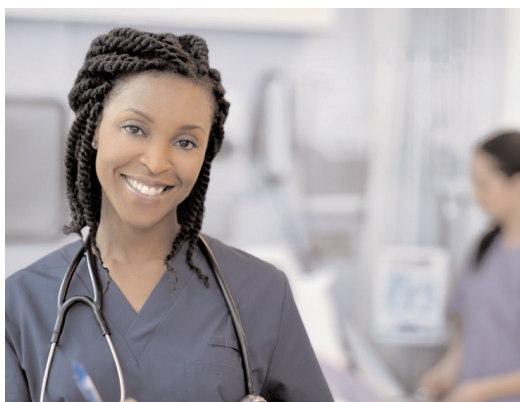


Secure Rooms and Seclusion Standards and Guidelines:

A Literature and Evidence Review





Ministry of Health
September 2012

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Acknowledgments

This report has been developed on behalf of the Provincial Mental Health and Substance Use Planning Council in consultation with stakeholders in the health authorities, national and international stakeholders. The contributions and cooperation of a variety of individuals and groups should thus be acknowledged.

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Executive Summary

Secure room and seclusion standards: context and purpose

The Ministry of Health is interested in developing standards for secure rooms and the delivery of seclusion as part of a process of developing overall standards of health, quality of care and safety for B.C.'s designated facilities. This report provides the clinical, professional and policy evidence base from which to generate secure room and seclusion standards. It synthesizes recently published academic, government and gray literature; a cross-jurisdictional scan of existing standards and guidelines for secure rooms and seclusion; and consultations with international experts in order to identify best practice for service delivery, which is underwritten by a proactive focus on minimizing the use of seclusion whenever possible.

Terminology

This evidence review focuses on the practice of seclusion, defined as a physical intervention that involves containing a patient who is perceived to be in psychiatric crisis in a room that is either locked or "from which free exit is denied" (Mayers et al., 2010, p. 61). An individual who has been contained and prevented from leaving a space in the course of a psychiatric intervention is considered to be experiencing seclusion, whether or not the intervention is carried out in a formal secure room or any other alternatively-labeled environment, including a patient's hospital bedroom. There is significant variation in the terminology used to describe the places in which seclusion interventions occur. Consistent with Accreditation Canada's approach, this report uses the term secure room exclusively to refer to the room in which a seclusion intervention should be delivered.

Existing standards and current practice

Although seclusion practices internationally are insufficiently regulated at present and existing standards vary, a review of standards and guidelines reveals a number of common elements that could be seen as providing basic requirements for the practice of seclusion. These basic requirements typically focus on maintaining patients' dignity and safety as well as improving clinical oversight and accountability. However, the most significant central point, common to standards and guidelines across every jurisdiction surveyed and reflected widely in both the academic and policy literature, is that seclusion should be an intervention of absolute last resort. Seclusion poses a high degree of risk to patients and staff, and most researchers agree that it is of no proven therapeutic value. When physical intervention is unavoidable, it should be delivered according to clear standards of practice, documented, and reported appropriately.

Existing standards and current practice cont.

Variation in environments and populations

The spaces available for seclusion in B.C.'s designated facilities vary widely depending on whether they are located in inpatient psychiatric, observation or tertiary units; in urban or rural hospitals; or in emergency departments. Seclusion in the unique environment of an emergency department requires a particular focus that is beyond the scope of the present project.

While the literature indicates that standards of care apply equally across populations, some groups (children and adolescents, people with developmental disability, psycho-geriatric populations) have particular needs that may warrant extra vigilance when delivering or preventing seclusion. The literature on best practice in psychiatric intervention overall supports adapting the delivery and prevention of seclusion in order to maximize cultural competence and sensitivity to gender-specific concerns.

Literature and evidence review: best practice for safety and quality of care

The present report addresses best practice in three categories: minimizing seclusion, program elements for safety and quality of care in the delivery of seclusion, and secure room environment and design.

