

Chief Psychiatrist's audit of inpatient deaths 2011–2014

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Foreword

The unexpected death of a person during a hospital admission is a tragic event that causes immense distress to families, carers and staff. Government and health services have an obligation to thoroughly investigate such deaths and carefully consider what could be done to prevent future deaths and other adverse clinical events.

The review of patients who have died while under the care of mental health inpatient units is a challenging but important part of my role as Chief Psychiatrist. I am supported in this work by a Morbidity and Mortality Committee, comprising clinical experts and service representatives who advise on issues related to reportable deaths and critical adverse events.

This report presents findings and recommendations from an audit of inpatient deaths in Victorian public mental health services over the three-and-a-half-year period from 2011 to mid-2014. The audit continues the work of the first review of deaths between 2008 and 2010.

Following the initial review, mental health services were asked to develop action plans in response to a series of recommendations to enhance ward safety, promote clinicians' capacity to manage known risks and strengthen service providers' own analyses of serious incidents. They have since implemented a range of practice and policy improvements to address these concerns.

While the numbers of unexpected, unnatural or undetermined deaths are identical in the current and previous audits, the number of people treated in inpatient units has increased significantly, suggesting that wards may have become safer. Compared with the volume of services provided, the proportion of unexpected, unnatural and undetermined deaths was nine percent less in the three years from 2011 to 2013 than in 2008 to 2010. Because there are few deaths relative to the large number of people who use inpatient services, it is difficult to be certain over short timeframes that rates of death are falling – but the available evidence points in this direction.

The methods employed in the audit were chosen expressly to: shed light on the actual experiences of the person who died; reflect the perceptions and values of consumers and carers; and recommend changes that will improve consumers' experiences and outcomes. To this end, the audit panels included roughly equal numbers of clinical leaders and consumer and carer advocates.

Our approach to the audit accords with the Victorian Government's commitment to strengthening the quality and safety of health services through better oversight of adverse incidents, extracting more value from service data and involving consumers and carers in service development and review. Going forward, my office will work closely with Safer Care Victoria, which was established in January 2017 to lead the government's health service governance reforms, including how clinical incidents are reviewed and learnings shared across the system.

Based on the audit outcomes and panel members' recommendations, I have committed to a range of actions consistent with my role in promoting service quality and safety across the mental health system. I have also made a number of recommendations for mental health service providers. The intent of these recommendations is not only to prevent deaths wherever possible but to make admission to mental health inpatient services a more positive, restorative experience for all consumers.

I encourage all health service staff to read this report and participate in the continuous drive to improve the quality and safety of our hospitals.

I thank all panel members for their invaluable contribution to this audit. The involvement of consumers and carers was especially appreciated.

Neil Coventry

Chief Psychiatrist

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Introduction

Mental health services are responsible for providing a safe, therapeutic and healing environment for consumers.

The *Mental Health Act 2014* contains a comprehensive suite of safeguards to protect the safety, rights and dignity of people who need mental health services. The Chief Psychiatrist has specific responsibilities in promoting these safeguards and ensuring they are upheld.

As part of this role, the Chief Psychiatrist monitors all deaths in public mental health inpatient facilities with a view to identifying systemic and care-related factors that, if remedied, might improve the care delivered to all consumers and reduce the likelihood of further deaths.

The Office of the Chief Psychiatrist (OCP) has previously published a report on the investigation of inpatient deaths in the three-year period from 2008 to 2010.¹ The report of that investigation included 15 recommendations that aimed to improve:

- service providers' own reviews of deaths
- the physical safety of inpatient facilities
- the quality of nursing observations
- the management of consumers' withdrawal from alcohol and other drugs and any deterioration in their physical condition
- clinicians' engagement with consumers' families and carers.

A review of service providers' responses to these recommendations one year later found high levels of adherence to the proposed actions and programs.

The report on the first audit recommended that the Chief Psychiatrist continue to formally review inpatient deaths every three years. The audit described here is the result of that proposal.

The current report details findings, outcomes and recommendations from an investigation of inpatient deaths in the three and a half years from 1 January 2011 to 30 June 2014. The proposed three-year review period was extended by six months to align with the transition to Victoria's new mental health legislation on 1 July 2014.

Purpose and scope of the audit

Under s. 134 of the Mental Health Act, the Chief Psychiatrist is empowered to conduct audits of specified practices or matters related to the mental health services provided by one or more service providers. A key goal of the audit process is to identify systemic issues or trends that need to be addressed to improve the quality and safety of mental health services.

The Chief Psychiatrist's authority in respect of audits is part of the broader statutory responsibilities associated with the role, as defined in s. 121 of the Act. These are outlined on page 10.

The scope and purpose of the audit is detailed in its terms of reference (see Appendix 1). In summary the audit examined:

- the circumstances of the deaths of public mental health inpatients between 1 January 2011 and 30 June 2014
- the physical safety of inpatient units and the adequacy of mental health services' policies, procedures and staff educational programs concerning leave arrangements and absconding
- the adequacy of service providers' responses to improvements in policy and practice proposed by the services themselves at the completion of their own review processes
- the adequacy of service providers' responses to recommended improvements in policy and practice made by the Coroner and/or the Department of Health and Human Services ('the department').

The audit looked far beyond factors immediately proximal to deaths on the grounds that improvements in all aspects of practice may contribute to better, safer care for all consumers.

Legislative and policy context

Mental health legislation

The current Mental Health Act came into effect on 1 July 2014 following six years of preparation and consultation with the Victorian community. While the deaths examined in the audit occurred in the last three and half years of the previous legislation (*Mental Health Act 1986*), the department's approach to the audit was governed and informed by the new Act.

This legislation has significant implications because it shifts the focus of the Chief Psychiatrist's role from individual client and service issues to responsibility for system-wide quality assurance and improvement.

The Mental Health Act (s. 121) describes the roles and functions of the Chief Psychiatrist. These include:

- providing clinical leadership and expert clinical advice to Victorian mental health service providers
- promoting continuous improvement in the quality and safety of mental health services
- promoting the rights of people receiving mental health services
- giving advice to the relevant minister and departmental Secretary about these services.

New quality and safety directions for health services

The Victorian Government has embarked on significant policy, structural and process changes in response to recent reviews of quality and safety in Victoria's health services.^{2,3} These changes represent a fundamental shift in how the department fulfils its system leadership role. The new directions will include:

- more active departmental oversight of the safety and quality of care provided by public and private health services and clearer parameters for intervening to address safety and quality issues
- reforming the current systems and processes for health service reporting of serious clinical incidents
- strengthening the department's role in coordinating and supporting quality improvement
- strengthening data collections and data analytics capacity with a health data body to develop and publish reports on health service performance
- better use of data and other information to inform improvement strategies and initiatives
- a 'sea change' in culture and practice regarding consumer and carer participation in service design, delivery and evaluation
- a greater focus on user-reported experiences and outcomes as measures of service performance and effectiveness
- improving the engagement of sector clinicians in policy and service development.

Specific changes that will impact on future investigations of serious clinical incidents, including inpatient deaths, encompass:

- creating a new agency, Safer Care Victoria, that will subsume the Sentinel Events Program including the functions of the now dissolved Clinical Incident Review Panel (Safer Care Victoria will use information arising from sentinel event reviews to promote statewide learnings)
- developing: a central oversight of hospital progress in investigating and addressing root causes of high-severity incidents; a central analysis of incident reports to support safety improvement; and departmental policies and improvement projects to mitigate recurrent risks detected through incident reports
- establishing a requirement that all hospitals have: at least one independent expert on their sentinel event root cause analysis panel; a designated individual responsible for ensuring panel recommendations are implemented, and evidence that they have implemented their panel's recommendations

- creating the Victorian Agency for Health Information to provide data to hospitals against a comprehensive range of performance and outcome indicators
- providing best practice root cause analysis and morbidity and mortality review protocols for health services
- developing a clinician-led training strategy that incorporates training in contemporary quality improvement methods.

Victoria's mental health plan

*Victoria's 10-year mental health plan*⁴ sets out the government's vision to improve mental health services and outcomes for Victorians. Key policy and practice directions established under the plan include:

- co-production – service providers and users will guide government policy and system management, as well as service design and delivery
- evidence-based practice – improvement in the quality of mental healthcare will be brought about by embedding evidence about effective treatments and practices
- trauma-informed care – clinical practice will be sensitive to trauma-related behaviours that serve as coping and survival mechanisms for many people experiencing mental illness
- recovery-oriented practice – consumers will be supported to define and realise personal wellbeing through recovery-oriented services that build optimism and hope.

