7-day follow-up: Transitioning from inpatient to community services

Key performance indicator literature review, November 2022

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Executive summary

The first week and month following people's discharge from inpatient mental health services is a particularly vulnerable time. It is essential inpatient and community services ensure people are well-supported during their transitions into life in the community. To support the wellbeing of tāngata whai ora (people seeking wellness), strategic plans for mental health services in Aotearoa New Zealand highlight the need to improve transition processes and options for community services after discharge from inpatient services (Government Inquiry into Mental Health and Addiction, 2018; Health Quality and Safety Commission, 2017; Manatū Hauora Ministry of Health, 2019).

The Key Performance Indicator Framework for New Zealand Mental Health and Addiction Service Programme (KPI Programme) includes the acute inpatient post-discharge community care (7-day follow-up) indicator. This indicator measures the proportion of people who were contacted by a community mental health service within 7 days of being discharged from an inpatient service. The indicator includes people across all ages.

Aim and objectives

This rapid literature review summarises evidence underlying the use of a 7-day follow-up indicator to inform the KPI Programme. It aims to develop a better understanding of the indicator and how it compares to those used internationally.

Specific objectives are to summarise evidence around:

- issues associated with transitions, including early readmission and risk of suicide
- outcomes and enablers of post-discharge follow-ups
- rates of 7-day follow-ups in Aotearoa New Zealand
- post-discharge follow-up measures used in the International Initiative for Mental Health Leadership (IIMHL) countries.

Findings are primarily drawn from journal publications and grey literature via database searches. A key source of information about the 7-day follow-up indicator and rates of follow-ups in Aotearoa New Zealand is the KPI Programme website, which provides key technical information and data sourced from the Programme for the Integration of Mental Health Data (PRIMHD) database.

Key findings

Issues associated with transitions

The literature indicates the time following discharge from inpatient mental health services can be a vulnerable period for some people. Commonly studied issues associated with transitions include early readmission and suicide.

Evidence identifies factors that increase people's likelihood of early readmission, such as having no plans to be followed up after discharge, and insufficient or a lack of comprehensive discharge planning (Callaly et al., 2011; Durbin et al., 2007; Steffen et al., 2009). Early readmission indicates that people may not have received adequate support from inpatient services; continue to experience high levels of distress; are underprepared for community living; have limited community or whānau support; or experience challenges in accessing community or culturally relevant services (Donisi et al., 2016; Durbin et al., 2007; The Key Performance Indicator Framework for New Zealand Mental Health and Addiction Services, 2021).

The literature highlights a concerning proportion of people who die by suicide within the first week or month following their discharge from inpatient mental health services. In Aotearoa New Zealand, of the 476 people who died by suicide in 2015, 201 people (42 percent) had contact with specialist mental health services the year prior. Of all tāngata whai ora who were in contact with mental health services in the year prior to dying by suicide between 2001 and 2015, 171 people (nearly 7 percent) died within 1 week of discharge (Manatū Hauora Ministry of Health, 2019). These findings highlight the critical role follow-ups play in supporting people's wellbeing after discharge.

Post-discharge follow-ups

Follow-ups involve services contacting tāngata whai ora via phone or video, home visits, or in-person appointments in the community. Post-discharge follow-ups can improve people's transitions by reducing the likelihood of early readmissions and suicide; increasing service contact; improving quality of life and satisfaction with services, including relationships with mental health service staff (Chen et al., 2020; Marino et al., 2016; Tyler et al., 2019; Vigod et al., 2013).

Key enablers to supporting post-discharge follow-ups include whānau involvement and comprehensive discharge planning (Haselden et al., 2019; Patel et al., 2019; Robst et al., 2014; Smith et al., 2022). More broadly, other enablers to supporting people's transitions include the appointment of staff to oversee transitions, efficient information sharing between staff and services across inpatient and community settings, psychoeducation, and the provision of 24-hour support for people recently discharged (Patel et al., 2019; Sather et al., 2018; Schmutte et al., 2022; Tyler et al., 2019; Vigod et al., 2013). These actions improve continuity across service settings in ways that support improved outcomes for people and their whānau.

Rates and measures of post-discharge follow-ups

In Aotearoa New Zealand, rates of 7-day follow-ups have remained relatively stable over time, at around 80 percent between 2017 and 2021. The Programme for the Integration of Mental Health Data (PRIMHD) database indicates that in 2021, Māori and Pākehā[1]

[1] Defined as New Zealanders of European ancestry.

experienced slightly lower rates of follow-ups (79 percent) than Pasifika (83 percent) and Asian peoples (84 percent). Looking at age groups, people aged 65 years and over experience the lowest rates of 7-day follow-ups (72 percent).[2] Though the data shows small differences between population groups, rates indicate that at least 1 in 5 people are not followed up within 7 days after discharge. More research is needed to identify the barriers people experience in receiving timely follow-ups, particularly older people.

Measures of post-discharge follow-ups were found for all IIMHL countries except the Netherlands. Most IIMHL countries measure the proportion of people who are followed up within 7 days after discharge. The only difference appears to be in timeframes: England uses 3 days, Norway 30 days, Sweden 7 or 8 days, and the US uses both 7 and 30 days across different states. This consistency in post-discharge follow-up measures allows for some international comparability.

Conclusion

The KPI Programme's 7-day follow-up indicator is useful and appropriate given evidence indicates the first week after discharge is a vulnerable time for some people. Along with studies showing positive outcomes of follow-ups in the community, the literature highlights the critical role that post-discharge follow-ups play in supporting people's wellbeing. International evidence also shows Aotearoa New Zealand's post-discharge follow-up measure aligns with those used in other IIMHL countries. It is therefore recommended that the KPI Programme continue to use the 7-day follow-up indicator. No changes are recommended because it collects data for all population groups that the KPI Programme serves, and its parameters align with those used internationally. There is a need for further exploration and sector consultation, including with Māori, lived experience, and whānau, into barriers which prevent tāngata whai ora from receiving follow-ups within 7 days after discharge.

[2] There are small differences for other age groups, ranging from 76 percent for people aged under 18, to 82 percent for people aged 45 to 54 years old.

Background

The first week and month following discharge from adult mental health inpatient services marks a critical period in people's mental health service journeys. A responsive community support system for people leaving inpatient services is essential to their health and wellbeing and to minimise the need for readmission (KPI Programme, 2022a). International evidence indicates that good planning before a person is discharged, which incorporates people's health and broader social needs, is critical in effectively supporting people as they move from an inpatient stay, to returning to life in their communities (Office of the Auditor-General, 2017).

Submissions to *He Ara Oranga* (Government Inquiry into Mental Health and Addiction, 2018) highlight the need for increased options for people's discharge into the community, improving follow-up times, reducing waitlists for further support, and increasing options for community services to make services more accessible for people. The Health Quality & Safety Commission identifies improving service transitions as a priority area of the national mental health and addiction quality improvement programme (Health Quality & Safety Commission, 2022). The New Zealand Office of the Auditor-General (Manatū Hauora Ministry of Health, 2019) recommends inpatient mental health services raise the standard of service delivery during inpatient to community transitions. This includes improving the use of information to measure, monitor, and report on transition processes and outcomes, and improve service quality.

KPI Programme 7-day follow-up indicator

The Key Performance Indicator (KPI) Programme is a mental health and addiction sector owned and led initiative. The programme facilitates continuous service quality improvement across districts and their non-government organisations (NGOs) through collective data collection, data analysis, benchmarking, learning, and problem-solving. The KPI Programme uses data from the PRIMHD database.

The KPI Programme includes the "acute inpatient post-discharge community care" or 7-day follow-up indicator. This measures the percentage of people who receive a follow-up from a community or NGO mental health service within 7 days of being discharged from a mental health inpatient service.[3] Appendix A provides full details of the indicator.

Aims and objectives

This rapid literature review aims to provide an updated evidence base for the 7-day follow-up indicator, present recent data on 7-day follow-ups in Aotearoa New Zealand, and compare the indicator to those used internationally.

[3] Prior to recent health system changes in Aotearoa New Zealand, this included district health boards (DHBs) and NGOs.

Specific objectives are to summarise recent evidence around:

- issues associated with transitions, including early readmission and suicide
- barriers and enablers of post-discharge follow-ups
- rates of 7-day follow-ups in Aotearoa New Zealand
- post-discharge follow-up measures used in IIMHL countries.

Method

Data and information about the 7-day follow-up indicator was collated from the KPI Programme website dashboard in May 2022.

Literature searches were conducted using EBSCOHost (Academic Search Complete, CINAHL Complete, MEDLINE Complete, Psychology and Behavioural Science Complete), Google, and Google Scholar. Literature published until September 2022 were included. Searches used the following search terms.

- Transition from inpatient to community services, discharge, exiting services, post-discharge, follow-up, post-discharge/community follow-up, post-discharge/community contact.
- Quality measures, performance measures, key performance indicators.
- Mental health, psychiatric, mental health services, behavioural health services.

Some articles included in this review, particularly those relevant to readmission and whānau engagement, were identified from literature searches for other KPI Programme indicators.

Among identified peer-reviewed articles, systematic reviews and meta-analyses were prioritised. Individual studies were included to supplement findings provided by reviews. Grey literature relating to specific performance frameworks and measures was included where relevant. Time and capacity restrictions limited the number of studies identified and appraisal of study quality. The quality and findings of individual studies may vary due to differences in samples, study methods, and settings, but are included to provide additional information that broader reviews may not otherwise cover. See Table 2 in Appendix B for details of studies included.

Though this review primarily aims to inform the KPI Programme around the 7-day follow-up indicator, the searches included literature relevant to the broader transition period, where tāngata whai ora adjust to life in the community after leaving inpatient services. This is to provide a more detailed picture of the importance of supporting tāngata whai ora who have recently been discharged from inpatient services. To reflect what the 7-day follow-up indicator measures, literature searches included studies on young people aged under 24 years, adults, and older adults aged over 65 years. Literature around inpatient services for substance use were excluded.

Where possible, this review reports the odds ratios (OR), hazard ratios (HR), and relative risk (RR) reported by studies. A ratio greater than 1 indicates a higher risk compared to the comparison group; for example an OR of 1.5 indicates a 50 percent higher risk.

Language

This report uses person-centred and strengths-based language.

Tāngata whai ora, defined as “people seeking wellness” is used to refer to people accessing services and to people experiencing mental health challenges or problematic substance use.

Transition is used to refer to the period during and after discharge from inpatient services, when tāngata whai ora adjust to life in the community.

Whānau is primarily used to refer to people’s support networks, including family members, partners, friends, and others who provide support.

Family is used where findings are specifically about people’s immediate families, particularly when referencing international research.

Results

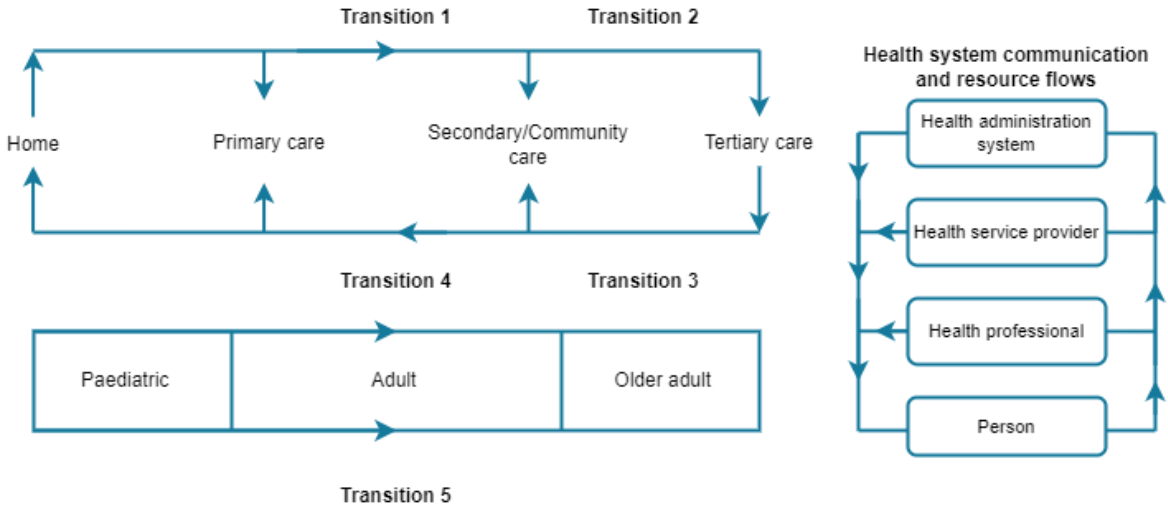
This section presents findings from the literature around factors associated with transitions from inpatient to community mental health and addiction services, and post-discharge follow-ups. Findings are presented as follows.

- An overview of mental health service transitions.
- Issues associated with transitions, including early readmission and suicide.
- Evidence around post-discharge follow-ups and their outcomes.
- Enablers and barriers to post-discharge follow-ups.
- Post-discharge follow-up indicators used in Aotearoa New Zealand and other IIMHL countries.

Mental health service transitions

Transitioning between settings and services can be challenging for tāngata whai ora. People may move between services in primary, community, inpatient, or forensic (tertiary) settings, and may engage with a different provider in each setting. In addition, people experience other types of service transitions as they age, such as transitioning from child and youth to adult services, and from adult services to older people’s services after age 65 (Carswell & Pashkov, 2018), see Figure 1.

Figure 1. The system of service transition



Note. Diagram adapted from Carswell and Pashkov (2018).

The focus of this review is on people's transition from mental health inpatient to community services (called "Transition 3" in Figure 1). Transition processes are complex. These can involve multiple information flows and multiple staff members from different providers. The experience of transition may be a difficult and a highly stressful time for tāngata whai ora and their whānau (Tyler et al., 2019). To support people's wellbeing during transitions, processes need to be person-centred and consider a wide range of the person's social, economic, and health needs. This includes following up with people recently discharged to ensure they are transitioning well into the community.

Some issues associated with transitions include early readmission and risk of suicide. These issues are explored in more detail below.

Outcomes associated with transitions

Some people may find it difficult to be in the community again, or may not have adequate support after discharge from inpatient services. Commonly studied outcomes include early readmission, where people are admitted back into inpatient services soon after being discharged, and suicide.

Early readmission

Early readmission is generally defined in the literature as people returning to services within 7 to 30 days from discharge. Early readmission indicates that people may not have received adequate support from inpatient services; continue to experience high levels of distress; are underprepared for community living; have limited community or whānau support; have limited access to appropriate housing arrangements; or experience challenges in accessing community or culturally relevant services (Adeponle et al., 2009; Donisi et al., 2016; Durbin et al., 2007; Gunnell et al., 2008; Haselden et al., 2019; Sfetcu et al., 2017; The Key Performance Indicator Framework for New Zealand Mental Health and Addiction Services,

2021; Tulloch et al., 2016; Vigod et al., 2013; Zhang et al., 2011). People may therefore need to re-access support to address these needs.

In 2021, around 15 percent of people discharged from inpatient services were readmitted within 28 days (KPI Programme, 2022b). This is in line with international trends in readmission rates, with around 16 percent of people readmitted within the first month (Australian Institute of Health and Welfare, 2021; Department of Health and Ageing, 2013; Durbin et al., 2007; NHS Benchmarking Network, 2019). These rates highlight the importance of providing timely follow-ups with people who have recently exited inpatient services.