Preventing or minimizing seclusion

Standards and guidelines across jurisdictions provide direction for the safe delivery of seclusion when the intervention cannot be prevented. Research evidence and expert consultation across all jurisdictions emphasize that when seclusion is delivered, it must be within an overarching framework that actively promotes minimization, reduction, or in some places elimination. Whereas many jurisdictions focus on reduction and elimination, the primary approach to changing the practice of seclusion in Canada may best be described as minimization.

All evidence suggests that an environment that promotes prevention or reduction/minimization is a prerequisite for the safe delivery of seclusion when the intervention is necessary and unavoidable. Prevention and reduction/minimization initiatives set the stage for a facility culture that emphasizes the simultaneous need to ensure staff and patient safety (staff safety depends on patient safety, and vice versa); prioritizes staff education and support so that staff have the tools with which to provide patient-centered care in a safe and appropriate environment; and recognizes the need for strong leadership committed to transparency, monitoring and oversight.

Literature and evidence review: best practice for safety and quality of care cont.

The goal of preventing or minimizing the use of seclusion flows logically from a recovery-oriented, person-centered, trauma-informed perspective on inpatient psychiatric care, for which there is an already-strong and growing evidence base, and which is being adopted widely across jurisdictions. This type of approach to treatment recognizes that people at risk of or experiencing seclusion are particularly vulnerable and require interventions that take their specific histories and individual needs into account.

Two frequently-cited frameworks for preventing and reduction/minimization, both from the United States and rooted in trauma-informed practice, are the Six Core Strategies for the Reduction of Seclusion and Restraint in Inpatient Facilities (see Appendix D) and the engagement model (Appendix E), articulated most fully in this context in Murphy & Bennginton-Davis' *Restraint and Seclusion: The Model of Eliminating their Use in Healthcare* (2005).

Recommendations for achieving minimization synthesize the guidelines provided by both of these frameworks, as well as other useful contributions within the reduction literature. These recommendations include:

- develop an explicit reduction or minimization initiative;
- build a culture of empowerment and respect based in patient-centred principles;
- ensure that services follow recovery-oriented, trauma-informed practice;
- provide strong oversight and leadership that actively supports minimization and manages risk;
- implement specific measures to prevent seclusion;
- document and report on seclusion to allow evidence to drive practice and foster organizational change;
- support staff to value patients' dignity and empowerment;
- provide staff with opportunities for continuous training and professional development;
- acknowledge and address staff concerns about violence; and
- partner with patients and consumers to improve treatment and service delivery.

Delivering seclusion: program elements

Given the known risks involved, it is critical that clinicians and other professionals prioritize safety and quality of care when delivering seclusion. When seclusion must take place, it is a short-term, emergency intervention designed to protect and enhance the safety of the individual patient and others on the unit. Seclusion should take place only in a room designed and designated specifically for that purpose, conform to protocols that are part of a facility's standard operating procedure, and not be delivered on an ad hoc basis.

Literature and evidence review: best practice for safety and quality of care cont.

Because of patients' vulnerability, staff should ensure that they treat patients with care and respect, and monitor their physical and emotional health and wellbeing. Following any incident of seclusion, staff must document the entire process thoroughly, and conduct debriefing sessions that involve facility leaders, and the patient and/or an advocate.

Delivery of seclusion should be based on best practices that include the following:

- provide patient-centred care that accounts for patients' views, expectations and critiques;
- care for patients' emotional wellbeing by maintaining constant contact and communication between patient and staff throughout every incident of seclusion;
- care for patients' physical health by attending to their basic needs at all times and delivering seclusion using methods that protect them from injury and harm;
- follow a two-step debriefing process after each incident, including facility leaders, staff, and the patient and/or advocate; and
- provide continuous training for staff involved with service delivery.

Secure room environment and design

Seclusion should take place only in a room designed expressly for that purpose. In new buildings, the location of the secure room should be determined early in the design process, and all decisions about the secure environment should be made jointly between the architect or builder and an appointed clinical liaison.

The design of the secure area has a direct impact on a patient's treatment and staff safety. Studies of patients' perceptions suggest that seclusion experiences often feel punitive rather than therapeutic, largely because of inadequate seclusion environments. Secure room design should focus equally on safety and functionality, ensuring that the room protects the patient at all times and is durable enough to withstand potential abuse.