Of the anticipated outcomes of the plan, four have special relevance to safety and the care of people admitted to mental health inpatient units:

- the rate of suicide is reduced
- services are safe, of high quality, offer choice and provide a positive service experience
- services are recovery-oriented, trauma-informed and family-inclusive
- the treatment and support that Victorians with mental illness, their families and carers need is available in the right place at the right time.

Suicide prevention framework

The Victorian Government has committed to reducing the suicide rate in Victoria by 50 per cent over 10 years. The government's suicide prevention strategy is outlined in the *Victorian suicide prevention framework 2016–25*.⁵

As part of the framework, assertive outreach programs will be trialled at six hospitals to support people and their families in the vulnerable period following a suicide attempt. There will also be six place-based trials, where local communities will develop and implement proactive suicide prevention strategies.

These initiatives are the first steps towards delivering a statewide approach that ensures all involved in suicide prevention collaborate and focus their efforts on interventions that have the greatest impact.

The trials will inform how we can best work together to reduce suicides in every community across the state. They are likely to deliver learnings that can be applied in mental health services, including inpatient settings.

Death notifications and reviews in Victoria

Deaths in Victorian mental health inpatient units are subject to review by multiple agencies. Service providers conduct their own reviews of inpatient deaths under the aegis of a formally constituted quality improvement program that reports to the health service's board of directors.

The OCP maintains a constant overview of the deaths of all mental health consumers, whether in inpatient units, subacute and residential facilities or the community. (However, only deaths on inpatient wards are considered in this report.)

During the period of this audit, the department's Sentinel Event Program monitored and reviewed service providers' reports about inpatient suicides.

All unnatural, unexpected or violent deaths, and the deaths of all involuntary inpatients, are examined by the Coroner.

This section outlines the processes involved in the review and the opportunities they afford to improve the quality and safety of mental healthcare.

Service providers

All inpatient deaths are reviewed by mental health service providers to help identify and remedy elements of care that might have contributed to the death.

Unexpected, unnatural or violent deaths are subject to a more detailed 'root cause analysis' conducted by a team of senior mental health clinicians, one of whom must have undertaken specialist training. The root cause of an incident is the earliest point at which action could have been taken to reduce the chance of the incident happening. Analyses employ recognised methods to highlight lapses in clinical systems and processes. These reviews are scrutinised by a clinical risk committee with representatives from a range of specialities. Outcomes are reported through senior management to the health service's board.

Office of the Chief Psychiatrist

The Chief Psychiatrist monitors deaths in all mental health services, both in inpatient units and the community. Service providers are required to notify the Chief Psychiatrist of the death of any person receiving treatment or care for a mental disorder that is a reportable death within the meaning of the *Coroners Act 2008*. Deaths are reportable to the Coroner and to the Chief Psychiatrist if:

- they appear to have been unexpected, unnatural or violent or to have resulted, directly or indirectly, from an accident or injury
- the deceased person was in custody or care as defined by the Coroners Act
- the deceased person had been a patient within the meaning of the Mental Health Act.

Guidelines developed by the Chief Psychiatrist go further.⁶ Health services are required to report all inpatient deaths within 24 hours, regardless of legal status, cause or location.

More information must be provided within a three-day period using a prescribed form that lists the circumstances of the death, as well as the person's mental and physical diagnoses, mental state, risk assessment and treatment plan.

A deputy chief psychiatrist and clinical advisor review the notification forms as they are received. Further information is sought from the service when required to enable the Chief Psychiatrist to reach a considered judgement regarding the circumstances of each death and the appropriateness of the treatment and care provided.

The OCP subjects inpatient suicides to scrutiny through its specialist review body, the Chief Psychiatrist's Sentinel Event Review Committee, which comprises senior psychiatrists and nurses, quality coordinators and managers. The committee meets on a quarterly basis to appraise providers' root

cause analyses and risk reduction action plans. For the period in which the audit applied, the analyses and plans were forwarded to OCP in a de-identified state by the department's Sentinel Event Program. Following review, the committee's findings and recommendations were then returned to the department's program for endorsement.

Sentinel Event Program

At the time of the audit, the department monitored suicides on all Victorian inpatient units (not just mental health wards) as part of the national Sentinel Event Program.

Sentinel events are defined as infrequent, clear-cut events that arise independently of a patient's condition as a result of system or process deficiencies, and where the patient outcome is death or permanent harm. There are eight such events, one of which is 'suicide in an inpatient unit'. Victoria is unique in having an additional 'other catastrophic' category that encompasses other deaths including suicides in medical wards and severe incidents such as self-harm

The program's multidisciplinary Critical Incident Review Panel reviewed service providers' root cause analyses and risk reduction action plans in conjunction with a report from the Chief Psychiatrist's Sentinel Event Review Committee, and provided written feedback to providers.

Coroner

The Coroner investigates all deaths on mental health inpatient units except the natural deaths of voluntary patients. Upon notification of a reportable death, the Coroner begins an investigation culminating in a report of the deceased person's identity and cause of death. A proportion of inquests are conducted in open court to permit the cross-examination of evidence submitted by clinicians and other key parties. When necessary, the Coroner makes recommendations about matters connected with a death with a view to preventing similar deaths from occurring in the future. The people or bodies to whom recommendations are directed must provide a written account of their responses within three months.

The OCP receives copies of the Coroner's reports for all inpatient deaths. It acts on recommendations directed to the Chief Psychiatrist and follows up matters with service providers when required.

Literature summary

The academic literature concerning deaths on mental health inpatient units was searched to help inform the OCP and its audit panels in their examination of deaths between 2010 and 2014.

Forty papers, mostly published in the past decade, were identified as having special relevance to the project. Most concern death by suicide.

Highlights from these papers are summarised below to set the Victorian experience in an international context and to prompt scrutiny of current local practice. Despite their value, it is important to note that the papers describe experiences in a wide range of settings and over a lengthy period of time. The outcomes they describe are often associated with significant changes in service organisation and delivery.

Inpatient suicide rates

Only three reports provided data from the past one to two decades regarding rates of inpatient suicides within countries, states or healthcare systems. These reports reveal the following:

- Inpatient suicides in the United Kingdom (UK) fell by about one-third between 1997 and 2008, from 2.45 to 1.68 per 100,000 occupied bed days, after adjusting for changes in occupancy rates. A reduction of 59 per cent in deaths by hanging was attributed by the authors to an intensive, ongoing national program to eliminate hanging ligature points on wards. While the *number* of suicides within three months of discharge fell by about one-fifth, the *rate* of suicides increased from 1.39 to 1.66 per 1,000 discharges. This was thought to reflect the large reduction in bed numbers over this period and a consequent increase in discharges.⁷
- In Denmark, inpatient suicide rates fell by about six per cent a year from 1997 to 2006.⁸
- In the United States (US), the Veterans Health Administration developed a detailed risk abatement checklist for clinicians and engineers to use in their regular safety audits of inpatient units. After adjusting for numbers of admissions, use of the tool was associated with a 67 per cent reduction in inpatient suicides.⁹

Clinical correlates of suicide

In the broader community, male gender and advancing age are predictors of suicide. In inpatient units, by contrast, men and women of all ages share a suicide rate about 60 times higher than the population generally.¹⁰ Gender, age and diagnosis have little bearing on risk.

In case control studies, in which inpatients who commit suicide are compared with those who do not, suicide was associated with suicidal acts or acts of self-harm preceding or during admission and with depressive symptoms as opposed to depressive diagnoses.^{11,12}

Phase of admission

Up to 40 per cent of suicides in the UK occurred within one week of admission, with 11 per cent happening on the day of admission.¹³

Environmental safety

As a result of the previous inpatient death audit, all Victorian mental health services conduct regular safety audits of inpatient units using a structured checklist, looking for ligature points and other opportunities for self-harm.

Hanging accounts for between half and three-quarters of suicides in UK and US inpatient units.^{14,15}

The most common ligature anchor points were bedroom and bathroom doors, followed by hooks, handles and rails. Ligatures included bedding, towels, clothing, belts and cables.^{16,17,18}

Absconding

A small proportion of the people who abscond from wards come to harm, whether deliberately or inadvertently. Reducing absconding is highly desirable, but locking ward doors may not prevent unauthorised egress and may not reduce suicide rates.