The literature identifies various factors associated with early readmissions. An early review found that people who were discharged without specific plans for follow-up in the community were more likely to experience early readmissions (Durbin et al., 2007). Other studies indicate people have a higher risk of readmission if they do not have an adequate discharge plan in place prior to discharge (Callaly et al., 2011; Steffen et al., 2009); if their families are not involved in their treatment (Haselden et al., 2019; Hegedüs et al., 2020); if they have specific mental health diagnoses such as schizophrenia, personality disorders, or co-existing problematic substance use (Chen et al., 2018; Hariman et al., 2020; Sveticic et al., 2020; Wheeler et al., 2011); or if they have experienced multiple previous admissions to inpatient services (Callaly et al., 2011; Tulloch et al., 2016; Wheeler et al., 2011).

Suicide

The transition from inpatient to community services is associated with an increased risk of suicide for some people. A recent meta-analysis found that suicide is the most frequent cause of unnatural death among people who were recently discharged from inpatient mental health services (Swaraj et al., 2019). Instances of suicide can be an indicator of the quality of community services, as well as coordination between inpatient and community services (OECD, 2021).

Studies show people may be at higher risk of suicide after discharge from inpatient mental health services, particularly within the first day and week after discharge (Chung et al., 2019; Hunt et al., 2009; Madsen et al., 2020; Meehan et al., 2006). A range of rates across different time frames can be found in the literature. International studies indicate that of people who died by suicide, between 25 to 55 percent died within 1 week of discharge from inpatient mental health services; 43 percent within 1 month; 25 percent within 3 months; and 1 to 10 percent within 1 year (Bickley et al., 2013; Crawford, 2004; Hunt et al., 2009; Katz et al., 2019; Large et al., 2011; Meehan et al., 2006). Studies also find up to half (41 to 49 percent) of people who died by suicide did so before receiving their first post-discharge follow-up (Bickley et al., 2013; Crawford, 2004; Hunt et al., 2009).

In Aotearoa New Zealand, of the 476 people who died by suicide in 2015, 201 people (around 42 percent) had contact with specialist mental health services in the year prior.[4] Of the 2,615 tāngata whai ora who died by suicide between 2001 and 2015, 171 (nearly 7 percent) died within 1 week of discharge, and 768 (nearly 29 percent) within 1 year (Manatū Hauora Ministry of Health, 2019). It is important to clarify that these rates do not indicate that people who access inpatient mental health services are necessarily at higher risk of suicide; rather, a significant proportion of people who die by suicide are likely to have had recent contact with mental health services.

The literature further indicates that people who die by suicide tend to have recent contact with healthcare services (Ayer et al., 2022; Stene-Larsen & Reneflot, 2019). In a population study by Chiang and colleagues (2021) in Aotearoa New Zealand, over half of people who died by suicide between 2013 and 2015 contacted a primary health service in the 6 months prior to their death (59.4 percent); 46.5 percent contacted a secondary service; and 30.4 percent contacted a tertiary service. Contacts with primary, secondary, and tertiary health services were associated with increased odds of suicide of 2.5, 4.5, and 6.6 times higher respectively. These associations again do not indicate that contacting healthcare services increases people's risk of suicide; rather, among people who die by suicide, there appears to be higher rates of healthcare access compared to the general population. Evidence shows that people who experience mental health challenges and problematic substance use, experience higher rates of physical health issues compared to other people (Te Pou, 2020).

This body of literature highlights the importance of early post-discharge follow-up to minimise the risk of suicide (Chung et al., 2019; Crawford, 2004; Large et al., 2011). Attention should be paid to people who may be at higher risk of suicide as identified in the literature, such as those with a recent history of self-harm or self-discharge (Bojanić et al., 2020; Hunt et al., 2009; Links et al., 2012; Meehan et al., 2006). For example, studies recommend people who self-discharge should be offered the same follow-up arrangements as people whose discharge is planned, such as scheduled and regular follow-up meetings with health professionals (Hunt et al., 2009; Lin et al., 2008).

[4] In reporting rates of service use among people who died by suicide, this report included 525 people with confirmed deaths by suicide, 17 deaths of "undetermined intent", and excluded 66 deaths involving people aged 65 years and over. Older people were excluded from analyses because treatment for older people's mental health was provided by health services specifically for older people rather than general mental health services, and was not necessarily recorded in PRIMHD.

Post-discharge follow-ups

After exiting inpatient services, it is critical for services to follow-up with tāngata whai ora to monitor and support their wellbeing, particularly in the first week after discharge. Follow-ups can include making contact via phone or video, home visits, or in-person appointments in the community. Post-discharge follow-ups can improve the outcomes of transitions for people. Vigod and colleagues' (2013) systematic review found that community follow-ups reduce people's likelihood of early readmissions.

Another systematic review found some evidence that post-discharge contacts can support people's transitions (Tyler et al., 2019): one study in the review found that early post-discharge telephone contacts were associated with about a 50 percent lower risk of suicide (Exbrayat et al., 2017), while another found weekly in-person meetings and telephone calls were associated with decreased suicidal ideation, increased frequency of service contact, and improved relationships with professionals (De Leo & Heller, 2007). Studies focused on young people identify additional positive outcomes of timely follow-ups including increased satisfaction, improved health outcomes and quality of life, and continued education (Chen et al., 2020; Marino et al., 2016).

Enablers to successful transitions and post-discharge follow-ups

The literature identifies various enablers that increase people's likelihood of receiving follow-ups, such as whānau engagement, discharge planning, and increasing continuity of care; as well as barriers that hinder these. These are explored in more detail below.

Whānau engagement

Whānau engagement involves services contacting or consulting with whānau, and including them in decision-making, or the treatment of tāngata whai ora. In the context of Aotearoa New Zealand, whānau includes anyone in the social support network of tāngata whai ora such as families, partners, friends, and others who provide them with support (Manatū Hauora Ministry of Health, 2017). The literature indicates that whānau engagement is associated with positive outcomes including increasing the likelihood of completing follow-ups, reducing readmission, and facilitating recovery (Hariman et al., 2020; Haverfield et al., 2019; Ungar & Theron, 2020). These positive outcomes are due to whānau being an integral source of social and practical support for tāngata whai ora. Specifically, whānau can provide support by providing housing, transport, and support after discharge; providing emotional support; and facilitating communication and information exchange with health professionals (Aldersey & Whitley, 2015; Bradley & Green, 2018; Schuster et al., 2021). It is important for services to consider, however, whether tāngata whai ora want whānau involved in their mental health or addiction treatment. Reasons reported for this in the literature include family conflict, isolation, and their own mental health challenges or problematic substance use (Barnett & Barnes, 2010; Kourgiantakis et al., 2018; Waller et al., 2019). Services are becoming increasingly attentive to the complexities of whānau dynamics when involving whānau in treatment.

There is some evidence that whānau engagement can specifically increase people's likelihood of being followed up after discharge. One study found that people were over 2.5 times more likely to attend follow-up appointments within 30 days after discharge if inpatient staff contacted a support person; and over 3.5 times more likely, if there was any involvement between family and inpatient staff (Haselden et al., 2019). In the same study, communication between inpatient staff and family was also linked with a 2.8 times higher likelihood of attending follow-up appointments within 7 days, and 3.6 times higher likelihood within 30 days after discharge. In another study of young people who were discharged from inpatient mental health services, those whose families were involved during treatment were more likely to receive follow-up outpatient support within 30 days after discharge (Robst et al., 2014).

Discharge planning

Discharge planning aims to facilitate people's transition from inpatient to community care, by coordinating services and providing people with sufficient resources to self-manage in the community (Steffen et al., 2009; Xiao et al., 2019). Overall, discharge planning aims to enhance continuity of care, encourage self-management, prevent readmissions, and improve wellbeing outcomes (Steffen et al., 2009; Xiao et al., 2019). The literature indicates that discharge planning can increase people's likelihood of attending follow-up appointments in the community. Smith and colleagues' study (2022) found that scheduling outpatient appointments as part of discharge plans is associated with a 3 times higher likelihood of people attending the follow-up appointment within 7 days of discharge, and more than 2 times higher likelihood of attending one within 30 days. Additionally, in a qualitative study by Patel and colleagues (2018), caregivers expressed that discharge preparation facilitated their adolescent children's transitions from inpatient services.

Continuity of care

Continuity of care can refer to the practice of health professionals cooperatively overseeing a person's health service journey and providing continuous support, including transitions between services (Jackson & Ball, 2018). Continuity of care is critical in supporting the transitions of tāngata whai ora between inpatient and community services. As the weeks after discharge are a vulnerable time for people, it is important that services in both settings ensure people are well supported. The literature highlights several actions services can take to create a supportive 'bridge' between services as outlined below. It is important to note that while these approaches are shown to positively support people's transitions, the research in this area does not necessarily prove whether they increase the likelihood of tāngata whai ora attending follow-up appointments.

Staff to oversee transitions

Studies highlight the importance of having one responsible staff member to oversee people's transitions, or staff in both settings coordinating to manage transitions (Crawford, 2004; Sather et al., 2018; Vigod et al., 2013). This provides continuity for tāngata whai ora by having a contact person available if they need support, and services can consistently monitor people's wellbeing and outcomes (Lorant et al., 2017). One example is the transitional discharge model, which involves inpatient staff working with people to build a therapeutic relationship with a community worker prior to and after discharge. Studies indicate that this can improve transitions by reducing readmissions for tāngata whai ora (Tyler et al., 2019). The literature also highlights barriers to coordinated staff involvement such as miscommunication during handovers, difficulties in finding the right staff in time, and staff turnover (Carswell & Pashkov, 2018; Meehan et al., 2006; Sather et al., 2018). These can lead to people feeling unsupported during their transition.

Information sharing

It is important for inpatient and community services to share information about tāngata whai ora efficiently, including information about their needs, discharge plans, and social support contacts. This helps community services to effectively support people by supplying specific information related to addressing their needs (Vigod et al., 2013). A lack of communication between services and tangata whai ora and their whānau makes it difficult for services to provide seamless transitional support, if they do not know the extent of the inpatient treatment received and what further support is needed (Lorant et al., 2017; Sather et al., 2018).

Other actions

Other actions to increase continuity of care cited across the literature include transition activities that overlap across settings, providing psychoeducation to people and their whānau, and having 24-hour community support for people who have recently been discharged (Sather et al., 2018; Tyler et al., 2019). Studies also find that prior contact with community mental health services is associated with a higher likelihood of receiving 7-day and 30-day follow-ups (Carson et al., 2014; Fontanella et al., 2016; Khankeh et al., 2011; Schmutte et al., 2022). Vigod and colleagues' (2013) review noted that approaches to improving transitions should continue for as long as the person wants or needs it.

Some studies speak to the effects of transition support for different age groups. Aligning with the findings above, Chen and colleagues' (2020) review of discharge interventions for young people, who exit inpatient child and adolescent mental health services, identified key supportive features including person-centred needs assessments, discharge preparation, links to community services, and psychoeducation. In Patel and colleagues' (2018) study, caregivers identified supports that facilitated their adolescent children's transitions from residential mental health services such as post-discharge support groups, scheduled or regular community support, and engagement in recreational or extracurricular activities.

In Schmutte and colleagues' study with adults aged over 65 years, providing specialised mental healthcare tailored towards older adults, rather than general healthcare approaches, was associated with around a 1.3 times higher likelihood of receiving a follow-up within 7 days after discharge. Another study with older adults indicates that people may need additional types of support, if they have co-existing physical health issues (Proctor et al., 2003).

Barriers to successful transitions and post-discharge follow-ups

The literature identifies various factors associated with people receiving, attending, or completing post-discharge follow-ups. In line with the enablers above, key barriers include low or no whānau involvement during inpatient stay, and insufficient or a lack of comprehensive discharge planning.

A report from the Office of the Auditor-General (2017) identifies barriers tāngata whai ora face in getting support after being discharged. These findings come from national mental health service use data and an audit of services in Aotearoa New Zealand between December 2015 and March 2016, including in-depth visits with three services. Barriers identified are outlined below.

- **Accommodation.** The most frequently reported service barrier was finding suitable accommodation for people leaving inpatient services. Factors such as accommodation costs, shortage of options for people with more complex needs, lack of access to other services in the community, and whānau being unable to accommodate tāngata whai ora can affect people's living conditions after discharge. In 2021, data collected through the Health of the Nation Outcomes Scales (HoNOS) indicates that at the point of discharge from inpatient services, 12 percent of tāngata whai ora experience problems with living conditions. Problems include low support with mental health challenges, missing or lack of basic necessities, risk of eviction, and poor home environments making their mental health challenges worse (Te Pou, 2022).[5]
- **Accessibility.** Available services can vary across the country, with some regions having better access to certain treatment options than others. For example, people experiencing co-existing problematic substance use or physical health conditions can find it difficult to access appropriate support due to capability gaps among mental health staff. It is acknowledged that staff may not have the expertise to address all of a person's physical and mental health needs. Services reported having shared arrangements with services in neighbouring areas to provide continuous support for tāngata whai ora requiring different types of support.
- **Other barriers.** Other service-level barriers to accessing post-discharge support include long waiting lists, funding, eligibility criteria, and a lack of continuous support.

[5] See the HoNOS Guide for New Zealand Clinicians (2021) for full definitions of outcomes measured by HoNOS https://www.tepou.co.nz/uploads/files/resources/HoNOS-NZ-Clinician-Guide-April-2021.pdf

The Auditor-General report (2017) notes that many of these barriers are beyond services' control; rather, improving and integrating mental health services is a priority at all levels including services, organisations, and the broader mental health system.

Some studies identify person-level factors associated with a lower likelihood of receiving timely follow-ups. Schmutte and colleagues' (2022) study found men, people of African-American descent, and people with no access to a mental health or addiction service within 30 days prior to admission were less likely to receive follow-ups within 7 days. Other reasons for missing appointments in general that may affect people's likelihood of receiving follow-ups include forgetting about appointments, having conflicting priorities, experiencing physical or mental wellbeing challenges, and issues with transport and accessibility (Aeby et al., 2015; Binnie & Boden, 2016; DeFife et al., 2010; Manatū Hauora Ministry of Health, 2020).

Patel and colleagues (2018) identified challenges to adolescents' transitions to life at home such as a lack of service support and follow-ups; services not having enough focus on the role of parents and family in supporting the transition; children having low self-esteem or feeling overwhelmed, nervous, or avoidant; and children struggling to reconnect with social support networks.

Measures of post-discharge follow-ups

This section presents post-discharge follow-up measures in Aotearoa New Zealand and other IIMHL countries. Additional data on 7-day follow-up rates are presented for Aotearoa New Zealand.

Aotearoa New Zealand

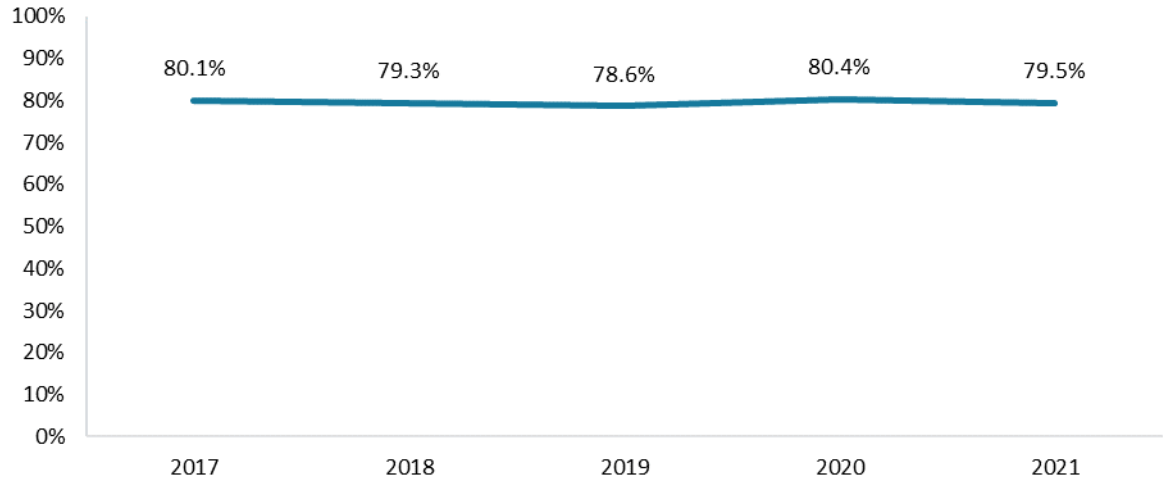
KPI Programme

The KPI Programme includes the acute inpatient post-discharge community care (7-day follow-up) indicator. This indicator describes the proportion of people who have been discharged from an inpatient mental health service, after a stay of at least one night, who have had a community mental health service contact them within 7 days after discharge. The indicator excludes written correspondence, text messaging, and online media contacts. National and district-level summaries for this indicator are publicly available through the KPI Programme website.[6] Appendix A provides more detailed information about this indicator.