The secure room should be designed to minimize the traumatic potential of seclusion interventions. It must be placed near enough to the nursing station to enable constant observation of the patient through the observation window, and away from areas that are the site of frequent non-clinical interaction, as well as elevators, stairs and exits. Closed-circuit television and an intercom that staff may turn down but not off are critical tools enabling staff to engage with and assess the secluded patient.

Literature and evidence review: best practice for safety and quality of care cont.

Design features for secure rooms recommended in the literature and by experts in the field include:

- adequate size, large enough to accommodate up to six staff members (approximately 50 square feet);
- limited furnishings;
- no safety hazards;
- durable, tamper- and impact-resistant features;
- seamless walls and floors, which may be padded;
- calming colour scheme (not grey or white);
- high ceilings (three metres height);
- unbreakable exterior window that provides natural light and is positioned to enable a view outside;
- securely mounted, unbreakable lighting operated on patient request;
- secure, heavy-duty door with glazed observation panel;
- external door locks set to unlock automatically in case of fire alarm;
- robust sanitary facilities;
- adequate airflow and healthy air temperature; and
- appropriate safety mechanisms, including a staff-operated alarm system and carefully mounted security mirrors.

1. Introduction

A. Secure room and seclusion standards: context and purpose

There are approximately 28,000 admissions (20,000 unique individuals) to psychiatric units across British Columbia each year¹. These people and their families, caregivers and communities require evidence-based, client-centered treatment that: ensures the health and safety of every person in psychiatric care; continues to improve service development; and furthers the integration of services within a continuum of care. The Ministry of Health is interested in developing standards and guidelines for secure rooms and the delivery of seclusion as part of a process of developing overall standards of health, quality of care and safety for B.C.'s designated facilities.

Rationale

While there are a variety of regulatory and quality standards governing B.C.'s designated facilities, it is unclear if any one approach is comprehensive enough to address all health and safety risk elements. Moreover, a review of B.C.'s Mental Health Act, Hospital Act, and Community Care and Assisted Living Act demonstrates that at present, no specific legislated quality, health and safety rules apply to care provided in designated facilities².

An absence of health and safety rules poses a potential risk to patients and staff, and creates inconsistency in service parameters and guidelines for individuals receiving services in these facilities. This paper, therefore, provides the clinical, professional and policy evidence base from which to generate secure room and seclusion standards and guidelines. It synthesizes recently published academic, government and gray literature; consultations with international experts in the field; and a cross-jurisdictional scan of existing standards and guidelines for secure rooms and seclusion in order to identify best practice for service delivery, which is underwritten by a proactive focus on minimizing the use of seclusion whenever possible.

Structure: literature & evidence review

The literature and evidence review (part two of this paper) is divided into four sections, each of which focuses on particular aspects of ensuring safety and quality of care. Section A explains that seclusion must be delivered within a framework that is intrauma-informed, recovery-oriented, and patient-focused, and which encompasses initiatives geared explicitly toward reducing or minimizing the use of seclusion. Section B then addresses key program elements for delivering seclusion when the intervention cannot be avoided. Finally, Section C considers the evidence for safe secure room design, acknowledging the critical importance of an appropriately-built environment when delivering this complex intervention.

¹Data provided by the Ministry of Health, Mental Health & Substance Use Branch, accessed via Quantum Analyzer.

²See Appendix A for a complete listing of B.C.'s designated facilities.

A. Secure room and seclusion standards: context and purpose cont.

Terminology and the continuum of care

Seclusion is a physical intervention during which a patient perceived to be in psychiatric crisis is contained in a room that is either locked or "from which free exit is denied."

Source: Mayers et al., 2010, p. 61.

