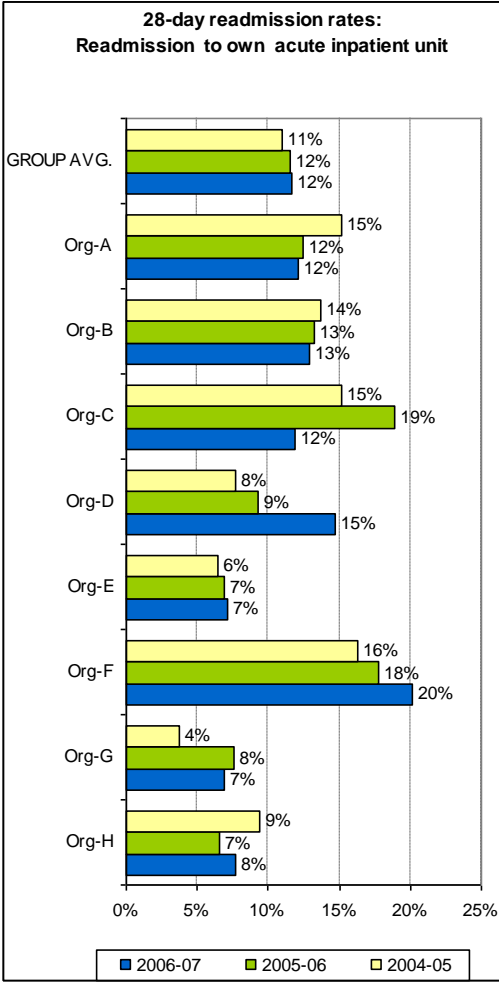
Key: ☆ = Phase 2 Indicators for development

## Appendix 2: Benchmarking Forum participants

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<p><b>Adult Benchmarking Forum</b></p> <ul style="list-style-type: none"> <li>• Western Sydney Area Health Services – Blacktown Adult Mental Health Services (NSW)</li> <li>• South Eastern Sydney Illawarra – St George Hospital and Community Services (NSW)</li> <li>• Barwon Health (VIC)</li> <li>• Bayside Health (VIC)</li> <li>• Rockhampton Mental Health Services (QLD)</li> <li>• South Metro Area Health Services - Fremantle (WA)</li> <li>• Noarlunga Health Services (SA)</li> <li>• ACT Adult Mental Health Services (ACT)</li> </ul>
<p><b>Child and Adolescent Benchmarking Forum</b></p> <ul style="list-style-type: none"> <li>• Eastern Child and Adolescent Mental Health Service (VIC)</li> <li>• Northern Sydney and Central Coast Area Health Service (NSW)</li> <li>• Mater Child &amp; Youth Mental Health Services (QLD)</li> <li>• South Metro Area Health Service - Bentley (WA)</li> <li>• Southern Child and Adolescent Mental Health Services - Flinders Medical Centre (SA)</li> <li>• ACT Child and Adolescent Mental Health Services (ACT)</li> </ul>
<p><b>Older Persons Benchmarking Forum</b></p> <ul style="list-style-type: none"> <li>• Sydney South West Area Health Service - Braeside Hospital Aged Care (NSW)</li> <li>• Aged Mental Health, Northwestern Health - Melbourne Health (VIC)</li> <li>• Aged Care Mental Health Service, Princess Alexandra Health Service District (QLD)</li> <li>• Bentley Elderly Mental Health Service, South Metro Area Health (WA)</li> <li>• Repatriation General Hospital (SA)</li> </ul>
<p><b>Forensic Benchmarking Forum</b></p> <ul style="list-style-type: none"> <li>• Justice Health (NSW)</li> <li>• Forensicare (VIC)</li> <li>• The Park – Centre for Mental Health (QLD)</li> <li>• State Forensic Mental Health Service (WA)</li> </ul>

# Appendix 3: Readmission rates for de-identified Adult Benchmarking Forum organisations



# Appendix 4: Proforma used for collecting opinion pieces

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(Service Name)

(Address)

(Contact Person/Author)

(Phone :)

(Service Model - include level of integration between inpatient & ambulatory services)

(General Population & Consumer Characteristics - Metro; rural; Socio economic influences; substance use issues; crime etc)

(Housing Options - any boarding house; SRS's & access by MH services, residential recovery or rehabilitation units)

(Support Services-NGO services and what they provide and how well are they are accessed by MH)

(Bed management- Is there a system and does it work)

(Discharge-Is there a discharge system a local process - i.e. social workers enabling, or family meetings)

(What does management think about the 28 day rate at your service - why? impacts? changes?)