The literature shows that:

- About a quarter of mental health inpatient suicides in London occurred after absconding from hospital.¹⁹ Nearly four per cent of absconding episodes had a lethal outcome.²⁰
- In London acute inpatient units, the mean absconding rate was 0.27 per day on permanently open wards versus 0.33 on permanently locked wards. Wards with locked front doors often offered alternative methods of egress to consumers who were determined to leave. Higher than average absconding rates were associated with poor ward environments, frequent use of agency and unqualified staff, and high rates of verbal aggression, self-harm and use of alcohol and illicit drugs.²¹
- In a 15-year study of area-based psychiatric hospitals in Germany, wards that had never been locked had lower rates of absconding and suicide attempts than wards that had always been locked. There were no significant differences in suicide rates.²²

Studies have also shed light on the factors that contribute to absconding. Some relate to the ward environment. Others relate to consumers' own lives and concerns.

- Patients in a UK study absconded because they were bored, frightened of other patients, felt trapped or confined, had household responsibilities they felt obliged to fulfil or felt cut off from family and friends.²³
- From the perspectives of nurses and families in a London study, locked doors offered protection against unwanted visitors, stealing and drug dealing.²⁴ Nurses reported arguments and episodes of aggression near locked doors but were fearful of allegations of incompetence if doors were left open. By contrast, consumers found locked front doors constraining, stigmatising and disempowering. Some voluntary patients were reluctant to bother staff to gain egress.²⁵

Efforts to reduce absconding have focused primarily on making the ward environment more congenial and supportive. For example:

- UK researchers have collated strategies and developed a workbook to help reduce absconding. Strategies included analysing absconding patterns, clarifying rules about entrance and exit policies, allocating nursing time to those identified as high risk for absconding, and holding post-incident debriefings.²⁶
- A program that increased the time nurses spent with people judged to be at high risk of absconding, encouraged family contact and offered debriefing after altercations was associated with a 25 per cent reduction in absconding episodes.²⁷

Nursing observations

Nurses in Victorian mental health services note the presence of every inpatient at predetermined intervals, ranging from constant observation by a 'special' nurse to hourly checks, both by day and night.

International studies have found:

- Nursing observations may be perceived by consumers as intrusive and anti-therapeutic, especially when applied as 'tick box' rituals with no effort to engage in empathic conversation.²⁸
- There was no association between the frequency of nurses' constant observation of consumers on acute wards in London and episodes of self-harm. Rates of self-harm remained steady despite a reduction in constant observation over a two-year period.²⁹
- Suicides were often prevented by nurses being vigilant and inquisitive, according to an analysis of suicide attempts on inpatient units in the UK. The authors promoted the use of intermittent, as opposed to set, observational routines and emphasised the value of skilled nursing judgement.³⁰

Risk assessment

It is now customary for nurses to assess consumers on mental health wards as being at low, medium or high risk of self-harm and violence during every shift. The effectiveness of this type of assessment is unclear. Authors of relevant studies have reported the following:

- Most people who committed suicide on inpatient units denied suicidal intent when last questioned by staff.³¹
- Fewer than two per cent of inpatients rated at high risk of suicide using a range of putative risk factors took their lives on the ward. Conversely, 14 per cent of those who committed suicide had none of these risk factors, and 30 per cent had only one.³²
- Using risk factors to classify inpatients as being at high risk or low risk would prevent few if any suicides but would result in more restrictive care to many patients, few of whom will self-harm.³³
- There is no evidence of the reliability and validity of repeated assessments of suicide risk during admissions. The best prospects for reducing inpatient suicide lie in improved clinical care and communication and in measures to reduce the opportunities to commit suicide while in hospital.³⁴

Incident review processes

Victorian healthcare services are required to conduct detailed reviews of all serious incidents. Root cause analysis, the most commonly used tool to review adverse clinical incidents, is derived from industry and seeks to identify a particular action or omission as the immediate cause of an incident. However, a review of the literature suggests the following:

- Typically, incidents in clinical settings are preceded by a complex chain of events and a wide variety of contributory factors. A focus on a single 'root cause' of an incident is therefore of limited value.³⁵
- Root cause analysis focuses on elements of care independent of the consumer. In the case of suicide, the person's intentional action is intrinsically connected to their current mental status. Review processes must therefore consider the quality of the care and treatment on offer and the skills of the staff members who were tasked with implementing them.³⁶
- An alternative, more wide ranging approach, known as the Protocol for the Investigation and Analysis of Clinical Incidents (the 'London Protocol'), aims to identify factors relating to consumers, staff members, clinical teams, work environments and management processes that contribute to those unsafe acts, errors and violations that overwhelm organisational barriers sufficiently to result in an incident. The review process is relatively standardised and is suited to reviews of even minor incidents and 'near misses'.³⁷

Concluding comments

Evidence from the US, UK and Denmark points to substantial reductions in inpatient suicide rates, most probably as a result of stringent efforts to reduce opportunities for self-harm – for example, by removing ligature points. Such efforts cannot abolish suicide completely, however, since three-quarters of deaths in most studies occur off the ward.

The 1986 Mental Health Act, which applied during the whole of this audit period, stipulated that people with a mental disorder were to be treated in the least possibly restrictive environment. This requirement is sometimes in tension with the desire to prevent patients coming to harm by exiting wards without staff knowledge. Evidence from a single trial suggests that efforts to engage empathically with consumers and families are more effective in reducing absconding than locking doors.

Predicting which inpatients will take their lives is fraught with difficulty. Most so-called 'high risk' patients do not harm themselves. Most of those who do commit suicide have been rated just prior to death as 'low risk'. There is no evidence that rating risk of self-harm on multiple occasions is effective in reducing harm. Many investigators believe that risk is mitigated more effectively by nurses engaging empathically with consumers, facilitating family support and holding debriefings after incidents. This style of approach seems more effective in reducing absconding than locking ward doors.

Root cause analysis may have limited utility as a tool to understand and remediate triggers to adverse incidents in mental health services where inpatient factors play a clear role. Tools that address a broader range of factors, including clinical care, are likely to prove more illuminating.

Audit methods

Definition of 'inpatient'

The Chief Psychiatrist wished to understand the circumstances of all inpatient deaths and to identify opportunities for service and system improvements. To this end, inpatients were defined for the purposes of the audit as people who were:

- admitted to a mental health inpatient unit at the time of death (or at the time of the injury that resulted in death)
- waiting in an emergency department for transfer to a mental health unit
- absent from a mental health inpatient unit with or without staff approval
- discharged from a mental health inpatient unit within 24 hours of death.

Case identification

All public mental health services were asked to nominate all inpatients who had died in the three-and-a-half-year period from 1 January 2011 to 30 June 2014. This information was then checked against the Chief Psychiatrist's own database of inpatient deaths and reports of inquests provided to OCP by the Coroner.

Information gathering

The Chief Psychiatrist requested that service providers furnish copies of the clinical record of the final inpatient admission for those whose deaths were judged on the basis of all available information to be unnatural, unexpected, violent or undetermined in nature, together with the providers' root cause analyses of death and risk reduction action plans.

Service providers were also asked to submit copies of their current policy and procedure documents concerning nursing observations, treatment and care plans, risk assessment, ward visiting arrangements, inpatient searches, ward security, missing person responses and family engagement. It is acknowledged that policies might have been updated since the request was made.

Audit materials

To help ensure that recommendations emerging from the audit were thoroughly grounded in a detailed understanding of the circumstances of inpatients' deaths, and reflected factors associated with as many deaths as possible, cases for detailed review were selected in equal numbers from the three largest categories of fatalities (see next section):

- deaths on mental health inpatient units
- deaths while on approved leave from an inpatient unit
- deaths after absconding from an inpatient unit.

Panels

The audit process was conducted by three multidisciplinary panels, one for each of the above categories. In selecting cases for discussion, preference was given to those for which a Coroner's report was available. Where possible, cases were not submitted to a panel if a panel member was employed by the service in which a death occurred.

Each panel comprised between eight and 10 members, with approximately equal numbers of clinicians and consumer and carer representatives. Members are listed in Appendix 2. The panels were chaired by a deputy chief psychiatrist and supported by the OCP's clinical advisors.

Clinical participants, who were members of the Chief Psychiatrist's Morbidity and Mortality Committee or their nominees, included mental health services' clinical directors, operational managers, nurse unit managers and quality coordinators.

It was important that panel membership reflected the experiences and viewpoints of consumers and carers. Expressions of interest were sought from consumer and carer representatives through their respective professional networks.

Panel tasks

Each of the three panels was asked to consider four cases, giving 12 in total, to ensure detailed scrutiny of the (usually) voluminous clinical materials, namely:

- the records of the final admission
- the provider's root cause analysis and action plan
- the provider's current policy and procedure documents in relevant domains
- the provider's current mental health educational program.

Members spent the first two days reading and reflecting on the materials provided and sharing perceptions of possible gaps in treatment and care. Panel members were encouraged to think broadly, to shift their focus from case to case if indicated and to apply their specific skills and backgrounds.