There is significant variation in the terminology used to describe the places in which seclusion interventions occur. Consistent with Accreditation Canada's approach, this literature review uses the term secure room exclusively to refer to the room in which a seclusion intervention should be delivered. Facilities around the province use additional terms including quiet room and time-out room to refer to the same or essentially the same type of space. This review will not use those terms for three reasons:

- they are not typical in the literature;
- to emphasize that there is only one type of highly specialized space in which it is acceptable for seclusion to be delivered; and
- to suggest the benefit to the overall system of care of facilities in British Columbia adopting consistent language to refer to the space designated for this practice.

In terms of the intervention itself, this review focuses on the practice of **seclusion**. Seclusion is defined as a physical intervention during which a patient perceived to be in psychiatric crisis is contained in a room that is either locked or "from which free exit is denied" (Mayers et al., 2010, p. 61). An individual who has been contained and prevented from leaving a space in the course of a psychiatric intervention is considered to be experiencing seclusion, whether or not the intervention is carried out in a formal secure room or other alternatively-labeled environment, including a patient's hospital bedroom.

Much of the literature considers seclusion in tandem with restraint (physical and chemical) because of the considerable overlap between the two practices. This review, however, addresses policy and practice relating only to seclusion.

Methodology

Relevant literature was identified using a variety of online databases (Google, Google Scholar, EBSCO, CINAHL and the Cochrane library) to search for discussions and studies of best practice in delivering seclusion and designing secure rooms. Comprehensive searches uncovered clinical and academic literature from across disciplines including social work, nursing, medicine, psychology and psychiatry, as well as policy documents from a variety of government and non-governmental organizations (NGOs). In most cases, searches concentrated on literature produced since 2000, such that it would reflect the significant developments over the past decade in behavioural health care. However, in exceptional cases and where there was a paucity of recent material, documents published prior to this period were considered.

A. Secure room and seclusion standards: context and purpose cont.

The cross-jurisdictional scan identified existing standards and guidelines for secure rooms and seclusion in Canada, the United States, the United Kingdom, Australia and New Zealand, as well as examples from Europe and South Africa. These standards and guidelines vary in their degree of comprehensiveness, and also in the degree to which one might discern the evidence on which they are based. Standards were located through internet searches using Google and Google Scholar; consulting government and NGO websites; as well as by following citations found in research and policy literature.

Following a thorough but not exhaustive review of published evidence, consultations were conducted with approximately a dozen experts across jurisdictions in order to enhance understanding of current notions of best practice, and leading thinking in the field. A large number of requests for consultation were made via e-mail, and consultations were conducted by telephone or Skype with all who responded within the allotted research timeline³.

Defining best practice

Typically, a practice is considered best, recommended or leading when it is supported by robust evidence. In the case of secure rooms and the delivery of seclusion, ethical considerations and other factors preclude the most stringent empirical research. According to a Cochrane review, the literature includes very few well-designed experimental studies, and no controlled examinations of service delivery or design (Sailas & Fenton, 2009). Although the literature does include less rigorous experimental studies as well as numerous excellent qualitative, exploratory and descriptive analyses, a variety of researchers concur that the delivery of seclusion requires further study (Kallert et al., 2005; Borckhardt et al., 2007; Johnson, 2010; Zun & Downey, 2005).

In the last 15 years, however, researchers appear to have shifted their focus away from delivery of seclusion in and of itself, and toward delivery in the context of prevention, reduction, and/or elimination of seclusion. In the process, they have generated a rich complementary body of literature, which expands the issue's scope and complexity, and introduces evidence gleaned from both quantitative and qualitative research designs.

Designating a practice as best, therefore, has depended on the level of support found within the literature on delivery, reduction, elimination, and/or prevention, combined with strong clinical consensus reflected in the testimony of key expert clinicians and administrators consulted across several jurisdictions.

³ Appendix C contains a summary of existing standards and guidelines, indicating the variety of approaches as well as the common elements across jurisdictions.

B. Existing standards and current practice

A specific focus on emergency departments is required in order to ensure safe and effective service delivery, and strong linkages and continuity of care throughout units within a designated facility.