[6] Available at https://www.mhakpi.health.nz/kpi-streams/adult-stream/acute-inpatient-post-discharge-community-care/

Figure 2 shows average annual rates of the 7-day follow-up indicator from 2017 to 2021. Rates of 7-day follow-ups have remained largely stable over time.

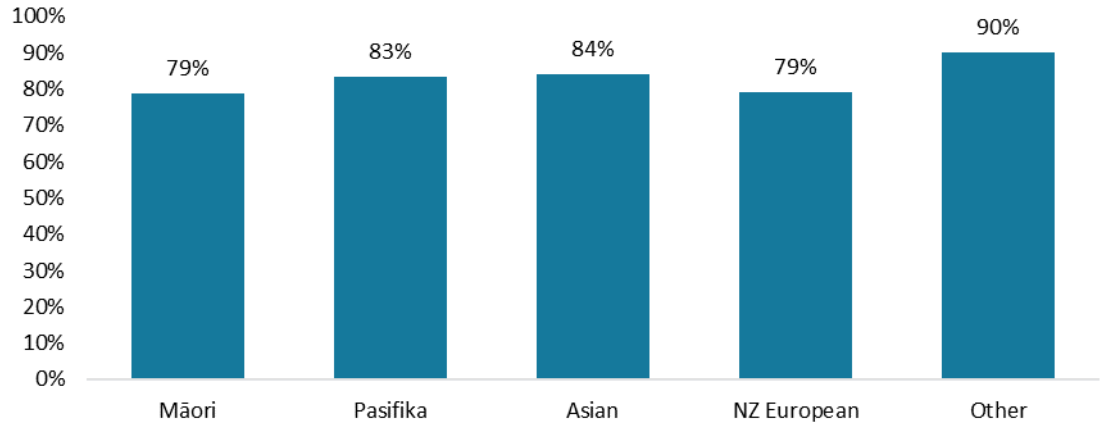
Figure 2. Average yearly rates of 7-day follow-ups 2017 to 2021 (KPI Programme, 2022b)



Source. KPI Programme 'Ask me anything' tool (KPI Programme, 2022b). Accessed May 2022.

In 2021, the national average for receiving a follow-up in the community within 7 days was 79.5 percent. Figure 3 shows the percentage of people who received follow-ups within 7 days for different ethnic groups. Almost 4 in 5 Māori and Pākehā received follow-ups in the community after discharge. Rates were higher for Pasifika and Asian peoples. Nine in 10 people who identified with 'other' ethnic groups received follow ups within 7 days.

Figure 3. 7-day follow-up rates across ethnic groups in 2021[7]

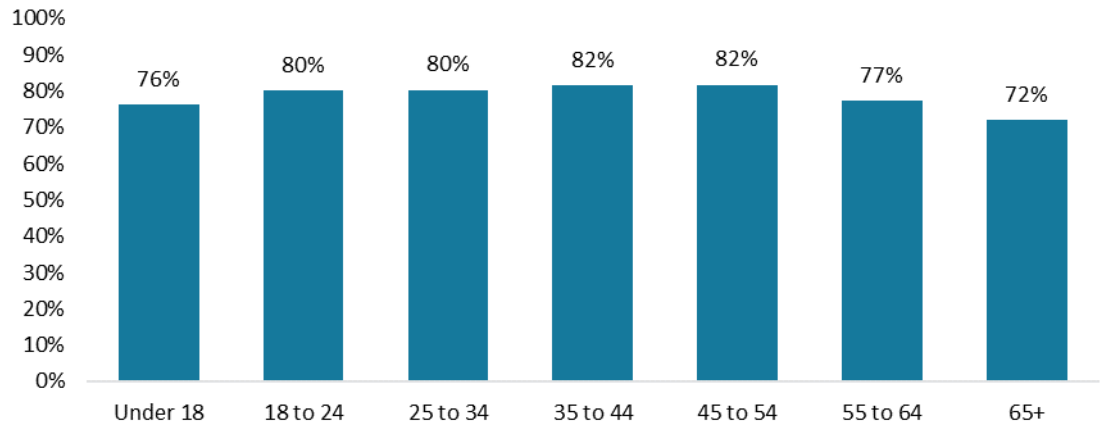


Source: KPI Programme 'Ask me anything' tool (KPI Programme, 2022b). Accessed May 2022.

[7] 'Other' ethnicities include any other ethnicities not presented in the figure, including but not limited to Middle Eastern, Latin American, and African ethnicities.

Figure 4 shows rates of follow-ups within 7 days of discharge for different age groups. People aged over 65 years had the lowest rates of post-discharge follow-ups compared to all other age groups. Adults aged between 18 to 54 years show comparable rates of 7-day follow-ups.

Figure 4. 7-day follow-up rates across age groups in 2021



Source: KPI Programme 'Ask me anything' tool (KPI Programme, 2022b). Accessed May 2022.

There are some regional differences in rates of 7-day follow-ups across Aotearoa New Zealand (KPI Programme, 2022b). Auckland, Canterbury, and Waitematā had the highest rate of follow-ups in 2021, with almost 9 in 10 tāngata whai ora receiving follow-ups within 7 days (88 percent, 87 percent, and 85 percent respectively). More than half of all districts had follow-up rates of between 70 and 80 percent. The lowest rates were in Tairāwhiti (62 percent) and Nelson Marlborough (67 percent).

IIMHL countries

Information on post-discharge follow-up-related indicators was found for all IIMHL countries, except the Netherlands. Most IIMHL countries record whether people are contacted or receive community care within 7 days of discharge from inpatient services. Exceptions include Norway, which records follow-ups within 30 days; England, which records follow-ups within 72 hours (3 days); and the US, which records follow-ups within 7 and 30 days across different states. Table 1 summarises these measures.

Table 1. Post-discharge follow-up indicators in IIMHL countries

Country	Indicator	Timeframe	Description
Australia (Australian Institute of Health and Welfare, 2022)	Post-discharge community mental health care	7 days	The percentage of separations from public acute psychiatric inpatient unit(s) for which a community mental health service contact, in which the consumer participated, was recorded in the 7 days following that separation.
England (NHS England, 2022)	72-hour post-discharge follow-up	72 hours / 3 days	Proportion of discharges from hospital followed up within 72 hours.
US (Medicaid, 2022)	Follow-up after hospitalization for mental illness: Age 18 and older	7 days and 30 days	Percentage of discharges who were hospitalised for treatment of selected mental illness or intentional self-harm diagnoses and who had a follow-up visit with a mental health provider within (1) 7 days and (2) 30 days after discharge. Rates of follow-ups are voluntarily reported. The included populations measured vary by state.
Scotland (Scottish Government, 2018)	Discharge follow-up	7 days	Percentage of all discharged psychiatric inpatients followed-up by community mental health services within 7 calendar days.
Ireland (OECD, 2021)	Follow-up after discharge from inpatient care	7 days	The proportion of those patients on Care Programme Approach discharged from inpatient care, who are followed up within 7 days.
Norway (OECD, 2021)	Follow-up after discharge from inpatient care	30 days	Percentage of patients, who received a follow up within 30 days following discharge from inpatient care.
Sweden (OECD, 2021)	Follow-up after discharge from inpatient care	7/8 days	Percentage of patients, who received a follow up within 7 days (or 8 days depending on county) following discharge from inpatient care.

Recent data on rates of post-discharge follow-ups were identified for Australia and England. In Australia, the average rate of follow-ups completed within 7 days in 2019/20 was 75.1 percent (Australian Institute of Health and Welfare, 2022). In England, the most recent available data shows an average annual rate of follow-ups completed within 3 days was 75.9 percent (NHS England, 2022).[8] These are slightly lower than rates found in Aotearoa New Zealand, where overall rates of 7-day follow-ups are closer to 80 percent.

Overall, the percentage of people followed up shortly after discharge from inpatient services is a common measure across the IIMHL countries. Timeframes differ slightly across countries, but like Aotearoa New Zealand, most aim to complete follow-ups within 7 days after discharge. This consistency in post-discharge follow-up indicators allows for international comparability.

Discussion

This report summarises evidence around what supports transitions from inpatient to community mental health services, associated risks, outcomes and enablers of follow-ups, and follow-up measures used in Aotearoa New Zealand and other IIMHL countries.

The literature identifies two major issues associated with transitions from inpatient to community services: early readmission and suicide. Evidence across studies indicate that scheduling and providing timely post-discharge follow-ups can be effective in reducing the likelihood of these risks. This is particularly important in the first week after discharge, where the risk of suicide is higher. These findings highlight the importance of following up with people soon after discharge to monitor their wellbeing and provide adequate support during their transition.

There are several actions staff and service providers can take to increase people's likelihood of receiving post-discharge follow-ups. Key approaches include:

- whānau involvement during inpatient stay
- creating comprehensive discharge plans that include scheduling a follow-up appointment in advance.

Studies show that both these approaches are associated with a higher likelihood of completing follow-ups.

While follow-ups are one effective way to support people's wellbeing after discharge, services should also, more broadly, endeavour to support safe transitions from inpatient services. Accordingly, the literature identifies actions that can have a positive effect on people's transition by increasing continuity of care across inpatient and community settings. These include:

[8] Data were aggregated from Q4 2019/20, and Q1 to Q3 2020/21. Files are available on the NHS mental health dashboard. https://www.england.nhs.uk/publication/nhs-mental-health-dashboard/

- allocating one responsible staff member to oversee people's transitions
- coordination by staff across both settings to oversee people's transitions
- efficient information sharing between staff and services in both settings
- flexibly supporting tāngata whai ora for as long as they want or need.

More quantitative research is required in this area to assess how well these approaches improve transition experiences and outcomes for tāngata whai ora, and whether they increase receipt of timely follow-ups after discharge.

Measuring post-discharge follow-ups is one way in which services can support people in the community. In Aotearoa New Zealand, the KPI Programme measures the proportion of people who are followed up in the community within 7 days after discharge. Rates of 7-day follow-ups have remained stable over time at about 80 percent between 2017 and 2021. In 2021, Pasifika (83 percent) and Asian peoples (84 percent) had slightly higher rates of 7-day follow-ups compared to Māori and Pākehā (both 79 percent). Efforts to achieve equity and improve the cultural responsiveness of mental health services are priorities in Aotearoa New Zealand's short- and long-term service improvement strategies (Government Inquiry into Mental Health and Addiction, 2018; Manatū Hauora Ministry of Health, 2021). It is therefore recommended that further work be undertaken looking at whether Māori and other ethnic groups experience unique barriers to successful transitions.

Similar rates of 7-day follow-ups were found across age groups, with most age groups having a rate between 76 and 82 percent. The exception is people aged 65 years and over, who had the lowest rate of 72 percent in 2021. Further examination is needed to identify why older adults in particular, are less likely to receive follow-ups after discharge and to determine how these gaps can be addressed.

There are large differences in rates of 7-day follow-ups across services. In 2021, Auckland, Canterbury, and Waitematā had the highest rates of follow-ups, with almost 9 in 10 tāngata whai ora receiving follow-ups within 7 days. More than half of districts had follow-up rates of between 70 and 80 percent. The lowest rates were found in Tairāwhiti and Nelson Marlborough, with under 7 in 10 tāngata whai ora receiving follow-ups within 7 days. Identifying and addressing barriers is important to ensure tāngata whai ora and their whānau are well supported after discharge from inpatient mental health services.

The KPI Programme's 7-day follow-up indicator aligns with how post-discharge follow-ups are measured internationally. Most IIMHL countries measure the proportion of people, who were followed-up within 7 days after discharge. Some differences in timeframes include England, the US, and Sweden, which record follow-ups within 3 days, 7 or 8 days, and 7 and 30 days respectively.

Limitations

This review mostly includes studies that draw on health professionals' or providers' views about transition processes and outcomes. There is a paucity of research exploring the

perspectives of tāngata whai ora and their whānau in terms of what barriers they face and transition practices that are helpful for them. This is a key gap for future research, as feedback from lived experience perspectives can help services identify opportunities to improve support and outcomes for tāngata whai ora and whānau. Identifying barriers and facilitators can help services to better support the wellbeing of tāngata whai ora during service transitions. Increased use of measures of people's experience with services, such as Mārama Real Time Feedback, may support further understanding about people's discharge from inpatient services and admission to community services. More research is also needed around how peer support roles can support these transitions. There are opportunities to build capacity of the consumer, peer, and lived experience workforce to support discharge transitions.

Some studies identified in this review, particularly those relevant to actions services can take to increase continuity of care, were qualitative. Though qualitative studies generate valuable insights into ways tāngata whai ora, staff, and services think transitions can be supported, they do not show the extent to which these approaches increase people's likelihood of post-discharge follow-ups, or improve transitions. It is important for future work to assess which approaches are effective in facilitating follow-ups, supporting post-discharge transitions, and improving wellbeing for different population groups.

This review includes literature relevant to adults, young people, and older adults. Though some reviews speak to the barriers and facilitators to successful transitions for young people and older adults, there is overall a paucity of research focusing on these groups. Given the differences in needs and life circumstances young people and older adults have compared to the general adult population, it is important for future work to identify what barriers they may face, how their transitions from inpatient services can be best supported, and whether timely post-discharge follow-ups can improve outcomes. This is particularly important for older adults, who experience the lowest rates of 7-day follow-ups in Aotearoa New Zealand.

Though there were no apparent large differences in rates of follow-ups between ethnic or age groups (see Figures 3 and 4), the data shows a substantial proportion of people do not receive timely post-discharge follow-ups. The overall annual rate indicates that 1 in 5 people who exit inpatient services are not followed up within 7 days. It would be useful for services in Aotearoa New Zealand to further identify actions that can improve follow-up rates, such as discharge planning, whānau engagement during treatment, the provision of support in the community, enhanced social support, and improved access to and receipt of follow-ups. To facilitate service quality improvement, further work is required to identify the barriers and outcomes people in Aotearoa New Zealand experience during their transition from inpatient services to the community.

Conclusion

This review outlines how follow-ups can support people during their transition from inpatient to community services. Evidence indicates that follow-ups are effective in supporting successful transition. International evidence also shows that Aotearoa New Zealand's measure of post-discharge follow-ups aligns with those used in other IIMHL countries. IIMHL countries measure the percentage of people followed up and the timeframe in which follow-ups happen. This allows for a good level of international comparability. It is therefore recommended that the KPI Programme continue to use the 7-day follow-up indicator to support people's wellbeing after discharge.

Given evidence highlighting people who die by suicide are more likely to occur within the first week after discharge, the KPI Programme should keep the 7-day timeframe to help support people during this time.