Discussions were structured using the London Protocol to ensure uniform coverage of key clinical and organisational domains including:

- the patient's clinical characteristics
- clinicians' interventions, including engagement with families
- team factors
- work environment
- organisational and management factors
- service context.

These various analytic and reflective activities were interspersed with a presentation on a consumer's perspective of inpatient deaths, followed by brief addresses on risk assessment, nursing observations, the department's workforce educational strategy and the Safewards program (see page 28). The program seeks to promote consumer engagement, a recovery focus and mutual support on mental health inpatient units.

Developing recommendations

On the last of the three days, panel members were asked to generate a range of recommendations derived from their discussions that, if applied, will improve the quality and safety of mental health services. The recommendations focused on clinical leadership, quality improvement and workforce development.

Inpatient death findings

Eighty-three deaths fell within the audit's scope across the three-and-a-half-year period from 1 January 2011 to 30 June 2014 (Table 1). Coroners' reports were available for 44 deaths (53 per cent). In outstanding cases, the cause of death could be reliably extrapolated from its manner. For example, death by hanging is assumed to be the result of suicide. The cause of death has yet to be determined in only three instances.

Table 1: Causes of inpatient deaths

| | |
|---|-----------|
| Unnatural, unexpected, violent and undetermined deaths | |
| Suicide | 36 |
| Homicide | 1 |
| Accidental overdose | 4 |
| Prescribed medication toxicity | 1 |
| Coroner's report not available; cause of death unclear | 3 |
| Subtotal | 45 |
| Deaths due to medical conditions and accidents | |
| Accident | 5 |
| Medical condition | 33 |
| Subtotal | 38 |
| Total | 83 |

Just under a third of the 83 deaths were due to medical causes (including expected deaths from cancer and organ failure) or to accidents, mostly due to falls. These are discussed briefly below.

The bulk of this report is concerned with the 45 deaths that were classified as unexpected, unnatural or of unknown cause. Of these 45 deaths, 36 were clear suicides. There were also four accidental overdoses, three deaths due to (as yet) unknown causes, one homicide and one death attributed to medication toxicity.

Unexpected, unnatural and undetermined deaths

The following sections explore the circumstances of unexpected, unnatural and undetermined deaths in the three largest categories shown in Table 2 (page 23), namely deaths on inpatient units, deaths on approved leave from wards and deaths after absconding.

Deaths on inpatient units

There were 22 deaths on mental health inpatient units over the three-and-a-half-year audit period, of which 18 were the result of suicide. There were also an accidental heroin overdose, a death attributed by the Coroner to the combined effects of methadone and psychotropic medications, and a homicide committed by a co-patient on a forensic ward.

Fifteen of the 18 suicides resulted from hanging – two from self-asphyxiation and one from jumping from the top of a courtyard wall.

The number of suicides ranged from four to six per calendar year. Most occurred on adult acute wards. Two deaths occurred in aged persons' units and one each on secure extended care and forensic units.

Patients' characteristics

Two-thirds of suicide victims were male, with most (78 per cent) between 26 and 64 years of age. Over half (61 per cent) were on compulsory treatment orders at the time of death.

The most common primary diagnoses were depressive episode (44 per cent) followed by schizophrenia or other psychosis (28 per cent). Personality disorders and formally diagnosed substance abuse disorders were relatively infrequent. A third had harmed themselves in some way in the three months prior to admission, and half (56 per cent) had abused alcohol or other drugs.

Some had a long experience of mental health services, and many previous admissions, but most did not. A third (39 per cent) had no previous contact with mental health services and no previous admissions.

A quarter of suicides (28 per cent) occurred on the day of admission or the following day. Only two of the 18 deaths occurred in the discharge planning phase of people's time in hospital (as defined by clinicians).

There were four suicides in high dependency bedrooms or bathrooms (all by hanging), 12 in low dependency bedrooms or bathrooms and two in ward courtyards.

Only three of the suicides occurred between 8 am and 5 pm. Four happened in the evening or night and six in the early morning (the timing was unclear in three cases). There was no spike in rates over weekends.

Inpatient hangings

Hangings are of special interest given the attention in recent times to identifying and removing potential ligatures and ligature fixture points. Of the 15 hangings, four took place in high dependency bedrooms or bathrooms, 10 in low dependency bedrooms or bathrooms and one in a ward courtyard.

Ligature fixture points included bathroom doors (four cases), bedroom doors (three), cupboard doors (three), a cupboard rail (one), a curtain rail (one), a shower fitting (one), a shower tap (one) and a tree (one).

Ligatures included belts (three cases), shoelaces (three), dressing gown cords (two), other items of clothing (2), bedding (two), a scarf (one), a shower hose (one) and an unspecified item (one).

Deaths during approved leave

Many inpatients request leave to visit the hospital café, spend time with visitors off the ward or complete errands. Leave has therapeutic value and is encouraged if possible. When considering requests, staff take account of people's mental state, legal status, progress since admission and practical imperatives (for example, a need to find new accommodation). Leave may be accompanied or unaccompanied, and it may be for brief periods or overnight.

Within the audit period, nine people died while off the ward or on leave with staff approval. Four had been given approval to leave the ward for a brief period, two were on day leave and two were on overnight leave.

Eight people were on leave from adult wards and one was on leave from a secure extended care unit. There was no clear pattern by year.

Six of the nine deaths were clear suicides. There was one instance each of hanging, impact with a train, shooting, self-asphyxiation, self-immolation and overdosing on prescribed opiates. Of the others, one resulted from an accidental overdose of heroin mixed with oxycodone, one was of undetermined origin and another has yet to be reported by the Coroner.

Three deaths happened in people's own homes. The rest took place off hospital grounds in public settings. None of the deaths took place immediately after admission.

Patients' characteristics

There were more females (56 per cent) than males in this category. Five people were on treatment orders, and most had primary diagnoses of schizophrenia, bipolar disorder or depressive episode. Four people had comorbid substance abuse disorders. All but one person had a history of self-harm, and most (67 per cent) had abused alcohol or other drugs. Most (78 per cent) had been in contact with mental health services for more than five years, and all had been admitted previously.

Deaths during unapproved leave

Nine people died after leaving a ward without approval (absconding). Adult wards accounted for seven of the deaths, with one each from youth and secure extended care units. The number of deaths in this category fell from four in 2011 to one in 2013.

One of the nine deaths was judged by the Coroner to result from an accidental overdose of methadone and tramadol. The rest were clear suicides. Three people died on train tracks, two hanged themselves, two jumped from heights and one took an overdose of psychotropic medications. Two people died in their own homes. The rest died in public spaces. None died on hospital grounds.

One absconding episode happened nine weeks after admission. The remainder occurred between admission and 10 days later. All but one death happened between 9 am and 6 pm. Four (44 per cent) occurred on a weekend, about twice the number expected by chance.

Patients' characteristics

Seven of the nine people were male, and four were between 18 and 25 years of age. Six were on compulsory treatment orders at the time of death. The most common primary diagnoses were schizophrenia and depression. Four had comorbid substance abuse disorders. More than half (56 per cent) had no history of self-harm, but 78 per cent had abused alcohol or other drugs, usually for lengthy periods. Most had been in contact with mental services for more than a year, and only three had no previous psychiatric admissions.

Natural and accidental deaths

Five deaths in this category were attributed to accidents and 33 to medical conditions. Nine followed from terminal physical states and had been expected.

The people concerned were mostly older, with a mean age of 66 years. The oldest was 92 years of age. Twenty-two of the 38 deaths were on aged mental health units, with another 10 on adult units, five on forensic wards and one on a secure extended care ward.

The most common psychiatric diagnoses were schizophrenia followed by dementia. The primary causes of death included 13 cases of cardiovascular or cerebrovascular disease, five of cancer, four of trauma associated with falls, four of sepsis, two of respiratory failure and 10 of various other conditions. Several deaths were due to combinations of complex, chronic medical disorders. One death resulted from heatstroke in a patient who was returning to hospital on foot in heatwave conditions.

Comparison with previous audit period

To check if inpatient mortality rates have changed in recent years, the numbers of unexpected, unnatural and undetermined deaths were compared between previous and current audit periods (see Table 2). Because the previous audit covered a three-year period, in contrast to the current one which covered three and a half years, Table 2 excludes data for the last six months of the most recent review. The table also excludes two deaths within 24 hours of discharge in the period 2011–13, since deaths in this situation were not considered previously.

While the total number of unexpected, unnatural and undetermined deaths was identical across the two triennia, there was an increase in hangings on inpatient units from nine to 16. Conversely, the number of deaths after taking unapproved leave (absconding) from wards fell from 13 to eight.