Seclusion is an intervention of absolute last resort, which poses a high degree of risk to patients as well as care providers, and is of low to no proven therapeutic

At present, seclusion practices internationally are insufficiently regulated, especially given the high risks it poses to patient safety and the legal risks to which it exposes care providers (Kontio, 2011; Haimowitz et al., 2006; Huckshorn, 2006a; Muir-Cochrane et al., 2002). Existing standards provide basic requirements for the practice of seclusion, but there can be significant variation even within a single jurisdiction, and the standards are rarely binding, thus allowing facilities a great deal of leeway in terms of compliance.

Within this context, standards and guidelines across jurisdictions do appear linked by a number of common elements. They typically focus on maintaining patients' dignity and safety as well as improving clinical oversight and accountability. The latter is critical considering how often seclusion is under-reported (Kontio, 2011; Haimowitz et al., 2006; Huckshorn, 2006a; Muir-Cochrane et al., 2002).

The most significant central point, common to standards and guidelines across every jurisdiction surveyed and reflected widely in both the academic and policy literature, is that seclusion should be an intervention of absolute last resort. Seclusion poses a high degree of risk to patients, and most researchers agree that it is of low to no proven therapeutic value (for example, LeGris et al., 1999; Happell & Harrow, 2010; Haimowitz et al., 2006; PPAO, 2001; Borckhardt et al., 2007; Isherwood, 2006; Powell et al., 2008; Kontio, 2011; Sailas & Fenton, 2009).

Existing standards thus reflect a common claim that facilities should prevent this intervention whenever possible using a variety of less restrictive techniques. When physical intervention is unavoidable, it should be delivered according to clear standards of practice, documented, and reported appropriately.

Variation in environments

Although this review often refers to seclusion in general, it is important to recognize that in British Columbia, seclusion is delivered in a variety of different environments for a range of populations. The spaces available for seclusion in designated facilities vary widely depending on whether they are located in inpatient psychiatric, observation or tertiary units; in urban or rural hospitals; or in emergency departments (EDs).

B. Existing standards and current practice cont.

Emergency departments

Seclusion in EDs requires a particular focus. This literature review includes the limited existing published research related to seclusion in EDs (Zun & Downey, 2005; Allen et al., 2002). However, international experts and local clinicians concur that a great deal of work remains to be done in order to identify detailed evidence of health, safety and quality of care needs in this context, and to envision the development of evidence-based standards and guidelines that may be applied in these unique settings that frequently lack specialized staff or sufficient infrastructure (Zun consultation; Glover consultation; Bennington-Davis consultation; Blank et al., 2004).

Although challenging, the work of focusing specifically on seclusion in the ED is critical to ensuring safe and effective service delivery in EDs, as well as strong linkages and continuity of care between emergency and inpatient units. Moreover, a patient's experience in the ED often sets the tone for the rest of the individual's hospital stay; careful consideration is required, therefore, to determine how to provide trauma-informed care and minimize the use of seclusion in this crisis-oriented environment.

Standards of care apply equally across all populations. Some groups have particular needs that may warrant extra vigilance when delivering or preventing seclusion.

Variation in populations

While the literature indicates that standards of care (both program and environmental) apply equally across populations, some groups have particular needs that may warrant extra vigilance when delivering or preventing seclusion. This is particularly the case for children and adolescents, people with developmental disability, and psycho-geriatric populations.

Literature on best practice in psychiatric intervention overall supports adapting the delivery and prevention of seclusion in order to maximize cultural competence, and sensitivity to gender-specific concerns (Jones-Warren, 2002; O'Hagan et al., 2008; El-Badri & Mellsop, 2002; Mosley, 2005).

Children and adolescents

The literature on delivering seclusion to children and adolescents is the most comprehensive of all areas of specialized populations, based largely on the American Academy of Child and Adolescent Psychiatry's (AACAP) Practice Parameter, which was generated from an extremely thorough literature review (Masters et al., 2002). The relatively focused attention on children and adolescents may derive from the increased medical and psychological risk that seclusion poses for this population (Fryer et al., 2004; see also Hammer et al., 2011). The AACAP Parameter conforms to all other standards around delivery, with minor additions that will be noted in this review.