Further exploration is needed of what barriers tāngata whai ora and services face in receiving 7-day follow-ups. This is particularly important for Māori, older adults aged over 65, and in areas where follow-up rates are low. An examination of barriers can help identify areas for service quality improvement and achieve equitable outcomes for tāngata whai ora.

Acknowledging that around 1 in 5 adults who leave inpatient services are not followed up in a timely manner, it is important to identify and address these barriers with regards to service quality improvement and to support people's wellbeing.

Appendix A

Acute inpatient post-discharge community care (7-day follow-up) indicator

The following information was retrieved from the KPI Programme website.[9]

Indicator definition

Percentage of overnight discharges from the mental health and addiction service organisation's acute inpatient unit(s) that result in readmission within 28 days of discharge.

This KPI calculates an overall readmission rate, which is the percentage of all acute inpatient discharges that were readmitted, regardless of where that readmission occurred (same or different service).

Indictor rationale

Psychiatric inpatient services aim to provide treatment that enables individuals to return to the community as soon as possible. Unplanned admissions to a psychiatric facility following a recent discharge may indicate that inpatient treatment was either incomplete or ineffective, or that follow-up care was inadequate to maintain the person out of hospital.

Denominator

Count of **acute inpatient discharges**.

Numerator

Count of **acute inpatient discharges** where a readmission occurs within 28 days; that is where an activity exists (for the same person), where:

- Referral team type is Inpatient — *into an inpatient team*
- Activity type is T02 or T03 — *acute inpatient bednight codes*
- Activity unit count > 0 — *for more than 0 days*
- Activity start date is between 0 and 28 days after inpatient discharge date
    - ReadmissionActivityStartDate >= dateadd(0, day, InpatientDischargeDate)
    - ReadmissionActivityStartDate < dateadd(29, day, InpatientDischargeDate)

Technical notes

This denominator is shared with the other members of the acute inpatient KPI suite: 7-day follow-up, length of stay, and pre-admission community contact.

[9] https://www.mhakpi.health.nz/kpi-streams/adult-stream/acute-inpatient-post-discharge-community-care/

General terminology

An **acute inpatient discharge** is any referral record where:

1. ReferralEndDate is not null — *ended referral*
2. TeamType is Inpatient — *into an inpatient team*
3. ReferralEndCode is DR, DW or DT — *ended in a way where we expect follow-up*
4. ReferralTo is not PI, AE or NP — *was not moving on to another hospital setting*
5. Exists at least one activity where — *there was at least one acute inpatient bednight*
    a. ActivityTypeCode is T02 or T03 — *acute inpatient bednight codes*
    b. ActivityUnitCount > 0 — *for more than 0 days*

Appendix B

Table 2. Details and findings of studies identified in the literature searches

Title and authors	Aim	Study type	Sample	Findings
Family Influence in Recovery from Severe Mental Illness Aldersey & Whitley, 2015	To investigate the perceived influence of family on recovery from severe mental health challenges	Semi-structured interviews	N = 54 semi-structured interviews with people with severe mental health challenges	Family facilitated recovery through providing: • Moral support – having social support, having people to trust and confide in, visits and phone calls, helped people feel "normal" or forget about their challenges • Practical support – financial, housing, meals, gifts, transportation • Motivation to recover – desire to recover to provide for family, to stay connected Family could also impede recovery through: • Source of stress – from intentional or intentional actions such as being judgemental, being made to feel weak or incompetent, being talked down to, disagreement with choices, family conflicts • Displaying stigma and lack of understanding – family being ashamed, denial, hiding it from extended family or community, cultural stigma, family not making efforts to understand their experiences • Forcing hospitalisation – (could be viewed as either facilitator or barrier, but most saw it as the latter) family play a key role in detecting mental health symptoms and/or initiating treatment but some people felt forcibly hospitalised, some people felt betrayed, that they would rather just talk to friends rather than be treated Findings also highlight the importance of family psychoeducation in promoting recovery.

Title and authors	Aim	Study type	Sample	Findings
Suicide Within Two Weeks of Discharge From Psychiatric Inpatient Care: A Case-Control Study Bickley et al., 2013	To identify risk and protective factors, including variation in health care received, for suicide among people in the 2-week period after discharge from inpatient care	Population-based retrospective case-control study	N = 100 people (aged 18 to 65) who died by suicide within 2 weeks of discharge	59% of suicides occurred within a week of discharge, 49% of whom were before their first follow-up appointment. Factors associated with suicide: • Recent adverse life events (<3 months) OR = 4.60 • Short admission (<1 week duration) OR = 3.42 (compared to >1 week) • Older age (40 to 65 years) OR = 5.30 (compared to <40) • History of self-harm OR = 6.80.
Involved, inputting or informing: "Shared" decision making in adult mental health care Bradley & Green, 2018	To better understand how family caregivers of people with mental health diagnoses are involved with decision making, particularly about treatment options including prescribed medication	Qualitative questionnaire study	n = 46 family member participants, n = 158 staff	Overall, staff valued the contextual information that families can provide, but families often felt that they were not given enough information and thus were not part of decision making. Both participant groups saw involvement as "opinion-seeking" to shape decisions around treatment options but also to consolidate decisions offered by staff. Family members saw involvement as a way to be listened to/heard and incorporated. When family members adopted coping strategies and could make practical decisions, their levels of distress reduced. **Rules of engagement** *Patient permission* – acknowledging people's permission and continuously reviewing, prioritising their wishes, ensuring confidentiality *Presence* – staff actively involving family *Information exchange* – staff actively exchanging information with family, who can provide contextual information about the service user, inform decision-making, and provide information about their response to adherence with prescribed medication. For families, information exchange provided a way to share thoughts and views

Title and authors	Aim	Study type	Sample	Findings
				about care, be listened to, enhance mental health literacy, and improve capacity to support at home. Relationships with staff was important.
An examination of risk factors for readmission to acute adult mental health services within 28 days of discharge in the Australian setting Callaly et al., 2016	To identify risk factors associated with readmission within 28 days of discharge from eight Australian acute adult mental health inpatient services	Retrospective cohort study	N = 480 (222 people readmitted within 28 days, compared with 258 controls not readmitted in same period)	Risk factors for being readmitted include: - being female (OR = 1.46) - being an existing client at the service (OR = 3.62) - admitted at least once within the last 12 months (OR = 3.30) - emotionally unstable personality disorder diagnosis (OR = 3.70) - follow-up care planned to be with local adult mental health service (OR = 1.89) - no discharge plan (OR = 5.30) - no record of discharge plan sent to GP (OR = 6.91) - higher mean HoNOS score at admission ($t_{(366)}$= 2.33). Risk factors that remained significant in multivariate analyses include: - being female (OR = 1.41) - being an existing client at the service (OR = 2.27) - admitted at least once in the last 12 months (OR = 2.23) - emotionally unstable personality disorder diagnosis (OR = 2.62) - follow-up care planned to be with local adult mental health service (OR = 1.87) no record of discharge plan sent to GP (OR = 10.94).
Quality of Follow-Up After Hospitalization for Mental Illness Among Patients From Racial-Ethnic Minority Groups Carson et al., 2014	To assess the quality of outpatient treatment episodes following inpatient psychiatric treatment among ‘blacks’,	Retrospective cohort study (secondary – using a survey panel)	N = 339 adults with inpatient psychiatric treatment	Rates of follow-up ranged from 16% to 22% within 7 days, 51% for any outpatient visit within 30 days, and 17% to 26% for adequate treatment beginning within 30 days. ‘Black’ people were half as likely to receive any follow-up within 30 days of inpatient discharge (OR = .45) and one-third as likely to receive adequate care within 30 days (OR = .36).

Title and authors	Aim	Study type	Sample	Findings
	'whites', and Latinos in the United States			Predictors of follow-up within 7 days: - 2+ comorbid medical illnesses (OR = 2.96, p = .01) - Having at least one office-based visit for mental health care before inpatient admission (OR = 6.18, p = <.001) Predictors of adequate treatment beginning within 7 days: - 2+ comorbid medical illnesses (OR = 3.19, p = .02) - Preadmission visit for mental health care (OR = 8.45, p = <.001) - Aged 35 to 64 (OR = 3.38, p = .03) Predictors of follow-up within 30 days: - Black ethnicity (OR = .45, p = .03) - 2+ comorbid medical illnesses (OR = 1.90, p = .04) - Preadmission visit for mental health care (OR = 4.29, p = <.001) - Married (OR = .51, p = .03) - Income > 200% of federal poverty level (OR = 2.72, p = .01) Predictors of adequate treatment beginning within 30 days: - Black ethnicity (OR = .36, p = .04) - Preadmission visit for mental health care (OR = 6.27, p <.001) Less than high school graduate (OR = .24, p = .01).
Discharge interventions from inpatient child and adolescent mental health care: a scoping review Chen et al., 2020	To identify the literature on discharge interventions for those discharged from inpatient children and adolescent mental health services (CAMHS)	Scoping review	N = 19 documents	Core components of discharge interventions: **Risk screening and (needs) assessment** Involves an intake process with discussions where the healthcare team can gather information on the accommodations necessary for clients during hospitalisation and post-discharge. Discussions also covered client issues and conflicts with family or other community agencies, as well as their social, housing, medical, therapeutic, vocational, and recreational needs. Some settings would do iterative assessments throughout treatment.

Title and authors	Aim	Study type	Sample	Findings
				Individualised care Structuring treatment according to clients' needs facilitates rapport and adherence. Interventions include personalised goal-setting and identifying barriers to services. Individualised treatment plans can be made collaboratively between health professionals and services. Some studies included elements of advocacy to ensure clients had preferred and appropriate care. Smaller caseloads also allowed staff to be more flexible in tailored services. **Client discharge preparation** Discharge planning – coordinated process of supporting the client from hospital and into the community. There are several ways to do this effectively. Roles such as a Transition Support Worker or community-based case manager can help the discharge planning process. Motivational interviewing can explore post-discharge obstacles and solutions, allowing for better individualisation of resources. The Preparedness Assessment Tool can be used to monitor preparedness and inform post-discharge coordination.The planning process also gives space for family involvement – can raise issues, concerns, and discuss health, recreational activities, basic needs, finances, housing, and employment. **Community linkage** Studies emphasised the involvement of community agencies. Health professionals would assist clients in identifying resources and making referrals to community services. Exposure to community services, vocational counselling, and supporting clients in building skills can support them in post-discharge integration.

Title and authors	Aim	Study type	Sample	Findings
				Psychoeducation Helps ensure that people are adequately supported after discharge. Can include coping strategies, emotion management, and self-management skills. Psychoeducation interventions included parental involvement, and could be delivered via parental psychotherapy groups, peer support, supportive therapy, and problem-solving and awareness (sessions). **Follow-up support** Ensures continuity of benefits the intervention/service provided and to reduce readmission. Studies with follow-up support included weekly meetings, phone calls, and group support. Support can include monitoring people's resources and discuss post-discharge adjustment.
Thirty-Day and 5-Year Readmissions following First Psychiatric Hospitalization: A System-Level Study of Ontario's Psychiatric Care Chen et al., 2018	To examine key trends and variables with implications for inpatient care as indicated by 30-day readmission and outpatient care as reflected by readmission within 5 years	Retrospective cohort study	N = 42,280 people who had their first inpatient admission were followed for 5 years to examine their subsequent 30-day and overall admission rates Diagnoses: - 44.6% mood disorders - 18.0% schizophrenia - 17.4% substance-related - 6.9% delirium/dementia 13.0% other.	The 30-day and 5-year readmission rates for the entire sample were 7.2% and 35.1% respectively. 30-day readmission rates by diagnosis: - 6.8% mood disorders - 10.2% schizophrenia/other psychosis disorder - 4.3% substance-related - 10% delirium/dementia - 6.9% other. 30-day readmission rates steadily declined between 2005 and 2010. Compared with the 2009/10 group, rates were significantly higher in the 2005/6, 2006/7, and 2007/8. This decline was not evident for substance-related and delirium/dementia. 5-year readmission rates by diagnosis: - 34% mood disorders - 51.5% schizophrenia/other psychosis disorder - 29.1% substance-related - 25.7% delirium/dementia

Title and authors	Aim	Study type	Sample	Findings
				- 29.5% other. 5-year readmission rates also declined from 2005 to 2010, with rates in 2005/6, 2006/7, and 2008/9 being higher than the 2009/10 rate. This pattern was not evident for those with delirium/dementia.
Suicide preceded by health services contact A whole-of-population study in New Zealand 2013-2015 Chiang et al., 2021	To determine if suicide deaths in New Zealand were likely to be preceded by contact with health services, and the type and time frame in which these contacts took place.	Population-based cohort study	N = 1,560 people who died by suicide between 2013 and 2015	In the 6 months prior to suicide, 59.4% of suicide decedents had contact with primary health services, 46.5% contacted secondary health services, and 30.4% contacted tertiary health services. Comparatively, the proportion of people still alive at the end of the study period who had health service contact were 39.6%, 21.2%, and 7.7% for primary, secondary, and tertiary services respectively. Males were around 3 times more likely to die of suicide than females. People who were Māori, separated, divorced or in a civil union were also more likely than NZ Europeans, and those not in a relationship respectively. Likelihood of suicide also increased with socioeconomic deprivation.
Meta-analysis of suicide rates in the first week and the first month after psychiatric hospitalisation Chung et al., 2019	To assess the magnitude of suicide rates in the first week and first month post-discharge following psychiatric hospitalisation	Meta-analysis	N = 34 articles (comprised of 29 studies) that reported suicides in the first week and month post-discharge	The pooled estimate of the suicide rate in the first week post-discharge suicide was 2,950 suicides per 100,000 person years The pooled estimate of the suicide rate in the first month post-discharge suicide was 2,060 per 100,000 person years.
Suicide following discharge from in-patient psychiatric care Crawford, 2004	To summarise demographic, clinical, and service factors associated with risk of suicide following discharge	Narrative review	N/A	Up to one third of people who die by suicide had recent contact with mental health services. The greatest period of risk is in the first few weeks – data on over 2,000 suicides among people in contact with mental health services found a quarter of all deaths occurred within the first 3 months of discharge. Almost 1% of suicides occur within the first year. 41% occur before the first follow-up appointment.