Table 2: Sites and circumstances of unexpected, unnatural and undetermined deaths in previous and current audit three-year periods

| Location/timing | Cause of death | 2008–10 | 2011–13* |
|--|--|-----------|-----------|
| On inpatient unit | Suicide | 9 | 16 |
| | Homicide | 2 | 1 |
| | Accidental drowning | 1 | – |
| | Accidental overdose | 1 | 1 |
| | Prescribed medication toxicity | 2 | 1 |
| | Coroner’s report available; cause of death not ascertained | 1 | – |
| | Coroner’s report not available; cause of death unclear | – | 1 |
| On approved leave | | 8 | 8 |
| On unapproved leave | | 13 | 8 |
| Emergency department | | 2 | 2 |
| Medical ward, admitted for psychiatric treatment | | – | 1 |
| Total | | 39 | 39 |

* This period excludes the first six months of 2014

Concluding comments

The number of unexpected, unnatural and undetermined deaths per year was consistent over the audit period from 2011 to 2013 and from the previous audit period to the current one. This represents an improvement in outcomes. There were 39 such deaths in both three-year periods (Table 2), despite an increase of 10 per cent in mean separation rates from the first to the second three-year periods. Separations refer to discharges, transfers and deaths and give a measure of service demand. In the period 2011 to 2013, the mean number of unexpected, unnatural and undetermined deaths per 1,000 separations per year was 0.62 compared with 0.68 in the period 2008 to 2010, representing a reduction of nine per cent.

As before, most unexpected, unnatural and undetermined deaths resulted from hangings on adult acute inpatient units. The rise in numbers of hangings, from nine to 16 from one triennium to another, is difficult to explain given the focus on ligature point reduction strategies and ongoing safety checks following the earlier audit. Reductions in hangings in mental health services have been linked to similar initiatives in the UK and US, and the same trend might therefore have been expected locally. The numbers of deaths in Victoria may be too small for trends to become clear over a relatively short three-year interval. In the meantime, overseas experience with much larger numbers of services in widely diverse settings point to ward safety programs having real, long-term value.

By contrast, there was a reduction in the number of deaths after absconding, perhaps as a consequence of the move to lock the doors of acute inpatient units. While evidence from overseas studies suggests that locking doors has minimal if any effect on absconding and mortality rates, the fall in deaths locally is notable and welcome. As with deaths on wards, the numbers are small and subject to variation across time periods.

Patients whose deaths were unnatural or unexpected were mostly male, on treatment orders and diagnosed with a depressive or psychotic disorder. There were high rates of previous self-harm and substance abuse. These patterns are very much in line with experience elsewhere.

Audit outcomes

Panel members' observations about the quality of clinical records

Practical constraints make it impossible for clinicians to document all of their interactions with consumers and families. What is committed to writing is typically a summary of formal and informal clinical assessments, conversations with families and other interested parties, and team discussions. It is important, though, that clinicians' understanding of consumers' psychological, medical and social needs be distilled in the clinical record, no matter how briefly, as part of a comprehensive treatment plan.

Panel members expressed a number of concerns based on their detailed examinations of selected clinical records. Key general perceptions were as follows:

- Initial assessments by treating psychiatrists often lacked a full mental status examination, alcohol and drug history, formulation, diagnosis, risk assessment and treatment plan.
- There were only occasional references to consumers' backgrounds and personal, family and social circumstances.
- There was little involvement with families, even by telephone.
- Few records included inpatient treatment plans.
- Recovery principles, with their emphasis on strengths and aspirations, were rarely articulated.
- There was a striking absence of identifiable psychological interventions.
- The frequent assessments of consumers' risk of self-harm, substance abuse and the like were typically not linked to actions to mitigate these perceived risks.
- The quality of root cause analyses of deaths and risk reduction action plans varied widely, especially in smaller services.

Panel members' conclusions

The outcomes of the panels' deliberations are reflected in the following sections. These describe, first, undertakings made by the Chief Psychiatrist in respect of actions for the OCP and, second, the Chief Psychiatrist's recommendations for service providers. Emphasis has been given to recommendations that emerged in all three panels' discussions and that accorded with the Chief Psychiatrist's responsibility to promote the quality and safety of mental health services. It was also important that the recommendations were able to be implemented within a reasonable timeframe, that they have demonstrable outcomes and that added demands on services are commensurate with likely improvements in quality and safety.

As a check on the validity of the panel's concerns, it is helpful to note the large overlap with the concerns expressed by the Coroner over the 2011–14 audit period in the form of recommendations to the OCP, the department and mental health service providers. The Coroner's nine recommendations, which relate to six of the 44 deaths for which Coroner's reports were available, are summarised in Table 3.

Table 3: Coroner’s recommendations on deaths in mental health inpatient units

| Domain | Coroner’s recommendation |
|----------------------|---|
| Patient engagement | The service provider should train staff in the importance of engaging with patients and obtaining collateral histories |
| Nursing observations | The service provider should amend its definition of visual observations (including signs of respiration if the patient is sleeping) and train staff to use new risk assessment and visual observation forms |
| Risk assessments | The service provider should train its staff in the use of static and dynamic risk factors and improve the consistency of mental state examinations and risk assessments across shifts |
| Ward safety checks | The service provider should engage an independent, skilled analyst in its annual ligature review |
| Absconding | The service provider should review its security arrangements and police notification policies |
| Safety bulletins | The Office of the Chief Psychiatrist should review its safety bulletin distribution practices The service provider should ensure the Chief Psychiatrist’s safety bulletins are widely distributed and considered |
| Opioid prescribing | The service provider should include Department of Health and national opioid prescribing guidelines in staff training and train staff in PRN methadone use and monitoring of patients prescribed methadone |

Chief Psychiatrist’s undertakings

The panels directed a number of recommendations to the Chief Psychiatrist, all of which have been accepted. The Chief Psychiatrist has committed the OCP to the actions described below.

Clinical care

Guideline updates

The Chief Psychiatrist has published clinical guidelines on several matters of relevance to inpatient deaths, namely death notification procedures, patient treatment plans, patient searches, medical health care, restrictive interventions and inpatients’ leave of absence.

These guidelines articulate the level of care that the Chief Psychiatrist expects to see delivered across all relevant services. It is expected that senior staff members are aware of the standards and that staff educators use them as the basis of educational programs. The Chief Psychiatrist also uses the guidelines as a benchmark when conducting audits and reviews.

The Chief Psychiatrist will lead the OCP’s review of all guidelines related to matters raised by the audit. Revised documents will be shorter, specify standards and focus more explicitly on recovery principles, family and carer engagement and individualised risk management strategies.

The Chief Mental Health Nurse’s recently established Inter-Professional Leadership Groups will form ideal partners in this process. These groups, which include medical, nursing and allied health representatives from a wide range of services, work in small groups to appraise standards of care and develop improved, evidence-based care practices within their own workplaces. When linking with leadership groups, it will be important for the OCP to articulate clear expectations and working parameters to help shape the groups’ work plans. Consumer and carer representatives must also be involved.

Guidelines of special relevance to inpatient safety include those on treatment plans, the detection and management of medical comorbidities, and inpatient’s leave of absence.

Action 1

The OCP will engage its Inter-Professional Leadership Groups to review and update clinical guidelines on treatment plans, physical deterioration and inpatients' leave of absence. The revised guidelines will include auditable markers of adherence to key elements for use in providers' ongoing quality improvement programs.

Clinical leadership

Consultant psychiatrists are expected to provide clinical leadership to inpatient teams. While their formal medical training in mental state examination, psychiatric diagnosis, risk assessment, pharmacotherapy, psychological interventions and medical investigations and treatments equips them to work at a high standard, their leadership was not always apparent to panels members based on their perusal of clinical records.

It is acknowledged that acute inpatient units operate under great pressure due to high turnover and population growth. At the same time, panel members believed that the initial assessment by the treating consultant is critical to the team's understanding of the reasons for the consumer's presentation, the goals of admission, safety issues and discharge planning. A thorough initial assessment by the clinical leader is likely to support better consumer outcomes.

Panel members agreed that a comprehensive assessment entailed a check of the consumer's: concerns and aspirations; trauma history; previous care episodes and responses to treatment; personal circumstances and stressors; recent use of alcohol and other drugs; present mental status; and collateral information from involved family members and carers. This assessment informs a risk assessment, treatment plan and possible discharge arrangements. Where this information has been extracted by clinicians in community teams or emergency departments, it should be noted and acknowledged.