B. Existing standards and current practice cont.

Psycho-geriatric

Dementia is the most frequent diagnosis applied to secluded patients (Georgieva et al., 2010). The same standards apply for secluding psycho-geriatric patients as for the general patient population, though several studies recommend providing one-to-one nursing as an alternative to a secure room (Dobrohotoff & Llewellyn-Jones, 2011; Dix & Williams, 1996).

Developmental disability

For individuals with developmental disability (DD), it is important to distinguish between dangerous behaviour warranting seclusion versus aggressive behaviour typical of some disabilities (Mason, 1996). People with DD may not have the capacity to communicate feelings of anxiety, stress and anger to staff. It is, therefore, critical to approach these patients with maximum sensitivity and understanding. Women with DD react particularly badly to seclusion, and it is the responsibility of staff to mitigate the negative impact of seclusion by collaborating with clients to manage disturbed behaviour; focusing on respect and empowerment during the intervention; and offering support and debriefing for clients and staff following seclusion (Sequeira & Halstead, 2001).

People with DD may derive particular benefit from strategies for preventing seclusion and alternative spaces to secure rooms (e.g., comfort rooms). These are discussed on p.23 of this review.

2. Literature & Evidence Review

A. Best practice: preventing and minimizing seclusion

Standards and guidelines across jurisdictions attempt to provide direction for the safe delivery of seclusion when the intervention cannot be prevented. There is a broader context for this guidance, however. Research evidence supported by expert consultation across all jurisdictions included in this review emphasizes that when seclusion is delivered, it must be within an overarching framework that actively promotes prevention, minimization, reduction, or in some places elimination (see, for example, US DHSS, 2011; Bennington-Davis consultation; del Vecchio consultation; Glover consultation; Huckshorn consultation; Zun consultation; O'Hagan consultation).⁵

Minimization emphasizes preventing seclusion, and ensuring that it is delivered as infrequently as possible.

Whereas many jurisdictions focus on reduction and elimination, the primary approach to changing the practice of seclusion in Canada may best be described as minimization. Policy makers, administrators, researchers and clinicians often use the terms reduction and minimization interchangeably. The difference tends to be primarily semantic, and this review, therefore, often refers to reduction/minimization as equivalents. There are, however, substantive advantages to emphasizing minimization specifically, in an effort to identify and encourage best practice. Rather than implying that the rate of delivery for seclusion should simply be reduced below current levels, minimization emphasizes preventing seclusion, and ensuring that it is delivered as infrequently as possible. Minimization acknowledges explicitly the simultaneous need to prevent seclusion in the vast majority of circumstances, while remaining prepared for its very occasional use (Woods consultation; Raymond consultation). Minimization may be understood as encompassing reduction, and it employs the techniques offered in that evidence base.

Evidence base

The literature on preventing, reducing, minimizing and/or eliminating seclusion is large and varied, and exhaustive engagement was beyond the scope of this review. However, this review does offer a thorough examination of a variety of studies, which are not of the highest scientific rigor (no randomized controlled trials or similar experimental studies exist in this field), but which do utilize both quantitative and qualitative evidence to describe elements of programmes that appear useful, and the impact of particular initiatives in specific programmes (Scanlan, 2010, p. 413).

⁵ While there has been a fair degree of enthusiasm for elimination in the US, it is sometimes a double-edged sword. For instance, there are reports in emergency departments that the shift to elimination has resulted in the use of security guards to keep escalated patients in their rooms. While secure rooms may no longer be available for formal seclusion, containing a patient in a room via security guard is de facto seclusion. In this sense, statistics claiming elimination are somewhat misleading (Zun consultation).