Title and authors	Aim	Study type	Sample	Findings
	from inpatient psychiatric care			Risk factors: • Diagnosis of depression and other affective disorders • History of deliberate self-harm • Suicidal ideation • Decrease in level of care agreed • Sociodemographic factors – male, aged over 45, unemployment, living alone, non-white ethnicity • Clinical factors – diagnosis of depression or other affective disorders, history of self-harm, suicidal ideation, decrease in level of care, first admission to hospital • Service factors – unplanned discharge, key personnel on leave/leaving, short admissions (<7 days), admitted under a 'new' consultant, time not in contact with services after discharge Interventions to improve support around time of discharge: • Discharge preparation • Periods of trial leave • Discharge coordinators (transitional nurses) • Meeting outpatient staff • Peer support • Day hospital • Early outpatient follow-up Risk assessments are important parts of routine clinical practice but it is not always clear who is at greater risk of suicide. For example, one study found only a third of people who died by suicide had a 'severe' mental health diagnosis. It is therefore important to support all service users' transitions to the best of services' ability.
Pre-discharge factors predicting readmissions of psychiatric patients: A	To identify the studied pre-discharge variables	Systematic review	N = 58 articles based on the following characteristics:	Pre-discharge variables were classified into six categories. **Patient-level factors** 1) Patient demographics and social and economic characteristics

Title and authors	Aim	Study type	Sample	Findings
systematic review of the literature Donisi et al., 2016	and describe their relevance to readmission among psychiatric patients		• Studied the quantitative association between pre-discharge variables and inpatient readmission after discharge for people with a main psychiatric diagnosis • Outcome of interest: readmission to inpatient hospital care (psychiatric or non-psychiatric/general bed) • Papers published in English, German, Spanish, Italian, and French Studied adult populations (at least 18 years old)	a. Risk factors include higher number of previous admissions, longer duration of illness, previous use of non-psychiatric health services, unemployment, and disabilities. b. Protective factors include older age, being married, being employed, and higher education level. 2) Patient clinical characteristics a. Risk factors include having a mood disorder, substance use disorder (primary or secondary diagnosis), personality disorder, history of suicide attempt (self or family), and lower Global Assessment of Functioning score. b. Protective factors include higher quality of life, higher number and frequency of contacts, and satisfaction (with living arrangements, family and social relations, leisure activities, personal safety, finances). 3) Patient clinical history a. Risk factors include admission history, duration of illness, and number of hospital days (in a given period before index admission). 4) Patient attitudes and perceptions a. Protective factors include higher satisfaction with hospital treatment and positive attitude towards medication. **Contextual factors** 5) Environmental, social, and hospital characteristics a. Risk factors include being discharged from regional and public hospitals, lower median length of stay, higher annual mean number of stays, insufficient emotional and practical support from caregivers, and maladaptive family system functioning. b. Protective factors include being discharged from medical centres or not-for-profit hospitals. 6) Admission and discharge characteristics

Title and authors	Aim	Study type	Sample	Findings
				a. Risk factors include being discharged to a relative, referral to social services, and complications during hospitalisation. Protective factors include adequate discharge planning, being assigned to an outpatient commitment group, and intensive case management.
Is readmission a valid indicator of the quality of inpatient psychiatric care? Durbin et al., 2007	To review research on predictors of early readmission (within 30 to 90 days) to assess the association between this indicator and quality of inpatient psychiatric care	Systematic review	N = 13 articles with the following characteristics: - Original quantitative analysis of predictors of readmission - Used early readmission (within 90 days of discharge) as a dependent variable - Assessed at least one predictor of patient status or treatment during hospitalisation - Written in English Published between 1995 and 2006	Seven articles assessed predictors of readmission within 30 days, four within 60 to 90 days, and two compared earlier and later readmission groups. 30-day readmission rates ranged from 7 to 17%. Possible risk factors associated with readmission include: - previous hospitalisation (4 of 5 studies) - bipolar, depression, psychotic disorder diagnosis (4 of 10 studies) - acuity at discharge (eg active symptoms, were in restraint, isolation, exhibited active psychotic behaviour, had low overall ratings of functioning; 3 of 5) - being discharged earlier than recommended by clinicians (1 of 1) - being discharged without being prescribed the expected medications (2 of 2) - low staffing levels and patient turnover (1 of 1) - low family involvement (1 of 1) - problems with medication compliance (1 of 1) - behaviour issues (2 of 2). Studies identified that the period immediately after discharge is associated with high vulnerability to readmission, underscoring the importance of hospital-community transition and of examining service practices that may prepare people to better manage during this period.

Title and authors	Aim	Study type	Sample	Findings
				Regarding acuity and behaviour issues, studies suggest the importance of greater (continuity in) discharge planning. Discharge planning should ideally begin at admission to allow time to educate people about the importance of continued support after discharge, explore clinical and social post-discharge needs, care preferences, stability of clinical condition, preparing people emotionally and practically to manage in the community, and connect people with community providers while they are receiving inpatient services.
Factors Associated With Timely Follow-Up Care After Psychiatric Hospitalization for Youths With Mood Disorders Fontanella et al., 2016	To identify patient-, hospital-, and community-level factors associated with timely follow-up care following psychiatric hospitalization for children and adolescents with mood disorders	Retrospective cohort study	N = 7,826 young people (aged 6 to 17) admitted to psychiatric hospitals with a primary diagnosis of mood disorders between July 2009 to November 2010	After discharge, 48.9% of young people attended a follow-up appointment within 7 days and 69.2% within 30 days. Positive predictors of follow-up attendance include preadmission mental healthcare, foster care, psychiatric comorbidity, receiving care in teaching or psychiatric hospitals, and residence in counties with more child and adolescent psychiatrists. Odds of 7-day follow-ups: • Aged 12 to 17 (OR = 0.82) compared to 6 to 11 • Male (OR = 0.89) compared to female • Non-Hispanic black (OR = 0.82) compared to non-Hispanic white • Any substance use disorder diagnosis (OR = .56) compared to none • Having 2 or more co-occurring diagnoses (OR = 1.51) compared to none / only having one • Having prior outpatient mental healthcare visits (OR = 4.76) compared to none • Receiving psychiatric care (OR = 2.13) compared to general Odds of 30-day follow-ups: • Aged 12 to 17 (OR = 0.57)

Title and authors	Aim	Study type	Sample	Findings
				• Non-Hispanic black (OR = 0.78) • SU disorder diagnosis (OR = 0.41) • Co-occurring diagnoses (OR = 1.36) • Prior mental healthcare (OR = 5.16) • Psychiatric care (OR = 1.79)
Hospital admissions for self harm after discharge from psychiatric inpatient care: Cohort study Gunnell et al., 2008	To determine the risk of non-fatal self-harm in the 12 months after discharge from psychiatric inpatient care	Cohort study based on national hospital episode statistics	N = 75,401 People aged 16 to 64 years discharged from psychiatric inpatient care between 1 April 2004 and 31 March 2005 and followed up for one year	11.7% were hospitalised for self-harm in the 12 months before their index psychiatric admission. 24.7% of those discharged from psychiatric care were readmitted to a psychiatric bed in the 12 months after discharge and 6.5% were readmitted to a general hospital or psychiatric bed for self-harm. 0.3% of people who were readmitted after self-harm died. The risk of readmission for self-harm among people discharged from psychiatric inpatient care was higher in females (8.0%) than males (5.3%). More than one third of those who self-harmed after discharge (38.5%) had been admitted to hospital for self-harm in the 12 months before their index admission to psychiatric care. **Timing of self-harm episodes** Admissions for self-harm within 12 months post-discharge comprised about 7% of all admissions for self-harm. Risk of self-harm diminished rapidly in the weeks after discharge: around one third (32.0%) of admissions for self-harm occurred within 4 weeks after discharge, 11.9% occurred within 7 days, and 57.3% occurred within 12 weeks. **Risk factors** At least 6% of people discharged from psychiatric inpatient care in England engaged in self-harm within 12 months. One third of these episodes occurred in the month after discharge. The actual figure is likely to be higher than this as less than half of all episodes of self-harm in England result in hospital admission.

Title and authors	Aim	Study type	Sample	Findings
				The strongest risk factor was an admission for self-harm in the previous 12 months (hazard ratio HR = 4.85). Additional risk factors for self-harm within 12 months include: - 40% higher in females - risk was 32% lower in those aged 45 to 64 years than for those aged 16 to 24 years (decreased with age) - risk was higher for those diagnosed with personality disorders (HR = 3.71), depression and anxiety (2.69), and substance misuse (2.64) people who self-harmed tended to have shorter lengths of hospital stay than those who did not self-harm across all diagnostic groups.
Clinical risk model to predict 28-day unplanned readmission via the accident and emergency department after discharge from acute psychiatric units for patients with psychotic spectrum disorders Hariman et al., 2020	To establish a clinical risk prediction model to predict 28-day unplanned readmission via the accident and emergency department after discharge from acute psychiatric units for patients with psychotic spectrum disorders	Retrospective cohort study	N = 18,514 people (aged 18 to 65) discharged from psychiatric units between 1 January 2013 to 31 December 2017, comprising 30,717 discharge episodes	The readmission rate was 7.09% with 1,496 people having more than one admission. Final set of predictors of 28-day unplanned readmission. - Number of previous admissions OR = 1.06 - Co-existing substance misuse OR = 1.49 - History of violence OR = 1.30 - HoNOS item 1: overactive, aggressive, disruptive, or aggravated OR = 1.50 - Conditional discharge OR = 0.29 - Clozapine prescribed OR = 0.70 - Age (older) OR = 0.98 - Abode after discharge (compared to alone) Family/relatives OR = 0.61.
Family Involvement in Psychiatric Hospitalizations: Associations with Discharge Planning and Prompt Follow-Up Care	To examine frequencies of involvement by family in the care and discharge planning	Retrospective cohort study	N = 179 people who received Medicaid and had a psychiatric hospitalisation at two urban hospitals in New York State in 2012 to 2013	Inpatient staff contacted a family member for 75% of patients, staff were unable to contact a family member for 1% of patients, and there were no documented attempts to contact a family member for the remaining 24%.

Title and authors	Aim	Study type	Sample	Findings
Haselden et al., 2019	for psychiatric inpatients		Length of stay: - 22% stayed 1 to 6 days - 39% stayed 7 to 13 days - 39% stayed 14 or more days Primary discharge diagnosis: - 42% psychotic disorder - 49% mood disorder - 9% other 45% had a co-occurring substance use disorder	Factors associated with receiving comprehensive discharge planning include: - family member contact with the patient (OR = 2.39) - family member visits to the patient (OR = 2.34) - attendance at a family therapy sessions (OR = 2.74) - communication with inpatient staff about services available to families (OR = 2.25) - longer length of stay (7 to 13 days) than people who stayed 0 to 6 days (OR = 2.65). Co-occurring substance use disorder was significantly associated with no family involvement (OR = 0.39) and lower likelihood of receiving comprehensive discharge planning (OR = 0.46). Factors associated with people attending follow-up appointments within 7 and 30 days after discharge: - inpatient staff contacting a support person (OR = 2.32) - communicating about the person's health or mental health (OR = 2.42) - discussing discharge-related topics before or after discharge (OR = 2.20). Factors associated with attending mental health appointment within 30 days after discharge: - inpatient staff contacting a support person (OR = 2.71) - communicating about the person's health or mental health (OR = 2.80) - discussing date of discharge (OR = 2.29) - discussing person's residence following discharge (OR =2.30) - any involvement between family and inpatient staff (OR = 3.65).
Social Support Networks and Symptom Severity Among Patients	To examine how social support	Intervention analysis	N = 406 people in inpatient mental health services with co-	Higher family conflict was associated with higher psychiatric severity (including for depression, PTSD, and drug use) across baseline and FUs. Conflict was not associated with alcohol use at

Title and authors	Aim	Study type	Sample	Findings
with Co-occurring Mental Health and Substance Use Disorders Haverfield et al., 2019	networks relate to symptom severity		existing mental health and substance use diagnoses Intervention: one in-person session followed by monitoring over the telephone (1 per week for 3 months)	initial intake. Families of people with co-existing challenges often experienced heightened levels of conflict, volatility in roles and functions, and poor communication. General social support (the sense of connection and membership towards a group) was associated with lower levels of depression, PTSD, and drug us severity at intake to treatment and FUs.
Effectiveness of Transitional Interventions in Improving Patient Outcomes and Service Use After Discharge from Psychiatric Inpatient Care: A Systematic Review and Meta-Analysis Hegedüs et al., 2020	To assess the effectiveness of transitional interventions with predischarge and post discharge components in reducing readmissions and improving health-related or social outcomes of patients discharged from psychiatric hospitals	Systematic review and meta-analysis	N = 16 studies (including 10 RCTs, three quasi-experimental, three cohort studies) Inclusion criteria: - Sampled people aged 18 to 65 - Participants had a psychiatric diagnosis and were discharged from a psychiatric inpatient unit Included interventions that aimed to improve discharge from inpatient care to home with a combination of pre- and post-discharge components	Nine of the included RCTs (total n = 1,258) reported readmission rates. Readmission rates were higher in control groups in all but two studies. Overall, the OR was 0.76 for readmission due to transitional interventions. The included studies tested 15 different interventions. All interventions included multiple components and were conducted by mental health workers, nurses, case or care mangers, social worker, or peer support workers. Pre-discharge interventions included: - case management (needs assessment, discharge or care planning, scheduling or preparing follow-up appointments, family or carer involvement - psychoeducational components, individualised psychoeducation, medication reconciliation elements, CBT elements (including skills training, peer support). Post-discharge components aimed to support people during a transition period and were most frequently delivered through phone calls, home visits, or letters. Components included ensuring timely follow-up with outpatient care providers, treatment coordination, timely communication between inpatient staff and outpatient care or community service provider after discharge, monitoring health status, implementing discharge plan, activating resources in the social network, CBT elements (therapeutic meetings with staff, skills training), psychoeducation and counselling, and peer support

Title and authors	Aim	Study type	Sample	Findings
				(facilitating access to local communities, promoting friendship, providing basic necessities, understanding, encouragement). Interventions lasted between one week and two years, or until a therapeutic relationship was established between the patient and outpatient care provider; but most interventions ended three months after discharge. Studies reported significant improvements favouring interventions in compulsory readmission, length of compulsory hospital episodes, outpatient service use, continuity of care, functioning, symptom severity, quality of life, social support, engagement in community. All studies with significant effects in at least one of these outcomes included elements of case management, most frequently in combination with CBT and psychoeducation, or exclusively CBT, or peer support.
Suicide in recently discharged psychiatric patients: a case-control study Hunt et al., 2008	To identify risk factors, including variation in healthcare received, for suicide within 3 months of discharge	Population-based case-control study	N = 238 psychiatric patients dying by suicide within 3 months of discharge, matched on date of discharge to 238 living controls	43% of suicides occurred within one month of discharge; 47% of whom died before their first follow-up appointment. The first day and week were particular high-risk periods. Risk factors for suicide include male gender (OR = 2.2), history of self-harm (OR = 3.2), primary diagnosis of affective disorder (OR = 2.3), any secondary diagnosis (OR = 1.8), recent last contact with services (OR = 2.2), suicidal ideation OR = 2.5), self-initiated discharge (OR = 2.5), and missing their last appointment with services (OR = 2.1). People under compulsory treatment at last admission (OR = 0.6) or received enhanced levels of aftercare were less likely to die by suicide.