Action 2

The OCP will enhance the quality of psychiatrists' initial inpatient clinical assessments by working with the Inter-Professional Leadership Groups to develop a tool to gauge the comprehensiveness of these assessments for use by service providers in their ongoing quality improvement programs.

Risk assessment

The current requirement that nurses complete a risk assessment of every inpatient several times each day is flawed from both conceptual and clinical perspectives. It is acknowledged that risk is ever-present on inpatient units and must be managed sensitively and carefully. There is little evidence, however, that rating consumers' perceived risks of self-harm, violence, substance abuse and absconding on a shift-by-shift basis is either reliable or effective. Since efforts to model outcomes, based on numerous studies of actual risk, show that most suicides occur in apparent 'low risk' groups, frequent reassessments of risk serve little purpose and may induce a false sense of security.

The present focus on assessing and reassessing risk is thought to have evolved in Victoria (but not in other states) in response to Coroners' criticisms of providers' failure to gauge risk accurately and prevent deaths. An alternative approach is to discuss the perceived risks for each inpatient at morning handover and to document positive responses to mitigate these risks, with updates throughout the day if circumstances change.

It is likely, however, that any attempt by the OCP to switch service providers' focus from risk assessment to risk management will be countered by providers' natural apprehension of public rebuke in the event of a death. Change can only occur if clinicians, consumers and carers meet with services' board members, senior executives and legal advisors to discuss key issues and agree on new directions.

Action 3

The OCP will host colloquia, involving a wide range of stakeholders, to consider current inpatient risk assessment tools with a view to working with service providers to write a more evidence-based, consumer-centred guideline concerning clinical risk management. The guideline will include auditable markers of adherence to key elements for use in providers' ongoing quality improvement programs.

Families and carers

Family members and other carers can play an invaluable role in providing useful information about consumers' mental health histories, previous responses to treatment and current stressors. They often provide moral and practical support to consumers during and after admission and must be sustained in this role by clinicians through information sharing and consultation. Equally, if clinicians are not properly informed of the circumstances facing consumers at the time of leave or discharge from the ward, they cannot take steps to work with consumers and carers to mitigate risk.

The Chief Psychiatrist requires services to contact key support people at the time of admission (or as soon as practicable) to offer a meeting, either in person or by telephone, and to engage them in discharge planning.

Panel members noted that none of the 12 people whose records were scrutinised in the audit had requested clinicians not to contact family or carers. Even when this happens, as it does on occasion, clinicians may continue to receive information volunteered by family or carers and to offer them opportunities to access support to sustain their wellbeing and caring relationship with the consumer. The nature of this contact may change during the inpatient stay.

Action 4

The OCP will revise its guideline on working with families and carers, in conjunction with relevant agencies, as part of a range of departmental measures to better support families and carers of people with mental illness and promote their participation in service design, delivery and review. The revised guideline will incorporate recovery principles and include advice concerning consent issues, collateral history taking and leave and discharge arrangements. The guideline will include auditable markers of adherence to key elements of the program for use in providers' ongoing quality improvement programs.

Chief Psychiatrist's oversight of service quality

Death notification data capture

At present, psychiatrists complete a brief death notification form (MHA 125), usually within a few days of death. The form specifies what items should be addressed, but clinicians make their own judgements about how best to write the narrative of the person's presentation, treatment and demise within the limited space on offer. Accounts are highly variable in their quality and legibility. The present system does not permit the Chief Psychiatrist to analyse patterns and trends of deaths or to respond quickly to new information concerning deaths, either in inpatient units or the community.

Action 5

The OCP will work with the Department of Health and Human Services to develop and implement an online death notification system to facilitate the capture of high-quality, standardised information that will permit the timely analysis of mortality data and facilitate prompt feedback to service providers concerning trends and safety issues.

Service providers' reviews of deaths

Inpatients' own thoughts and plans in the moments before death are rarely recorded, a fact that may contribute to the limited quality and scope of some root cause analyses. Panel members were concerned by the tool's narrow focus on a single action or omission as the 'cause' of death and by some smaller providers' lack of expertise in conducting analyses and formulating risk reduction action plans.

Panel members agreed that root cause analyses were less helpful in mental health than in medical and surgical services and that an alternative approach should be considered. The so-called London Protocol was endorsed by virtue of its broader, more sophisticated conceptualisation of the organisational and team-based factors that promote or inhibit safe care in settings where a single event or circumstance is unlikely to provide an adequate explanation of critical incidents.

At the same time, panel members acknowledged that deaths in mental health services are considered by larger committees with representatives from a wide range of disciplines. Root cause analyses are an integral part of these service-wide reviews, and the department provides statewide training in their use.

It is not proposed, therefore, that mental health providers move to an alternative model without reference to service partners. This might reduce opportunities to participate in existing training programs and compromise communication with clinical risk committees.

Action 6

The OCP will host a colloquium involving multiple stakeholders to: review the use of root cause analysis as a tool to investigate deaths in mental health inpatient units; consider modifying, supplementing or changing the root cause analysis methodology to overcome its limitations in the mental health field; and advise on what steps are required to effect change in providers' quality assurance policies and procedures.

Enhanced VHIMS capability

The Victorian Health Incident Management System (VHIMS) aggregates data entered by service providers concerning clinical, organisational and environmental adverse incidents. While the system focuses quite deliberately on the consequences of incidents for consumers, service providers and insurers, the material that is entered by clinicians in text form concerning the nature and causes of incidents is searchable and could be used, for example, to track instances of self-harm and attempted suicide on inpatient units. This information will add usefully to the OCP's understanding of the causes of these behaviours and how the risks could be reduced. VHIMS is presently being upgraded to facilitate this sort of detailed analysis of qualitative data.

Action 7

The OCP will participate in the revision of VHIMS to maximise opportunities for analyses of data concerning absconding, self-harm and attempted suicide on inpatient units.

Safety bulletins

The OCP produced advisory notices over a number of years to service providers summarising selected coronial recommendations, legal rulings and related information. The notices were highly regarded and panel members reported that service providers would value their reinstatement.

Action 8

The OCP will resume issuing at least two bulletins each year to alert services to coronial comments and recommendations and to the OCP's own learnings from its analyses of death notifications and reviews.

Chief Psychiatrist's recommendations for service providers

Based on the audit outcomes and panel members' recommendations, the Chief Psychiatrist has made the following recommendations for service providers. The OCP will follow-up with services providers 12 months after the release of this report to check their progress implementing these recommendations.

Safewards

Panel members noted the absence of psychologically based approaches, no matter how modest or brief, for any of the 12 cases examined in detail. Clinicians focused instead on practical matters – admission processes, medications, observations and risk assessments. Few attempts were made, or so it appeared, to understand why this person presented in this way, at this time, and to assist the person to develop more adaptive solutions to current stressors.

While senior clinicians described the huge pressures of work that make it difficult for staff members to offer inpatients the level of personalised, psychologically minded and optimistic care that the department advocates, the success of the current Victorian 'Safewards' pilot program shows that staff members will adopt new, more client-centred approaches if a program has a clear theoretical framework, constructive values and practical expectations.

Safewards is an evidence-based collection of simply expressed interventions to: promote clear communication between clinicians and consumers; articulate mutual standards of behaviour; pre-empt escalation of tension; and encourage hopefulness and mutual support. It was developed by UK nurse researchers specifically for use in busy, stressed acute mental health settings.¹⁸

Recommendation 1

Service providers who have yet to engage in the Safewards program should work over the coming two years to implement it across adult, child and youth, secure extended care, forensic and aged inpatient facilities. The program will include auditable markers of adherence to key elements of the program for use in providers' ongoing quality improvement programs.

Families and carers

There are opportunities during admission to help restore and strengthen relationships between consumers and those involved in their lives. Progress towards this goal can often be achieved in a single meeting or telephone conversation with carers. This is more likely to come about if carers believe their concerns are validated and they have been properly prepared for their ongoing role in supporting the person with mental illness.

It will be helpful if clinicians from a range of backgrounds and levels of experience have access to training in making brief but valid assessments of consumer–carer relationships, even after a single encounter with a family member or other carer, and to propose meaningful strategies to sustain family members and carers in their roles.

Recommendation 2

Training clusters should implement a practice change program that enhances clinicians' capacity to conduct brief, therapeutic family and supporter assessments. This program should be suitable for use by inpatient clinicians from a range of backgrounds and levels of experience. The program will include auditable markers of adherence to key elements of the program for use in providers' ongoing quality improvement programs.

Ward entry and egress

Panel members from clinical backgrounds reported that many adult inpatient units are now locked all or most of the time.