(What do clinical staff think about the 28 day rate at your service - why? impacts? changes?)

(What do consumers think about the 28 day rate at your service - why? impacts? changes?)

(What do carers think about the 28 day rate at your service - why? impacts? changes?)

(Skills Mix - are there issues related to skills mix that may impact on 28 day readmit)

(List the 5 major diagnostic categories of admission to your unit(s))

(5 major diagnostic categories of re-admission to your unit(s))

(And Everything Else you want to put in)

# Appendix 5: Framework and prompt questions for site visits

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## Framework Item 1: Business rules

- Local standards – how things are done? Are there any clinical pathways?
- Guidelines and treatments that are favoured by the organization?
- How are the business rules monitored within the organization? Governance approach?
- How are the business rules used in decision-making? Does the organization use data to inform decisions?

## Framework Item 2: Interface between inpatient and ambulatory services

- Ambulatory service resources – what is available, do consumers wait for case management? What is the referral system b/w inpatient to community?
- What are the accommodation options in the area?
- What is the perceived and actual impact of housing availability?
- Level of support post-discharge (special programs etc) – what types of case management or follow-up offer?
- Are NGOs etc involved in discharge planning or follow-up care?
- Primary care involvement – level of? Formal arrangements? Early reengagement arrangements?
- Communication – is primary care involved in discharge planning
- ? Access to the discharge plan?

## Framework Item 3: Consumer flow decisions

- What is the involvement of medical staff in decisions to discharge and admit?
- If multidisciplinary decision, what disciplines involved and how? Reality vs reported and positive outcomes?
- IS admission criteria interlinked with systems and processes or personal wishes (of Case Managers or medical staff)
- What impacts of individual systems on the movement of consumers in/out of beds and ambulatory services?
- IS there an active bed management organizational system? Does it work well?

## Framework Item 4: Purpose of admission/readmission

- Why do people get admitted? Level of risk, change of environment: mode of practice; Carer burden?
- Acuity rather than behaviour or not?
- Why do people get RE-admitted? Level of risk, change of environment: mode of practice; Carer burden?
- Acuity rather than behaviour or not?
- What part does organizational culture play in readmission rate?
- What is the process for follow-up of DNA outpatient appointments post-discharge?

## **Framework Item 5: Illness influences**

- What impact do staff see diagnosis on admission? Anecdotal and actual
- Local aged differences – ie: younger usually have a longer LOS but less admissions
- Do the diagnostic patterns match (Schizophrenia readmission vs schizophrenia of ALL admissions)
- Demographic Impacts – mitigation factors for the organization
- Impact and mitigation of substance use etc
- What is the local impact of CALD and Indigenous demographics?

## **Framework Item 6: Length of stay; bed occupancy; readmission**

- Is there evidence that correlates LOS with occupancy and readmission? (Nothing much in literature about this but everyone has a feeling they are interlinked - ? any evidence)

## **Framework Item 7: Consumer and carer participation**

- What is the consumer's experience of discharge / readmission process? If they are at the center of the experience what would they report?
- Do Consumers & Carers know who is responsible for what in the discharge plan?
- Is there a management plan (can be part of discharge plan, care plan) and do all who are involved know it and see it?
- Family meetings – when, how, coordinated by whom, who attends? (? A big link in readmission)
- What about precipitous discharge – are family meeting done by community staff???
- What is the model of care the Consumers & Carers experience? Is it recovery & self-efficacy, chronic disease management etc
- What education is provided re: medication safety, use and compliance?

## **Framework Item 8: Discharge planning**

- Clarify who coordinates vs who actually does
- How involved are MH ambulatory services in the discharge planning process?
- How involved are bed based staff – nursing vs allied health vs medical staff vs discharge facilitators?
- What do staff think they DON'T know about discharge (what are unknowns, what else would they like to know about discharged consumers and processes?)
- Are discharges monitored, reviewed including summary, follow-up arrangements and what outcome from the monitoring? (? this is really auditing and the quality system of the organisation)
- Does it happen the way it should?