Title and authors	Aim	Study type	Sample	Findings
Critical Periods for Increased Mortality After Discharge From Inpatient Mental Health Units: Opportunities for Prevention Katz et al., 2019	To evaluate whether the elevated mortality within 30 to 90 days after discharge from inpatient mental health units was specific to suicide or whether there were similar increases in other causes of death	Retrospective cohort study	N = 106,430 VA (veteran affairs) patients discharged from inpatient mental health units in 2013 to 2014 Compared all-cause and cause-specific mortality in the first 30 and 90 days after discharge,	Among the 106,430 people discharged from inpatient care, 6.1% died by suicide within 1 week from discharge. Of all people who died by suicide within the study period, 19.4% were within 30 days of discharge and 39.8% were within 90 days.
The effects of nursing discharge plan (post-discharge education and follow-up) on self-care ability in patients with chronic schizophrenia hospitalized in Razi psychiatric Center Khankeh et al., 2011	To determine the effect of discharge, education and follow-up program on self-care abilities of patients with chronic schizophrenia	Quasi-experimental study	N = 60 people (aged 18 to 50 years) diagnosed with schizophrenia, divided into two groups (30 intervention, 30 control) The intervention group received a post-discharge program and home care for 6 months Data were collected before education, then after 1 and 6 months	Results showed people's ability of self-care increased from baseline to follow-up measures. Both discharge plans and community care increased people's level of self-care at both follow-up measures. Findings generally highlight the effectiveness of home care and providing good discharge plans.
Risk factors for suicide within a year of discharge from psychiatric hospital: A systematic meta-analysis	To establish risk factors for suicide in the year following discharge from psychiatric hospitals	Systematic meta-analysis	N = 13 Studies reported a total of 1,544 suicides (mean = 127 per study) Study inclusion criteria:	**Risk factors** - History of self-harm or suicide attempt (OR = 3.15) - Depressive symptoms irrespective of affective diagnosis (OR = 2.7) - Male sex (OR = 1.58) - Recent social difficulties (OR = 2.23)

Title and authors	Aim	Study type	Sample	Findings
Large et al., 2011	and their usefulness in categorising patients as high or low risk suicide		- Reported characteristics of people who committed suicide within one year after discharge from a psychiatric inpatient setting - Reported characteristics of a control group from the same settings who did not commit suicide in the same period Employed case control, nested case control, or cohort control designs	- Hopelessness (OR = 2.31) - Suicidal ideation (OR = 2.47) - Major depressive disorder (OR = 1.91) - Unplanned discharge (OR = 2.44). People who had less psychiatric follow-up because they were either discharged from care or had less frequent outpatient appointments were less likely to commit suicide in the year following discharge (OR = 0.69).
Prospective study of risk factors for increased suicide ideation and behavior following recent discharge Links et al., 2012	To prospectively examine the association between predictors from three thematic areas – suicidality, personal risk factors, and patient care factors – and the occurrence of post-discharge suicide ideation and behaviour in recently discharged patients	Prospective cohort study	N = 120 adults (baseline sample who consented to participating; by the end of the study 10 withdrew and eight were lost to follow-up) 22.5% were admitted for a first suicide attempt, 59.2% were admitted for a non-first-time suicide attempt, 18.3% had current suicide ideation and previously attempted suicide	Scale for suicide ideation (SSI) scores decreased from baseline (mean = 23.6) to 1-month (7.9), 3-month (6.6), and 6-month (5.7) follow-ups. A high proportion of people reported no suicidal ideation at all three follow-ups (1-month = 40%, 3-month = 44.8%, 6-month = 48.0%). Overall, SSI scores decreased with a mean change of -15.7. 3.3% of the sample died by suicide within the study period – one person (0.8%) while hospitalised and three (2.5%) within one month after hospital discharge. Of those who survived, 39.4% reported self-injury or suicide attempts within 6 months of hospital discharge. **Univariate analysis risk factors** (outcome: higher SSI score) - More than one past suicide attempt before current admission (OR = 2.11) - Suicide attempt as reason for admission (compared to suicidal ideation) (OR = 3.25) - Female gender (OR = 2.22) - Depression (OR = 1.04) - Hopelessness (OR = 1.07) - Impulsivity (OR = 1.04).

Title and authors	Aim	Study type	Sample	Findings
				Multivariate analysis risk factors (outcome: higher SSI score) - Suicide attempt as reason for admission (compared to suicidal ideation) (OR = 3.60) - Female gender (OR = 2.46) - Depression (OR = 1.04).
Optimal Network for Patients with Severe Mental Illness: A Social Network Analysis Lorant et al., 2017	To examine whether certain types of network structure have been associated with improved continuity of care and greater social integration.	Survey study	N = 954 patients across 19 mental health networks in Belgium (eg community mental health, outreach teams, rehabilitation teams, etc)	Continuity of care was associated with large, centralised, and homophilous networks (definition: the tendency to form strong social connections with people who share one's defining characteristics, as age, gender, ethnicity, socioeconomic status, personal beliefs), whereas social integration was associated with smaller, centralised, and heterophilous networks. Relational continuity of care was higher when a network included a greater number of services, particularly social services; when the network was more centralised; less dense; and had greater referral homophily. Social integration was greater in networks that were less centralised (OR = 0.98), denser (OR = 1.02), and had a smaller number of services (OR = 0.99), though these had small effects.
High suicide rates during psychiatric inpatient stay and shortly after discharge Madsen et al., 2020	To calculate suicide rates, rate ratios, population attributable risks (PAR), and trends among people admitted to or recently discharged from psychiatric wards	Retrospective cohort study	N = 178,703 people admitted to a psychiatric hospital in Denmark between 1995 to 2016 (out of a larger sample of 6,292,932 people)	A total of 6,174 people who were psychiatrically admitted died by suicide. This constituted ~41% of all people who died by suicide during this time (15,075 people). Among men, the suicide rate after discharge was 3,148 per 100,000 person-years (3.1%). For women, the rate was 1,631 per 100,000 person-years (1.6%). Estimated suicide rates were highest in those with affective or anxiety stress disorders. In the first week after discharge, the incidence rate ratio (IRR) was 225 and 425 for men and women respectively. Rates decreased over time.

Title and authors	Aim	Study type	Sample	Findings
				Population attributable risk: overall, the PAR associated without having ever had a psychiatric admission accounts for 35% in men and 60% in women. Men – 3.3 within 1 week, 4.8 within first 2 weeks, 12 within 3 months Women – 6.3 within 1 week, 9.4 within 2 weeks, 21.2 within 3 months.
Predictors of outpatient mental health clinic follow-up after hospitalization among Medicaid-enrolled young adults Marino et al., 2016	To assess demographic and clinical predictors of outpatient mental health clinic follow-up after inpatient psychiatric hospitalization among Medicaid-enrolled young adults	Retrospective cohort study	N = 1,127 young adults (aged 18 to 26) who were enrolled in Medicaid	Only 51% of young adults had any outpatient mental health follow-up visits within 30 days after discharge. Being black (OR = 0.60) and having a co-existing substance use diagnosis (OR = 0.36) were associated with a lower likelihood of receiving follow-ups. Those who used any outpatient public mental health services in the 180 days prior to their hospitalization were more likely to have an outpatient follow-up visit than those with no prior contact with services (OR = 2.45).
Suicide in mental health in-patients and within Suicide in mental health in-patients and within 3 months of discharge Meehan et al., 2006	To describe the social and clinical characteristics of a comprehensive sample of inpatient and post-discharge cases of suicide	Survey	N = 20,927 deaths by suicide between 1996 and 2000 in England and Wales	• 24% of people had contact with mental health services in the year prior to death. • The greatest number of suicides (40%) occurred on the first day after discharge. • 32% died within 2 weeks. • 23% died within 3 months of discharge. • 40% died before first post-discharge contact in the community.
Youth Transition Home from Residential Mental Health Treatment: Caregivers' Perspective	To explore caregivers' perceptions of their child's immediate transition home	Semi-structured interviews	N = 10 mothers of young people aged 12 to 18 discharged from residential treatment	**Transitional challenges** Caregivers spoke about how the transition home is a challenging time for their children. Challenges included: • struggling to reconnect with social support networks • struggling to make friends

Title and authors	Aim	Study type	Sample	Findings
Patel et al., 2018	following residential treatment			• changes to the environment structure (eg from structured to free) • lack of service support (including lack of discharge planning) • lack of follow-ups • too much focus on the child and not the parents or family • child nervousness, overwhelm, avoidance around transitioning back • low self-esteem or motivation • "honeymoon period" – where common problems appear to be absent at first, but resurface after spending more time home. Could be due to feeling more isolated or upset over time. **Transition supports** Caregivers also mentioned factors that facilitated their children's transitions, including: • discharge preparation • post-discharge support groups • Caregivers providing support to their children themselves • community support, including ones that were scheduled/regular • engagement in some recreational or extracurricular activity.
Family Involvement in Treatment Among Youth in Residential Facilities: Association With Discharge to Family-Like Setting and Follow-Up Treatment Robst et al., 2014	To describe characteristics of children and youth who were in residential treatment facilities, examine whether family involvement in treatment is	Retrospective cohort study	N = 1,505 residential treatment episodes between January 2005 and December 2011	Family contacts for interventions and treatment planning are associated with greater likelihood of discharge to a family-like setting (eg home or foster home; versus another treatment setting such as a therapeutic group home or therapeutic foster care). Among young people discharged to such settings, family involvement during treatment was associated with receiving follow-up outpatient care. Results highlight the importance of family involvement in the treatment of young people with mental health challenges to ensure better outcomes and continuity of treatment.

Title and authors	Aim	Study type	Sample	Findings
	associated with discharge to a family-like settings, examine whether family involvement is associated with discharge to a family-like setting, and assess continuity of treatment after discharge			
Care pathways in the transition of patients between district psychiatric hospital centres (DPCs) and community mental health services Sather et al., 2018	To explore health personnel's experience of care pathways in patient transition between inpatient and community mental health services	Qualitative design using focus groups	12 informants from 7 communities	Participants shared experiences on topics that affects smooth pathways in mental health. Integrated care Occurs when healthcare professionals consider all health conditions at the same time, instead of adopting a fragmented, disease-specific focus. This approach is more likely to be customised to individual patients and treats them as a whole. In adopting this approach, there are: Six promoting factors: • Opportunities for information-sharing • Implementation of systematic plans • Use of e-messages • Around-the-clock care • Designating one responsible person in each system for each patient • Involvement of patients and their families.

Title and authors	Aim	Study type	Sample	Findings
				Barriers that impede transitions between levels of care: • Lack of a single responsible person at each health care level • Insufficient meetings • Absence of systematic plans • Difficulties in identifying the right staff at different levels • Delays in information-sharing • Complexity of welfare systems, negatively affecting patient dignity. Systems and procedures should be developed to ensure clear responsibilities and transparency at each stage of care pathways. A single person should facilitate connection and communication between inpatient and community mental health services. Both patient and staff in community services should be linked through around-the-clock-availability.
Factors Associated With 7-Day Follow-Up Outpatient Mental Healthcare in Older Adults Hospitalized for Suicidal Ideation, Suicide Attempt, and Self-Harm Schmutte et al., 2022	To identify patient-, hospital-, and regional-level factors associated with 7-day follow-up outpatient mental healthcare in suicidal older adults	Retrospective cohort analysis	N = 27,257 people aged 65+ who were hospitalised for suicidal ideation, suicide attempts, or deliberate self-harm (2015 Medicare data)	30.3% of people received follow-up mental healthcare within 7 days of discharge from hospital. Follow-up rates were higher for: • people who received any mental healthcare within 30 days before admission (RR = 2.77; 43.7%) compared to people with no preadmission mental healthcare (15.7%). • women (RR = 1.22) • people with longer length of stay in psychiatric hospitals (4 to 5 RR = 1.22, 6 to 7 = 1.43, 8 to 12 = 1.60, 13 to 30 = 1.77; compared to 1 to 3) • people who stayed in psychiatric hospitals (RR = 1.52) compared to general medical and surgical hospitals • people in hospitals with lower bed numbers (RR = 1.34) • people who received geriatric psychiatric care (RR = 1.26).

Title and authors	Aim	Study type	Sample	Findings
				Non-white people (African American = 0.65, Other = 0.72) were less likely to receive follow-up care.
The Effectiveness of Discharge Planning for Psychiatric Inpatients With Varying Levels of Preadmission Engagement in Care Smith et al., 2022	To examine the extent to which pre-hospital treatment engagement is related to post-hospital follow-up treatment among psychiatric inpatients, and whether the effect of inpatient discharge planning on post-hospital follow-up treatment varies by level of pre-treatment engagement in care	Retrospective cohort study	N = 18,793 adult inpatients discharged to the community between 2011 and 2013	Scheduling an appointment as part of their discharge plan was associated with higher likelihood of attending outpatient psychiatric appointments, regardless of the patient's level of engagement in care before admission. The differences were most pronounced for people who had not received any outpatient care in the 6 months before admission. When appointments were scheduled, people were 3 times more likely to follow up in care within 7 days and more than twice as likely to follow up within 30 days than people without an appointment. Participants were categorised into four engagement level groups: no engagement, low engagement, partial engagement, high engagement. Compared to people with high engagement, those with no psychiatric visits in the 6 months prior to admission were more likely to be Black (than White), older, have shorter lengths of stay (LOS), be homeless, have a co-occurring substance use disorder, and have a primary mood disorder (compared to psychotic disorder).
Discharge planning in mental health care: A systematic review of the recent literature Steffen et al., 2009	To determine and estimate the efficacy of discharge planning interventions in mental health care from in-patient to out-	Systematic review and meta-analysis	N = 11 studies (six RCTs, three controlled clinical trials, two cohort studies; 5,655 participants) Inclusion criteria:	In the six studies which assessed readmission to inpatient mental health treatment, individual study risk ratios (RRs) ranged from 0.30 to 0.72. Readmission proportions ranged from 15% to 46% in control groups, and 7% to 25% in intervention groups. The pooled RR between intervention to control groups was 0.66, meaning the relative risk reduction was about 34% in favour of the intervention group.

Title and authors	Aim	Study type	Sample	Findings
	patient treatment on improving patient outcome, ensuring community tenure, and saving costs		- Adults aged 18+ in mental health care - RCT, CCT, or cohort study - Included multicomponent or single intervention - Aimed to prevent, facilitate, or solve problems in outpatient care Outcomes related to readmission rates, connection to outpatient treatment, length of stay, health, costs	Among studies examining adherence to outpatient treatment and continuity of care, individual study RRs ranged from 1.02 to 2.23. Proportions of adherent participants ranged from 21% to 76% in control groups, and 47% to 95% in intervention groups. The pooled RR between intervention to control groups was 1.25, meaning the probability of adherence increased by 25% in favour of the intervention group.
Short stay unit for patients in acute mental health crisis: A case control study of readmission rates Sveticic et al., 2020 Australia	To evaluate the introduction of a short stay pathway (SSP) for patients in acute mental health crisis with admissions of up to 3 days	Retrospective cohort study	N = 678 people admitted to the SSP between 1 March 2016 and 30 June 2018 Matched against case controls (n = 1,356) admitted to acute mental health beds in the same period	After matching by mental health diagnosis, the SSP group had a significantly lower readmission rate of 10.4% within 28 days compared to 18.4% for the control group. Binary regressions identified independent predictors of readmission rates. For both groups, receiving follow-up within 7 days from discharge significantly reduced likelihood of readmitting within 28 days: - SSP OR = 2.29 - Controls OR = 1.98. Indigenous people in SSP were 2.88 higher odds of readmission than non-indigenous people; being indigenous had no effect for the control group. Personality disorder diagnoses was associated with 2.61 higher odds of readmission than no personality diagnosis for the control group; this effect was not significant for the SSP group.
Meta-analysis of natural, unnatural and cause-specific mortality rates following discharge from	To compare rates of unnatural mortality (specifically from suicide) with natural	Meta-analysis	N = 71 longitudinal studies (comprising 982,558 people) of mortality among people	Over all periods of follow-up, the pooled estimates of natural mortality exceeded the pooled estimates of unnatural mortality. Vascular mortality exceeded suicide.

Title and authors	Aim	Study type	Sample	Findings
in-patient psychiatric facilities Swaraj et al., 2019	mortality (specifically from vascular causes) after inpatient psychiatric care		discharged from inpatient psychiatric facilities	Suicide was the most frequent cause of unnatural death, followed by accidents, then homicide. Vascular death was the most common natural cause with cause-specific rates at least three times that of other natural causes. Among studies reporting separate mortality among men and women, men had higher unnatural, suicide, accidental, and gastrointestinal mortality, but lower natural mortality than women. Studies of people admitted as adolescents reported lower rates of unnatural, suicide, accidental, and much lower natural mortality than adults. Suicide rates were higher among people with schizophrenia and mood disorders than among studies of other/mixed diagnoses.

Exploring the predictors of early readmission to psychiatric hospital
 	
Tulloch et al., 2016
	To explore the associations of readmission to psychiatric hospital over time
	
	To develop a statistical model for early readmission to psychiatric hospital
	
	To assess the feasibility of predicting early readmission
		Retrospective cohort study	N = 7,891 hospital discharges
			
			Primary diagnosis:
			- 26% schizophrenia
			- 16% other psychotic disorder
			- 12% hypomania/mania/bipolar disorder
			- 16% depression
			- 9% neurotic and anxiety disorders
			- 6% personality disorders
			- 11% drug and alcohol disorders
			5% other
				15% of people discharged were readmitted within 90 days.
				