Evidence from the UK and Europe suggests that locking doors fails to reduce absconding or suicides outside wards and makes admission more burdensome for patients. The situation in Victoria looks to be more complex. In a period characterised by fewer opportunities for impulsive exiting from inpatient units, the numbers of deaths after absconding from wards fell from 13 in the 2008–10 audit period to eight in the current period.

For clinicians, reasons for restricting access to and from wards include the need to limit the widespread entry onto wards of alcohol and illicit drugs given their detrimental effects in causing and perpetuating mental illness and the role of amphetamines in particular in provoking aggression.

Clinicians also noted that, as occupancy rates of high dependency units have increased in recent years, the levels of acuity in low dependency units have risen to the point where open doors present too great a risk of impulsive exiting by people whose judgement is severely compromised.

Consumer representatives, by contrast, emphasised the negative aspects of locked doors, including a risk that confinement increases, rather than decreases, the impulse to leave. They also noted the implications of restricted egress for voluntary consumers.

The Chief Psychiatrist notes the tension between the need to promote consumers' rights to free movement and the obligation to provide a safe setting for all consumers, visitors and members of staff.

Recommendation 3

Service providers should review their policies regarding ward entry and egress to ensure that, where doors are locked during daylight hours, consumers and carers are informed verbally and in writing of the reasons for securing doors and of procedures to enter and leave the ward.

Service providers should gather consumers' and carers' perceptions of ward entry and egress by means of regular consumer and carer surveys. The results of these surveys, and the providers' responses to expressed concerns, should be displayed on the ward in a public area.

Service providers should offer a therapeutically focused discussion within one working day to all consumers who abscond to understand their reasons for leaving the ward. Information from these discussions should be presented to the multidisciplinary team and action taken to mitigate consumers' concerns and promote engagement with them. These discussions should be subject to audit as part of providers' ongoing quality improvement programs.

Clinical benchmarking

Benchmarking helps to reduce variations in clinical practice. The new Victorian Agency for Health Information will provide healthcare services with interactive data portals to enable them to explore patient outcomes and compare outcomes with other organisations. The OCP can facilitate this process by working closely with the authority and VHIMS (see Action 7) to collect and share meaningful data (inpatient deaths, 'near misses', overdoses and absconding rates) between service providers and to take remedial action based on new learnings.

Recommendation 4

Service providers should engage in at least annual benchmarking of the numbers of deaths, 'near misses', self-harm episodes and absconding episodes in adult, youth, aged and secure extended care inpatient units. Services with multiple units of a similar nature should compare outcomes between units and with at least one other mental health service provider.

Conclusion

For every death in a mental health inpatient unit, there are many people deeply affected. This is especially so when the person commits suicide. It is imperative to learn from these tragic events so that they can be prevented in the future.

This investigation examined findings for all 45 unexpected, unnatural and undetermined deaths over a three-and-a-half-year period with detailed reviews of 12 cases from the three largest categories of deaths by panels of clinical leaders and consumer and carer advocates.

This audit was notable for the close attention paid to data supplied by service providers, its scrutiny of carefully selected clinical records and the involvement of consumer and carer advocates. These processes worked well and set a new standard for future OCP reviews. They align well with the department's determination to harness data more effectively, promote benchmarking of outcomes and raise standards.

The audit also considered evidence from studies in the US, UK and Denmark. This suggests that efforts to remove ligature points from wards have led to striking reductions in inpatient suicides. While this trend is not yet apparent in Victoria, overseas data are so compelling that local efforts to mitigate risk through ward redesign and engineering should continue.

The Chief Psychiatrist has welcomed and accepted recommendations made by members of the audit panels. A number of Chief Psychiatrist's guidelines are being updated to reflect contemporary standards of practice in the hope that positive, therapeutic styles of engagement with consumers and carers will prove more effective than simplistic risk mitigation processes.

However, guidelines in themselves do not lead to changes in clinicians' behaviour. Change comes about when clinical leaders agree that a shift in direction is warranted and provide practical, ongoing support to new initiatives. To this end, the report makes a number of recommendations for mental health service providers. Some of the recommendations – for example, those concerning risk assessment and providers' own analyses of inpatient deaths – are ambitious and will require sustained input from multiple agencies. The new Inter-Professional Leadership Groups, in partnership with consumer and carer advocates, will be key players in the change process.

The OCP will initiate, coordinate and monitor the progress of these activities, in keeping with its mandate to give clinical leadership to the field and promote continuous improvement in the quality and safety of mental health services. The OCP will also monitor trends in inpatient and community deaths to identify newly emergent risks and take action to minimise their impact.

It is expected that these actions will benefit everyone admitted to mental health units, as well as other consumers of mental health services and their families and carers.

Appendix 1: Audit terms of reference

The *Mental Health Act 2014* contains a comprehensive suite of safeguards to protect the rights and dignity of people living with mental illness. The Chief Psychiatrist has specific responsibilities in promoting these safeguards and ensuring they are upheld.

Background

The Mental Health Act provides the Chief Psychiatrist with the power to conduct a clinical practice audit of a matter related to the provision of services by mental health service providers. The purpose of a clinical practice audit is to identify systemic issues or trends that need to be addressed to improve the quality and safety of mental health services (s. 134).

The Chief Psychiatrist intends to conduct a clinical practice audit of inpatient deaths from 1 January 2011 to 30 June 2014 to determine what, if any, additional responses may be required to improve the quality and safety of Victorian mental health services.

Duration

The Chief Psychiatrist will report the findings of this audit to the Secretary to the Department of Health and Human Services by the end of 2016.

Scope and objectives

The clinical practice audit will address but not be limited to the following topics:

- the circumstances of the deaths of mental health inpatients between 1 January 2011 and 30 June 2014
- the physical safety of inpatient units and the adequacy of mental health services' policies, procedures and staff educational programs concerning leave arrangements and absconding
- the adequacy of service providers' responses to improvements in policy and practice proposed by the services themselves at the completion of their own review processes
- the adequacy of service providers' responses to recommended improvements in policy and practice made by the Coroner and/or the Department of Health and Human Services.

In conducting the review, the Office of the Chief Psychiatrist will:

- collate service providers' and Coroner's information regarding inpatient deaths
- request from service providers copies of their policies, procedures and educational materials concerning topics relevant to the audit's objectives
- request from service providers selected clinical records, clinical reviews and responses to recommendations regarding deaths from within their own service, the Coroner's office and the Office of the Chief Psychiatrist
- conduct visits and/or inspections of selected services to determine whether recommendations and practice improvements have been implemented
- compile a report providing key themes, findings and proposed actions directed to further improvements across health services generally.

Membership

The Chief Psychiatrist will lead the audit.

Staff employed by mental health services with appropriate expertise will assist the Chief Psychiatrist in the audit and will be appointed by way of an agreement under s. 143 of the Mental Health Act.

Others may be appointed as required to bring technical expertise or provide policy advice.

Secretariat support

Secretariat support will be provided by the Office of the Chief Psychiatrist.

Protections, obligations and conflicts of interest

The Chief Psychiatrist will issue documentation identifying those providing assistance in the conduct of the audit.

- Any minutes in relation to the audit will be recorded separately to ensure confidentiality obligations are met (s. 140, s. 141).
- The Chief Psychiatrist will advise those appointed under s. 143 to assist in the audit of the specific obligations and protections relating to this material as specified in the *Chief Psychiatrist's clinical practice audit of mental health inpatient deaths 2011–2014* (Terms of reference, Attachment 1).
- The Chief Psychiatrist will address any issues of conflict of interest as required under s. 364 of the Mental Health Act.

Review

These terms of reference have been reviewed by the legal department and the Chief Psychiatrist's Morbidity and Mortality Committee.