A. Best practice: preventing and minimizing seclusion cont.

The following discussion is based on a series of:

- retrospective and statistical analyses of facility-specific data (Chan & Chung, 2005; Mosley, 2005; Flannery et al., 2007; Qrashi et al., 2010; Azeem et al., 2011; Ashcraft & Anthony, 2010; Sullivan et al., 2007; Pollard et al., 2006; Bowers & Flood, 2006; Georgieva et al., 2010);
- comparisons of outcomes over time (Morrison & Lehane, 1995; Bowers & Flood, 2006); surveys and interviews with service users and staff (Keski-Valkama, 2010; Kontio, 2011; Kontio et al., 2011; Hoekstra et al., 2004);
- comprehensive evidence reviews (Sailas & Fenton, 2009; Scanlan, 2010; Rocca et al., 2006; D'Orio et al., 2007; Johnson, 2010; Beech & Leather, 2006; Happell & Harrow, 2010; Gaskin et al., 2007; Bower et al., 2000; Chaudhury et al., 2005; Van Der Merwe et al., 2012);
- program descriptions (Hyde et al., 2009; Visalli & McNasser, 2000);
- evidence-based program design and practice guides (Huckshorn, 2006b; Huckshorn, 2004; Champagne & Stromberg, 2004; US DHSS, 2011; Murphy & Bennington-Davis, 2005; Australian Psychological Society, 2010; MacDaniel, 2009);
- position papers (Allen et al., 2002; Huckshorn, 2006a); and
- expert commentary (Muir-Cochrane et al., 2002; Haimowitz et al., 2006; McGann, 2011; Bower et al., 2000; expert consultations).

Preventing & minimizing seclusion – *research conclusions at a glance:*

- Develop an explicit prevention and minimization initiative.
- Build a culture of empowerment and respect based in patient-centred principles.
- Ensure that services follow recovery-oriented, trauma-informed practice.
- Provide strong oversight and leadership that actively supports minimization and manages risk.
- Implement specific measures to prevent seclusion.
- Document, monitor and report out on seclusion to allow evidence to drive practice and foster organizational change.
- Support staff to value patients' dignity and empowerment and meet all patients' needs.
- Provide staff with opportunities for continuous training and professional development.
- Acknowledge staff concerns about violence and work toward reduction/minimization in order to mitigate risk.
- Partner with patients and consumers to improve treatment and service delivery.

A. Best practice: preventing and minimizing seclusion cont.

Evidence-based treatment

Seclusion is losing legitimacy in jurisdictions that endorse evidence-based health policy because it has no proven therapeutic value (Sailas & Fenton, 2009; Happell & Harrow, 2010). There is no evidence that seclusion contributes to healing or recovery, and there is strong support for the claim that it can be harmful to the individual being secluded as well as to those who witness or deliver the intervention (Haimowitz et al., 2006; Borckhardt et al., 2007; Isherwood, 2006; Powell et al., 2008; Kontio, 2011; Payley, 2009; Frueh et al., 2005; Finke, 2001; Ashcraft & Anthony, 2008; Georgieva et al., 2010; see also, Raymond consultation; Bennington-Davis consultation; Glover consultation). Some experts have argued that seclusion is not treatment at all but a treatment failure, and if it is ever a suitable intervention, it functions as an emergency containment measure only, when no other method of preventing an individual from harming him/herself or others has succeeded (Bennington-Davis consultation; Glover consultation; US DHSS, 2011; McGann, 2011). The American Federation of Families for Children's Mental Health firmly opposes secluding children except in very rare cases to prevent death (Bower et al., 2002).

There is no evidence that seclusion contributes to healing or recovery.

Internationally, seclusion is understood as a violation of human rights (see, for example, the 2006 United Nations Convention on the Rights of Persons with Disabilities; New Zealand, 2008; Australia, 2005; MHCC, 2012). Standards forthcoming in the European Union recommend alternatives to traditional seclusion practice in order to avoid the negative impacts of isolation and emphasize engagement (Vaaler consultation), and a reduction/minimization lens is fundamental to policy in the United Kingdom, Australia and New Zealand (O'Hagan consultation; Happell & Harrow, 2010; Kuosmanen et al., 2007).

In the United States, reduction initiatives are widespread and often funded by state and federal bodies, and a number of states have already eliminated the practice entirely or within particular hospital systems (Curie, 2005; USDHSS, 2011; Huckshorn consultation; del Vecchio consultation; Glover consultation; Bennington-Davis consultation). Further, a pan-Canadian group sponsored by the Canadian Patient Safety Institute as well as the Mental Health Commission of Canada (2012) recently declared minimization of seclusion to be the standard of care, consistent with a collaborative, recovery-oriented approach, and successful reduction initiatives are underway at hospitals in Ontario (Raymond consultation; Simons consultation).⁶

⁶ St. Joseph's Hospital in Ontario is currently leading an extremely successful seclusion reduction program, and will be publishing their data shortly.