				Risk factors for readmission include:
				- any Black ethnic group at one year follow-up (compared to White British) (HR = 1.12)
				- greater number of psychiatric hospital discharges in the two years before admission (compared to none)
				  ○ One (HR = 1.49)
				  ○ Two (HR = 1.69)
				  ○ Three or more (HR = 2.63)
				- being managed by ‘Other community mental health team’ at one year follow-up (HR = 1.13)
				- personality disorder diagnosis (compared to schizophrenia) (HR = 1.50)
				- length of index hospital admission (compared to 0 days)
				  ○ 1 to 5 days (HR = 1.38)
				  ○ 6 to 18 days (HR = 1.49)
				  ○ 19 to 47 days (HR =1.52)

Title and authors	Aim	Study type	Sample	Findings
				○ 48 days or more (HR = 1.54). Protective factors include: - being married (HR = 0.76) - primary diagnosis compared to schizophrenia ○ depression at one day follow-up (HR = 0.79) and one year follow-up (HR = .67) ○ neurotic and anxiety disorder at one year follow-up (HR = 0.68) other primary diagnosis at one year follow-up (HR = 0.72).
Interventions to improve discharge from acute adult mental health inpatient care to the community: systematic review and narrative synthesis Tyler et al., 2019	To identify the evidence base for interventions to support continuity of care and safety in the transition from mental health inpatient to community services at the point of discharge	Systematic review and narrative synthesis	N = 45 peer-reviewed studies (2000 to 2018) that addressed adults admitted to an acute inpatient mental health and reported on health interventions relating to discharge from the ward to the community	**Transitional Discharge Model / Transitional Relationship Model (TDM)** aims to increase continuity of care from hospital to community. Inpatient nurses work with service users until they establish a therapeutic relationship with their community worker. Support from peers commencing prior to discharge and for up to 1 year after hospitalisation can be included. **Contact-based interventions** The provision of additional post-discharge contact with a professional beyond treatment as usual. Includes letters, telephone, face-to-face, and video contact. Some aimed to reduce suicide, others to improve treatment adherence, one to reduce readmission. Studies that show effectiveness include one where very early telephone follow-ups were effective in reducing likelihood of suicide. Another found intensive case management (weekly face-to-face and telephone calls) decreased suicidal ideation, increased service contact, and improved relationships with professionals.

Title and authors	Aim	Study type	Sample	Findings
				One study that used SMS messages found a significant reduction in readmission and increase in treatment utilisation. Results collectively indicate that speed of follow-up is important for suicide prevention. Contacts may not reduce readmission, but could be useful for improving treatment adherence, particularly in rural populations.
Resilience and mental health: how multisystemic processes contribute to positive outcomes Ungar & Theron, 2019	To show that resilience is best understood as the process of multiple biological, psychological, social, and ecological systems interacting in ways that help individuals to regain, sustain, or improve their mental wellbeing when challenged by one or more risk factors	Review	N/A	A description of psychological resilience must include details of an individual's risk exposure, including the quality of adverse experiences, their severity and chronicity, the systemic level at which they occur, the individual's attribution of causality, and the cultural relevance of the challenges faced. Risk exposure factors include: quantity of stressors, type of adversity, chronicity, severity, systemic level (biological, cognitive, social, and environmental), attribution of causality (ie self or other is responsible), cultural relevance. Promotive and protective factors include: significant others (eg parents, caregivers, relatives, romantic partners), social networks, stress response system, family and community systems, culturally valued norms, justice systems, spiritual or cultural belief systems, cognitive appraisal, mastery motivation or other reward systems. Other considerations include internal systems (eg neurological, stress response, epigenetic, microbiome, and cognitive), external systems (eg social, economic, political, and built and natural environments), and other considerations (eg social constructions of gender, cultural norms, and availability of resources).

Title and authors	Aim	Study type	Sample	Findings
				Desired outcomes include: regaining, sustaining, improving, or transforming mental health; positive changes in behaviour, attitudes, and emotions; and changes to the social and physical environment to facilitate positive development.
Transitional interventions to reduce early psychiatric readmissions in adults: systematic review Vigod et al., 2013	To describe and evaluate interventions applied during the transition from in-patient to out-patient care in preventing early psychiatric readmission.	Systematic review	N = 15 studies of transitional interventions among adults admitted to hospital with mental illness where the study outcome was psychiatric readmission	Absolute risk reductions of 13.6 to 37.0% were observed in statistically significant studies. Effective intervention components were: pre- and post-discharge patient psychoeducation (including self-management, medication information, and living skills), structured needs assessments, medication reconciliation/education, transition managers and in-patient/out-patient provider communication.
Five-year follow-up of an acute psychiatric admission cohort in Auckland, New Zealand Wheeler et al., 2011	To look at engagement with hospital and community-based mental health services in the 5 years after discharge.	Retrospective cohort study	N = 924 (had at least one psychiatric admission in 2000) Adults aged 18 to 65 living in north, west, and south Auckland between 2000 and 2006. Primary diagnosis: - 38.1% schizophrenia/schizoaffective - 24.0% bipolar - 12.6% depression - 25.3% other 59.6% had a previous psychiatric admission, 40.4% did not	Over a third (38.5%) of the original cohort had no further acute psychiatric hospital contact in the 5 years following their index admission, meaning just under two thirds were readmitted. People who had no previous psychiatric admissions were less likely to be readmitted than people who did (32.3% vs 47.7% respectively). In the 5-year follow-up period, 16.7% had one readmission, 10.7% had two, and 34.1% had three or more (range of 3 to 43 readmissions). 41% were readmitted within one year of index admission, 11.1% were readmitted sometime within the second year, 4.1% within the third year, and 2.6% within the fourth and fifth year after index discharge. 5.6% experienced at least one admission in every 12-month period following their index admission. There were significant differences in the proportion of people having readmissions between diagnostic groups: 68.5% of people with bipolar were readmitted, followed by 67.3% with

Title and authors	Aim	Study type	Sample	Findings
				schizophrenia/schizoaffective, then 52.1 % with other disorders, and 49.1% with depression ($p < .001$). **Negative binomial regression** Ethnicity ($p = .001$) and previous admissions ($p < .0001$) were associated with total number of readmissions, adjusting for other factors in the model. Māori and people with previous admissions were more likely to have greater number of readmissions, and Pasifika peoples were more likely to have fewer readmissions. Of those who were readmitted at least once, the median length of stay over the 5 year study period was 67 days, ranging from brief day admissions with no overnight stays to a total of 1,743 days over the 5 years. Diagnosis ($p < .0001$) and previous admissions ($p < .0001$) were significantly associated with length of stay. People with bipolar or 'other' diagnoses had shorter stays than those with schizophrenia, and those with previous admissions stayed longer. Age was also associated with length of stay ($p = .017$), with incidence decreasing with age.
Discharge planning in mental healthcare settings: A review and concept analysis Xiao et al., 2019	Part of a larger study to develop an instrument to measure the quality of discharge planning processes in mental health care	Concept analysis	N = 49 articles that (i) provided an explicit or implicit definition of discharge planning, (ii) explained the concept within the mental health context, and (iii) reflected the general adult population (≥18 years).	**Defining attributes** - Comprehensive needs assessment - Collaborative, patient-centred care - Resource availability management - Care and service coordination - Discharge planner role - Discharge plan. Consequences - Reduced readmission rates - Reduced clinical symptoms - Improved functional levels

Title and authors	Aim	Study type	Sample	Findings
				- Aftercare compliance.
Factors associated with length of stay and the risk of readmission in an acute psychiatric inpatient facility: A retrospective study Zhang et al., 2011	To investigate factors influencing the length of stay and predictors for the risk of readmission at an acute psychiatric inpatient unit	Retrospective cross-sectional clinical file audit	N = 226 admission episodes (178 patients) during a 12-month period - 46% of the sample had a psychiatric history of more than 10 years duration - 71% psychiatric admission - 22% forensic history - Nearly 52% history of self-harm or suicide attempts - 44% history of aggression towards others - 57% admitted involuntarily - 32% discharged on a community treatment order - 61% discharged to case management - 30% directly related to either drug intoxication or withdrawal Primary diagnosis: - 60% psychosis - 36% schizophrenia - 29% personality disorder - 16% schizoaffective - 59% at least one drug or alcohol-related diagnosis	46% were readmitted during the follow-up period, including 40% within 12 months. 13% had at least two readmissions within 12 months and 8% had three or more. Risk factors for readmission include: - greater number of previous admissions - recorded deterioration of mental health state prior to index admission - risk to others at time of index admission - contact with emergency department post-discharge - alcohol intoxication on index admission - electro-convulsive therapy on index admission. Protective factors include: - involuntary treatment in the community - reviewing individual service plans - transferring care to a new treating team. Factors that did not affect readmission rates include: - sociodemographic characteristics - diagnosis of a major psychiatric illness - length of stay - clinical care and practice provided at the inpatient unit during index admission - quality of care.

References

Adeponle, A. B., Thombs, B. D., Adelekan, M. L., & Kirmayer, L. J. (2009). Family participation in treatment, post-discharge appointment and medication adherence at a Nigerian psychiatric hospital. *British Journal of Psychiatry*, *194*(1), 86–87. https://doi.org/10.1192/bjp.bp.108.052217

Aeby, V. G., Xu, L., Lu, W., Carpenter-Aeby, T., Edwards, T., & Vaughn-Heath, J. (2015). Evidence-based social work interventions to improve client attendance in rural mental health: An overview of literature. *Psychology and Cognitive Sciences - Open Journal*, *1*(2), 39–45. https://doi.org/10.17140/PCSOJ-1-106

Aldersey, H., & Whitley, R. (2015). Family influence in recovery from severe mental illness. *Community Mental Health Journal*, *51*(4), 467–476. https://doi.org/10.1007/s10597-014-9783-y

Australian Institute of Health and Welfare. (2022). *Mental health services in Australia, Key Performance Indicators for Australian Public Mental Health Services*. Australian Institute of Health and Welfare. https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/mental-health-indicators/key-performance-indicators-for-australian-public-mental-health-services

Ayer, L., Horowitz, L. M., Colpe, L., Lowry, N. J., Ryan, P. C., Boudreaux, E., Little, V., Erban, S., Ramirez-Estrada, S., & Schoenbaum, M. (2022). Clinical pathway for suicide risk screening in adult primary care settings: Special recommendations. *Journal of the Academy of Consultation-Liaison Psychiatry*, S2667296022002695. https://doi.org/10.1016/j.jaclp.2022.05.003

Barnett, H., & Barnes, A. (2010). *Walk a Mile in Our Shoes. He tuara, ngā tapuwae tuku iho ō ngā Mātua Tūpuna. Exploring discrimination within and towards families and whānau of people diagnosed with "mental illness."* The Mental Health Foundation of New Zealand. https://www.likeminds.org.nz/assets/Uploads/walk-a-mile-in-our-shoes.pdf

Barnett, P., Matthews, H., Lloyd-Evans, B., Mackay, E., Pilling, S., & Johnson, S. (2018). Compulsory community treatment to reduce readmission to hospital and increase engagement with community care in people with mental illness: A systematic review and meta-analysis. *The Lancet Psychiatry*, *5*(12), 1013–1022. https://doi.org/10.1016/S2215-0366(18)30382-1

Bickley, H., Hunt, I. M., Windfuhr, K., Shaw, J., Appleby, L., & Kapur, N. (2013). Suicide within two weeks of discharge from psychiatric inpatient care: A case-control study. *Psychiatric Services*, *64*(7), 653–659. https://doi.org/10.1176/appi.ps.201200026

Binnie, J., & Boden, Z. (2016). Non-attendance at psychological therapy appointments. *Mental Health Review Journal*, *21*(3), 231–248. https://doi.org/10.1108/MHRJ-12-2015-0038

Bojanić, L., Hunt, I. M., Baird, A., Kapur, N., Appleby, L., & Turnbull, P. (2020). Early Post-Discharge suicide in mental health patients: Findings from a national clinical survey. *Frontiers in Psychiatry*, *11*. https://doi.org/10.3389/fpsyt.2020.00502

Bradley, E., & Green, D. (2018). Involved, inputting or informing: "Shared" decision making in adult mental health care. *Health Expectations*, *21*(1), 192–200. https://doi.org/10.1111/hex.12601

Callaly, T., Trauer, T., Hyland, M., Coombs, T., & Berk, M. (2011). An examination of risk factors for readmission to acute adult mental health services within 28 days of discharge in the Australian setting. *Australasian Psychiatry*, *19*(3), 221–225. https://doi.org/10.3109/10398562.2011.561845

Carson, N. J., Vesper, A., Chen, C., & Lê Cook, B. (2014). Quality of follow-up after hospitalization for mental illness among patients from racial-ethnic minority groups. *Psychiatric Services*, *65*(7), 888–896. https://doi.org/10.1176/appi.ps.201300139

Carswell, D. P., & Pashkov, A. (2018). *Evidence-scoping review: Service transitions for mental health and addiction*. Synergia Ltd.

Chen, A., Dinyarian, C., Inglis, F., Chiasson, C., & Cleverley, K. (2020). Discharge interventions from inpatient child and adolescent mental health care: A scoping review. *European Child & Adolescent Psychiatry*. https://doi.org/10.1007/s00787-020-01634-0

Chen, S., Collins, A., & Kidd, S. A. (2018). Thirty-day and 5-year readmissions following first psychiatric hospitalization: A system-level study of ontario's psychiatric care. *Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie*, *63*(6), 410–415.