Appendix 2: Panel members

Three panels of clinicians, consumer and carer representatives, and members of OCP assisted in the investigation:

| | | |
|-----------------------|--|---|
| Sophie Adams | Medical Director, Orygen Youth Health | Melbourne Health |
| Judy Anderson | Carer Consultant | Peninsula Health |
| Ravi Bhat | Divisional Clinical Director, Goulburn Valley Area Mental Health Service | Goulburn Valley Health |
| Deb Carlon | Operations Manager | VMIAC |
| Indigo Daya | Senior Policy Officer, Consumer, Carer and National Relations | Department of Health and Human Services |
| Mary Gilbert | Clinical Advisor | OCP |
| Richard Harvey | Clinical Director, Mental Health, Drugs and Alcohol Services | Barwon Health |
| Penny Herbert | Quality Manager, North Western Mental Health | Melbourne Health |
| David Huppert | Clinical Director, Aged Persons Mental Health Program, North Western Mental Health | Melbourne Health |
| Rebecca Johnson | Director of Nursing, Mental Health Program | Eastern Health |
| Debra Jeffrey | Manager, Acute Inpatient Services | Eastern Health |
| Paul Katz | Executive Clinical Director, Mental Health Program | Eastern Health |
| Peter Kelly | Director Operations, North Western Mental Health | Melbourne Health |
| Sandra Keppich-Arnold | Operations Director | Alfred Health |
| Vinay Lakra | Deputy Chief Psychiatrist | OCP |
| Merv Love | Manager, Acute Inpatient Services | St Vincent's Health |
| Daniel O'Connor | Deputy Chief Psychiatrist (Convenor) | OCP |
| Violeta Peterson | Carer Consultant | Alfred Health |
| Lyn Ruggiero | Carer Consultant | |
| Cate Salmon | Clinical Advisor | OCP |
| Amber Scanlon | Senior Policy Officer, Consumer, Carer and National Relations | Department of Health and Human Services |
| Sharon Sherwood | Operations Director and Chief Nursing Officer, Mental Health | Peninsula Health |
| Simon Stafrace | Program Director of Psychiatry | Alfred Health |
| Ian Stephenson | Consumer Consultant | Eastern Health |
| Jodie Ten Hoeve | EQIIP Manager | Monash Health |
| Kate Thwaites | Clinical Advisor | OCP |
| Maggie Toko | CEO | VMIAC |
| Fiona Whitecross | Quality and Risk Manager, Alfred Psychiatry | Alfred Health |

References

- ¹ Victorian Government (Office of the Chief Psychiatrist) 2012, *Chief Psychiatrist's investigation of inpatient deaths 2008–2010*, State Government of Victoria, Melbourne.
- ² Victorian Government 2016, *Review of hospital safety and quality assurance in Victoria*, State of Victoria, Melbourne.
- ³ Victorian Auditor General's Office 2016, *Victorian Auditor-General's report, patient safety in Victorian public hospitals*, State of Victoria, Melbourne.
- ⁴ Department of Health and Human Services 2015, *Victoria's 10-year mental health plan*, State of Victoria, Melbourne.
- ⁵ Victorian Government 2015, *Victorian suicide prevention framework 2016–25*, State of Victoria, Melbourne.
- ⁶ Victorian Government 2014, *Chief Psychiatrist's guideline: reportable deaths*, State Government of Victoria, Melbourne.
- ⁷ Kapur N, Hunt IM, Windfuhr K et al. 2013, Psychiatric inpatient care and suicide in England, 1997 to 2008: a longitudinal study, *Psychological Medicine*, 43, 61–71.
- ⁸ Madsen T, Agerbo E, Mortensen PB et al. 2012, Predictors of psychiatric inpatient suicide: a national prospective register-based study, *Journal of Clinical Psychiatry*, 73, 144–151.
- ⁹ Watts BV, Young-Xu, Mills PD et al. 2012, Examination of the effectiveness of the mental health environment of care checklist in reducing suicide on inpatient mental health units, *Archives of General Psychiatry*, 69, 588–592.
- ¹⁰ Madsen T, Agerbo E, Mortensen PB et al. 2012, Predictors of psychiatric inpatient suicide: a national prospective register-based study, *Journal of Clinical Psychiatry*, 73, 144–151.
- ¹¹ Powell J, Geddes, Deeks et al. 2000, Suicide in psychiatric hospital inpatients: risk factors and their predictive power, *British Journal of Psychiatry*, 176, 266–272.
- ¹² Bowers L, Banda T, Nijman H 2010, Suicide inside: a systematic review of inpatient suicides, *Journal of Nervous and Mental Disease*, 5, 315–328.
- ¹³ Hunt IM, Bickley H, Windfuhr K et al. 2013, Suicide in recently admitted psychiatric inpatients: a case-control study, *Journal of Affective Disorders*, 144, 123–128.
- ¹⁴ Hunt IM, Windfuhr, Shaw J et al. 2012, Ligature points and ligature types used by psychiatric inpatients who die by hanging: a national study, *Crisis*, 33, 87–94.
- ¹⁵ De Santis ML, Myrick H, Lamis DA et al. 2015, Suicide-specific safety in the inpatient psychiatric unit, *Issues in Mental Health Nursing*, 36, 190–199.
- ¹⁶ Hunt IM, Bickley H, Windfuhr K et al. 2013, Suicide in recently admitted psychiatric inpatients: a case-control study, *Journal of Affective Disorders*, 144, 123–128.
- ¹⁷ Hunt IM, Windfuhr, Shaw J et al. 2012, Ligature points and ligature types used by psychiatric inpatients who die by hanging: a national study, *Crisis*, 33, 87–94.
- ¹⁸ Mills PD, De Rosier JM, Ballot BA 2008, Inpatient suicide and suicide attempts in Veterans' Affairs hospitals, *Joint Commission Journal on Quality and Patient Safety*, 34, 482–488.
- ¹⁹ Powell J, Geddes J, Deeks J et al. 2000, Suicide in psychiatric hospital inpatients: risk factors and their predictive power, *British Journal of Psychiatry*, 176, 266–272.
- ²⁰ Bowers L, Simpson A, Eyres S et al. 2006, Serious untoward incidents and their aftermath in acute inpatient psychiatry, *International Journal of Mental Health Nursing*, 15, 226–234.
- ²¹ Nijman H, Bowers L, Haglund K et al. 2011, Door locking and exit security measures on acute psychiatric admission wards, *Journal of Psychiatric and Mental Health Nursing*, 18, 614–621.
- ²² Huber CG, Schneeberger AR, Kowalinski E et al. 2016, Suicide risk and absconding in psychiatric hospitals with and without open door policies: 15-year observational study, *Lancet Psychiatry*, 3, 842–849.

-
- ²³ Bowers L, Alexander J, Gaskell C 2003, A trial of an anti-absconding intervention in acute psychiatric wards, *Journal of Psychiatric and Mental Health Nursing*, 1, 410–416.
- ²⁴ Van der Merwe M, Bowers L, Jones J et al. 2009, Locked doors in acute inpatient psychiatry: a literature review, *Journal of Psychiatric and Mental Health Nursing*, 16, 293–299.
- ²⁵ Muir-Cochrane E, van der Merwe M, Nijman H et al. 2012, Investigation into the acceptability of door locking to staff, patients and visitors on acute psychiatric wards, *International Journal of Mental Health Nursing*, 21, 41–49.
- ²⁶ National Mental Health Development Unit 2007, *Strategies to reduce missing patients: a practical workbook*, National Mental Health Development Unit, London.
- ²⁷ Bowers L, Alexander J, Gaskell C 2003, A trial of an anti-absconding intervention in acute psychiatric wards, *Journal of Psychiatric and Mental Health Nursing*, 1, 410–416.
- ²⁸ Bowles N, Dodds P, Hackney D et al. 2002, Formal observations and engagement: a discussion paper, *Journal of Psychiatric and Mental Health Nursing*, 9, 255–260.
- ²⁹ Stewart D, Bowers L, Warburton F 2009, Constant special observation and self-harm on acute psychiatric wards: a longitudinal analysis, *General Hospital Psychiatry*, 31, 523–530.
- ³⁰ Bowers L, Dack C, Gul N et al. 2011, Learning from prevented suicide in psychiatric inpatient care: an analysis of data from the National Patient Safety Agency, *International Journal of Nursing Studies*, 48, 1459–1465.
- ³¹ Busch KA, Fawcett J, Jacobs DG 2003, Clinical correlates of inpatient suicide, *Journal of Clinical Psychiatry*, 64, 14–19.
- ³² Watts BV, Young-Xu, Mills PD et al. 2012, Examination of the effectiveness of the mental health environment of care checklist in reducing suicide on inpatient mental health units, *Archives of General Psychiatry*, 69, 588–592.
- ³³ Large M, Ryan C, Niessen 2011, The validity and utility of risk assessment for inpatient suicide, *Australasian Psychiatry*, 19, 507–512.
- ³⁴ Large MM, Ryan CJ 2014, Suicide risk categorisation of psychiatric inpatients: what it might mean and why it is of no use, *Australasian Psychiatry*, 22, 390–392.
- ³⁵ Taylor-Adams S, Vincent C 2004, Systems analysis of clinical incidents: the London Protocol, *Clinical Risk*, 10, 211–220.
- ³⁶ Vine R, Mulder C 2013, After an inpatient suicide: the aim and outcome of review mechanisms, *Australasian Psychiatry*, 21(4), 359–364.
- ³⁷ Vincent C, Stanhope N, Taylor-Adams S 2000, Developing a systematic method of analysing serious incidents in mental health, *Journal of Mental Health*, 9, 89–103.