Chung, D., Hadzi-Pavlovic, D., Wang, M., Swaraj, S., Olfson, M., & Large, M. (2019). Meta-analysis of suicide rates in the first week and the first month after psychiatric hospitalisation. *BMJ Open*, *9*(3), e023883. https://doi.org/10.1136/bmjopen-2018-023883

Crawford, M. J. (2004). Suicide following discharge from in-patient psychiatric care. *Advances in Psychiatric Treatment*, *10*(6), 434–438. https://doi.org/10.1192/apt.10.6.434

De Leo, D., & Heller, T. (2007). Intensive case management in suicide attempters following discharge from psychiatric care. *Australian Journal of Primary Health*, *13*(3), 49. https://doi.org/10.1071/PY07038

DeFife, J. A., Conklin, C. Z., Smith, J. M., & Poole, J. (2010). Psychotherapy appointment no-shows: Rates and reasons. *Psychotherapy: Theory, Research, Practice, Training*, *47*(3), 413–417. https://doi.org/10.1037/a0021168

Department of Health and Ageing. (2013). *Department of Health | Indicator 14: Readmission to hospital within 28 days of discharge*. https://www1.health.gov.au/internet/publications/publishing.nsf/Content/mental-pubs-n-report13-toc~mental-pubs-n-report13-3~mental-pubs-n-report13-3-4~mental-pubs-n-report13-3-4-ind14

Donisi, V., Tedeschi, F., Wahlbeck, K., Haaramo, P., & Amaddeo, F. (2016). Pre-discharge factors predicting readmissions of psychiatric patients: A systematic review of the literature. *BMC Psychiatry*, *16*, 1–17. https://doi.org/10.1186/s12888-016-1114-0

Durbin, J., Lin, E., Layne, C., & Teed, M. (2007). Is readmission a valid indicator of the quality of inpatient psychiatric care? *The Journal of Behavioral Health Services & Research*, *34*(2), 137–150. https://doi.org/10.1007/s11414-007-9055-5

Exbrayat, S., Coudrot, C., Gourdon, X., Gay, A., Sevos, J., Pellet, J., Trombert-Paviot, B., & Massoubre, C. (2017). Effect of telephone follow-up on repeated suicide attempt in patients discharged from an emergency psychiatry department: A controlled study. *BMC Psychiatry*, *17*, 1–6. https://doi.org/10.1186/s12888-017-1258-6

Fontanella, C. A., Hiance-Steelesmith, D. L., Bridge, J. A., Lester, N., Sweeney, H. A., Hurst, M., & Campo, J. V. (2016). Factors associated with timely follow-up care after psychiatric hospitalization for youths with mood disorders. *Psychiatric Services*, *67*(3), 324–331. https://doi.org/10.1176/appi.ps.201500104

Government Inquiry into Mental Health and Addiction. (2018). *He Ara Oranga: Report of the Government Inquiry into Mental Health and Addiction*. https://mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf

Gunnell, D., Hawton, K., Ho, D., Evans, J., O'Connor, S., Potokar, J., Donovan, J., & Kapur, N. (2008). Hospital admissions for self harm after discharge from psychiatric inpatient care: Cohort study. *BMJ*, *337*(nov18 3), a2278–a2278. https://doi.org/10.1136/bmj.a2278

Hariman, K., Cheng, K. M., Lam, J., Leung, S. K., & Lui, S. S. Y. (2020). Clinical risk model to predict 28-day unplanned readmission via the accident and emergency department after discharge from acute psychiatric units for patients with psychotic spectrum disorders. *BJPsych Open*, *6*(1), e13. https://doi.org/10.1192/bjo.2019.97

Haselden, M., Corbeil, T., Tang, F., Olfson, M., Dixon, L. B., Essock, S. M., Wall, M. M., Radigan, M., Frimpong, E., Wang, R., Lamberti, S., Schneider, M., & Smith, T. E. (2019). Family involvement in psychiatric hospitalizations: Associations with discharge planning and prompt follow-up care. *Psychiatric Services*, *70*(10), 860–866. https://doi.org/10.1176/appi.ps.201900028

Haverfield, M. C., Schmidt, E., Timko, C., & Ilgen, M. (2019). Social support networks and symptom severity among patients with co-occurring mental health and substance

Use Disorders. *Community Mental Health Journal*, *55*(5), 768–776. https://doi.org/10.1007/s10597-019-00396-7

Health Quality & Safety Commission. (2022). *Connecting care: Improving service transitions: Health Quality & Safety Commission*. https://www.hqsc.govt.nz/our-work/mental-health-and-addiction-quality-improvement/projects/connecting-care-improving-service-transitions/

Hegedüs, A., Kozel, B., Richter, D., & Behrens, J. (2020). Effectiveness of transitional interventions in improving patient outcomes and service use after discharge from psychiatric inpatient care: A systematic review and meta-analysis. *Frontiers in Psychiatry*, *10*, 969. https://doi.org/10.3389/fpsyt.2019.00969

Hogue, A., Becker, S. J., Wenzel, K., Henderson, C. E., Bobek, M., Levy, S., & Fishman, M. (2021). Family involvement in treatment and recovery for substance use disorders among transition-age youth: Research bedrocks and opportunities. *Journal of Substance Abuse Treatment*, *129*, 108402. https://doi.org/10.1016/j.jsat.2021.108402

Hunt, I. M., Kapur, N., Webb, R., Robinson, J., Burns, J., Shaw, J., & Appleby, L. (2009). Suicide in recently discharged psychiatric patients: A case-control study. *Psychological Medicine*, *39*(3), 443–449. https://doi.org/10.1017/S0033291708003644

Jackson, C. L., & Ball, L. (2018). Continuity of care is vital but how do we measure it? *Australian Journal of General Practice*, *47*(10). https://doi.org/10.31128/AJGP-05-18-4568

Katz, I. R., Peltzman, T., Jedele, J. M., & McCarthy, J. F. (2019). Critical Periods for Increased mortality after discharge from inpatient mental health units: opportunities for prevention. *Psychiatric Services*, *70*(6), 450–456. https://doi.org/10.1176/appi.ps.201800352

Khankeh, H., Rahgozar, M., & Ranjbar, M. (2011). The effects of nursing discharge plan (post-discharge education and follow-up) on self-care ability in patients with chronic schizophrenia hospitalized in Razi psychiatric Center. *Iranian Journal of Nursing and Midwifery Research*, *16*(2), 162–168.

Kourgiantakis, T., Saint-Jacques, M.-C., & Tremblay, J. (2018). Facilitators and Barriers to Family involvement in problem gambling treatment. *International Journal of Mental Health & Addiction*, *16*(2), 291–312. https://doi.org/10.1007/s11469-017-9742-2

KPI Programme. (2022a). *Acute inpatient post-discharge community care*. MH&A KPI Programme. https://www.mhakpi.health.nz/kpi-streams/adult-stream/acute-inpatient-post-discharge-community-care/

KPI Programme. (2022b). *Acute inpatient post-discharge community care: Ask me anything*. MH&A KPI Programme. https://www.mhakpi.health.nz/kpi-streams/adult-stream/acute-inpatient-post-discharge-community-care/ask-me-anything/

Large, M., Sharma, S., Cannon, E., Ryan, C., & Nielssen, O. (2011). Risk factors for suicide within a year of discharge from psychiatric hospital: A systematic meta-analysis. *Australian & New Zealand Journal of Psychiatry*, *45*(8), 619–628. https://doi.org/10.3109/00048674.2011.590465

Lin, H.-C., Lee, H.-C., Kuo, N.-W., & Chu, C.-H. (2008). Hospital characteristics associated with post-discharge suicide of severely depressed patients. *Journal of Affective Disorders*, *110*(3), 215–221. https://doi.org/10.1016/j.jad.2008.01.030

Links, P., Nisenbaum, R., Ambreen, M., Balderson, K., Bergmans, Y., Eynan, R., Harder, H., & Cutcliffe, J. (2012). Prospective study of risk factors for increased suicide ideation and behavior following recent discharge. *General Hospital Psychiatry*, *34*(1), 88–97. https://doi.org/10.1016/j.genhosppsych.2011.08.016

Lorant, V., Nazroo, J., & Nicaise, P. (2017). Optimal network for patients with severe mental illness: A social network analysis. *Administration and Policy in Mental Health and Mental Health Services Research*, *44*(6), 877–887. https://doi.org/10.1007/s10488-017-0800-7

Madsen, T., Erlangsen, A., Hjorthøj, C., & Nordentoft, M. (2020). High suicide rates during psychiatric inpatient stay and shortly after discharge. *Acta Psychiatrica Scandinavica*, *142*(5), 355–365. https://doi.org/10.1111/acps.13221

Marino, L., Wissow, L. S., Davis, M., Abrams, M. T., Dixon, L. B., & Slade, E. P. (2016). Predictors of outpatient mental health clinic follow-up after hospitalization among Medicaid-enrolled young adults. *Early Intervention in Psychiatry*, *10*(6), 468–475. https://doi.org/10.1111/eip.12206

Medicaid. (2022). *2022 Core Set of Adult Health Care Quality Measures for Medicaid (Adult Core Set)*. https://www.medicaid.gov/medicaid/quality-of-care/downloads/2022-adult-core-set.pdf

Meehan, J., Kapur, N., Hunt, I., Turnbull, P., Robinson, J., Bickley, H., Parsons, R., Flynn, S., Burns, J., Amos, T., Shaw, J., & Appleby, L. (2006). Suicide in mental health patients and within 3 months of discharge: National clinical survey. *British Journal of Psychiatry*, *188*, 129–134.

Ministry of Health. (2019). *Office of the Director of Mental Health and Addiction Services: Annual Report 2017*. Ministry of Health. https://www.health.govt.nz/system/files/documents/publications/office-of-the-director-of-mental-health-and-addiction-services-annual-report-2017-v2.pdf

Ministry of Health. (2020). *Mental health 2016/17: New Zealand Health Survey*.

Ministry of Health. (2021). *Kia Manawanui Aotearoa: Long-term pathway to mental wellbeing* (p. 76). Ministry of Health.

NHS Benchmarking Network. (2019). *International mental health comparisons 2019: Child and Adolescent, Adult, Older Adult Services*.

NHS England. (2022). *NHS Mental Health Dashboard: February 2022 publication (Quarter 2 2021/22)*. https://www.england.nhs.uk/wp-content/uploads/2022/02/nhsmh-dashboard-q2-2021-22.xlsm

OECD. (2021). *A new benchmark for mental health systems: Tackling the social and economic costs of mental ill-health*. OECD Publishing. https://www.oecd.org/health/a-new-benchmark-for-mental-health-systems-4ed890f6-en.htm

Office of the Auditor-General. (2017). *Mental health: Effectiveness of the planning to discharge people from hospital*. Office of the Auditor-General.

Patel, M., Head, S., Dwyer, J., & Preyde, M. (2019). Youth transition home from residential mental health treatment: Caregivers' perspective. *Child & Adolescent Social Work Journal*, *36*(5), 485–494. https://doi.org/10.1007/s10560-018-0572-2

Robst, J., Rohrer, L., Dollard, N., & Armstrong, M. (2014). Family involvement in treatment among youth in residential facilities: Association with discharge to family-like setting and follow-up treatment. *Journal of Emotional and Behavioral Disorders*, *22*(3), 190–196. https://doi.org/10.1177/1063426614523651

Sather, E. W., Svindseth, M. F., Crawford, P., & Iversen, V. C. (2018). Care pathways in the transition of patients between district psychiatric hospital centres (DPCs) and community mental health services. *Health Science Reports*, *1*(5), e37. https://doi.org/10.1002/hsr2.37

Schmutte, T., Olfson, M., Xie, M., & Marcus, S. C. (2022). Factors associated with 7-day follow-up outpatient mental healthcare in older adults hospitalized for suicidal ideation, suicide attempt, and self-harm. *The American Journal of Geriatric Psychiatry*, *30*(4), 478–491. https://doi.org/10.1016/j.jagp.2021.08.011

Schuster, F., Holzhüter, F., Heres, S., & Hamann, J. (2021). "Triadic" shared decision making in mental health: Experiences and expectations of service users, caregivers and clinicians in Germany. *Health Expectations*, *24*(2), 507–515. https://doi.org/10.1111/hex.13192

Scottish Government. (2018). *Mental health quality indicators: Background and secondary definitions*. http://www.gov.scot/publications/mental-health-quality-indicators-background-secondary-definitions/pages/8/

Sfetcu, R., Musat, S., Haaramo, P., Ciutan, M., Scintee, G., Vladescu, C., Wahlbeck, K., & Katschnig, H. (2017). Overview of post-discharge predictors for psychiatric re-hospitalisations: A systematic review of the literature. *BMC Psychiatry*, *17*(1), 227. https://doi.org/10.1186/s12888-017-1386-z

Smith, T. E., Haselden, M., Corbeil, T., Wall, M. M., Tang, F., Essock, S. M., Frimpong, E., Goldman, M. L., Mascayano, F., Radigan, M., Schneider, M., Wang, R., Rodgers, I., Dixon, L. B., & Olfson, M. (2022). The effectiveness of discharge planning for psychiatric inpatients with varying levels of preadmission engagement in care. *Psychiatric Services*, *73*(2), 149–157. https://doi.org/10.1176/appi.ps.202000863

Steffen, S., Kösters, M., Becker, T., & Puschner, B. (2009). Discharge planning in mental health care: A systematic review of the recent literature. *Acta Psychiatrica Scandinavica*, *120*(1), 1–9. https://doi.org/10.1111/j.1600-0447.2009.01373.x

Stene-Larsen, K., & Reneflot, A. (2019). Contact with primary and mental health care prior to suicide: A systematic review of the literature from 2000 to 2017. *Scandinavian Journal of Public Health*, *47*(1), 9–17. https://doi.org/10.1177/1403494817746274

Sveticic, J., Turner, K., Bethi, S., Krishnaiah, R., Williams, L., Almeida-Crasto, A., Stapelberg, N. J. C., & Roy, S. (2020). Short stay unit for patients in acute mental health crisis: A case-control study of readmission rates. *Asia-Pacific Psychiatry*, *12*(1), e12376. https://doi.org/10.1111/appy.12376

Swaraj, S., Wang, M., Chung, D., Curtis, J., Firth, J., Ramanuj, P. P., Sara, G., & Large, M. (2019). Meta-analysis of natural, unnatural and cause-specific mortality rates following discharge from in-patient psychiatric facilities. *Acta Psychiatrica Scandinavica*, *140*(3), 244–264. https://doi.org/10.1111/acps.13073

Te Pou. (2020). *Achieving physical health equity for people with experience of mental health and addiction issues: Evidence update*. Te Pou. https://d2ew8vb2gktr0m.cloudfront.net/files/resources/Equally-Well-Evidence-Update-2020.pdf

Te Pou. (2022). *Summary Report HoNOS National Jan—Dec 2021* (p. 29). Te Pou. https://www.tepou.co.nz/uploads/files/resources/Summary-Report-HoNOS-National-Jan-Dec-2021.pdf

The Key Performance Indicator Framework for New Zealand Mental Health and Addiction Services. (2021). *Acute inpatient 28-day readmission*. MH&A KPI Programme. https://www.mhakpi.health.nz/kpi-streams/adult-stream/acute-inpatient-28-day-readmission/

Tulloch, A. D., David, A. S., & Thornicroft, G. (2016). Exploring the predictors of early readmission to psychiatric hospital. *Epidemiology and Psychiatric Sciences*, *25*(2), 181–193. https://doi.org/10.1017/S2045796015000128

Tyler, N., Wright, N., & Waring, J. (2019). Interventions to improve discharge from acute adult mental health inpatient care to the community: Systematic review and narrative synthesis. *BMC Health Services Research*, *19*(1), 883. https://doi.org/10.1186/s12913-019-4658-0

Ungar, M., & Theron, L. (2020). Resilience and mental health: How multisystemic processes contribute to positive outcomes. *The Lancet Psychiatry*, *7*(5), 441–448. https://doi.org/10.1016/S2215-0366(19)30434-1

Vigod, S. N., Kurdyak, P. A., Dennis, C.-L., Leszcz, T., Taylor, V. H., Blumberger, D. M., & Seitz, D. P. (2013). Transitional interventions to reduce early psychiatric readmissions in adults: Systematic review. *British Journal of Psychiatry*, *202*(3), 187–194. https://doi.org/10.1192/bjp.bp.112.115030

Waller, S., Reupert, A., Ward, B., McCormick, F., & Kidd, S. (2019). Family-focused recovery: Perspectives from individuals with a mental illness. *International Journal of Mental Health Nursing*, *28*(1), 247–255. https://doi.org/10.1111/inm.12528

Wheeler, A., Moyle, S., Jansen, C., Robinson, E., & Vanderpyl, J. (2011). *Five-year follow-up of an acute psychiatric admission cohort in Auckland, New Zealand*. *124*(1336), 10.

Xiao, S., Tourangeau, A., Widger, K., & Berta, W. (2019). Discharge planning in mental healthcare settings: A review and concept analysis. *International Journal of Mental Health Nursing*, *28*(4), 816–832. https://doi.org/10.1111/inm.12599

Zhang, J., Harvey, C., & Andrew, C. (2011). Factors associated with length of stay and the risk of readmission in an acute psychiatric inpatient facility: A retrospective study. *Australian & New Zealand Journal of Psychiatry*, *45*(7), 578–585. https://doi.org/10.3109/00048674.2011.585452