A. Best practice: preventing and minimizing seclusion cont.

An environment that promotes reduction/minimization is a prerequisite for the safe delivery of seclusion when the intervention is necessary and unavoidable.

Reduction/minimization as a prerequisite for safe delivery

All evidence suggests that an environment that promotes prevention and reduction/minimization is a prerequisite for the safe delivery of seclusion when the intervention is necessary and unavoidable. Prevention and reduction/minimization initiatives set the stage for a facility culture that emphasizes the simultaneous need to ensure staff and patient safety; prioritizes staff education and support so that staff have the tools with which to provide patient-centered care in a safe and appropriate environment; and recognizes the need for strong leadership committed to transparency, monitoring and oversight.

Business case for prevention & reduction/minimization

In addition to meeting clinical best-practice standards, prevention, reduction/minimization and/or elimination are also recommended “from a best business practice imperative.” Seclusion is an expensive intervention to deliver, with little clear benefit. By contrast, studies have shown relatively minor to no additional costs associated with reduction initiatives. In fact, research reported by the US federal government indicates significant cost savings resulting from reduction, and associates reduction with lower “staff turnover, hiring and replacement costs, sick time, and liability-related costs.” Florida State Hospital, for example, reduced seclusion and restraint by 54 per cent, and saw a cost savings of nearly \$2.9 million, and a state-wide program in Massachusetts to reduce seclusion and restraint with adolescents generated a cumulative savings of \$10.72 million between 2001 and 2008 (US DHSS, 2011, pp. 4-5 and pp. 15-16).⁷

Prevention and minimization flow logically from a recovery-oriented, person-centered, trauma-informed approach to inpatient psychiatric care

Context: recovery-oriented, person-centered, trauma-informed practice

The goal of preventing or minimizing the use of seclusion flows logically from a recovery-oriented, person-centered, trauma-informed perspective on inpatient psychiatric care, for which there is an already-strong and growing evidence base, and which is being adopted widely across jurisdictions. This type of approach to treatment recognizes that people at risk of or experiencing seclusion are particularly vulnerable and require interventions that take their specific histories and individual needs into account.

⁷ The cost savings associated with reducing seclusion alone, independently of restraint, have not been studied. However, the lessons from studies of the business case for reducing restraint are an instructive starting point. The most comprehensive study of the economics of restraint reduction is LeBel & Goldstein, 2005.

A. Best practice: preventing and minimizing seclusion cont.

A recovery-oriented, person-centered approach is consistent with the Mental Health Commission of Canada's position that the outcome of an intervention should be measured according to its impact on a person or population's well-being, and emphasis on delivering interventions that empower, build on individuals' strengths, and reinforce people's sense of hope (MHCC, 2009; MHCC, 2012). As one expert clinician associated with a major American hospital puts it, recovery principles offer the best hope of helping at-risk patients to avoid seclusion: "When you treat a patient with dignity and respect, that patient is less likely to harm you or others" (McGann, 2011), and therefore less likely to require emergency containment.

A trauma-informed approach is similarly crucial to delivering appropriate services to the target population, as it helps decrease conflict between patients and staff by avoiding power-based practice. According to expert researchers and clinicians, the majority of individuals hospitalized for major mental illness have a history of trauma – estimates range anywhere from 51 to 98 per cent – and individuals with trauma histories are more likely to experience seclusion (Murphy & Bennington-Davis, 2005, p. ix and p. 9; Champagne & Stromberg, 2004, p. 36; Hammer et al., 2006; see also Glover consultation; Bennington-Davis consultation; del Vecchio consultation; O'Hagan consultation). One study in the US indicates that among individuals experiencing seclusion and restraint most frequently, 70 per cent had histories of childhood sexual or physical abuse (Hammer et al., 2006).

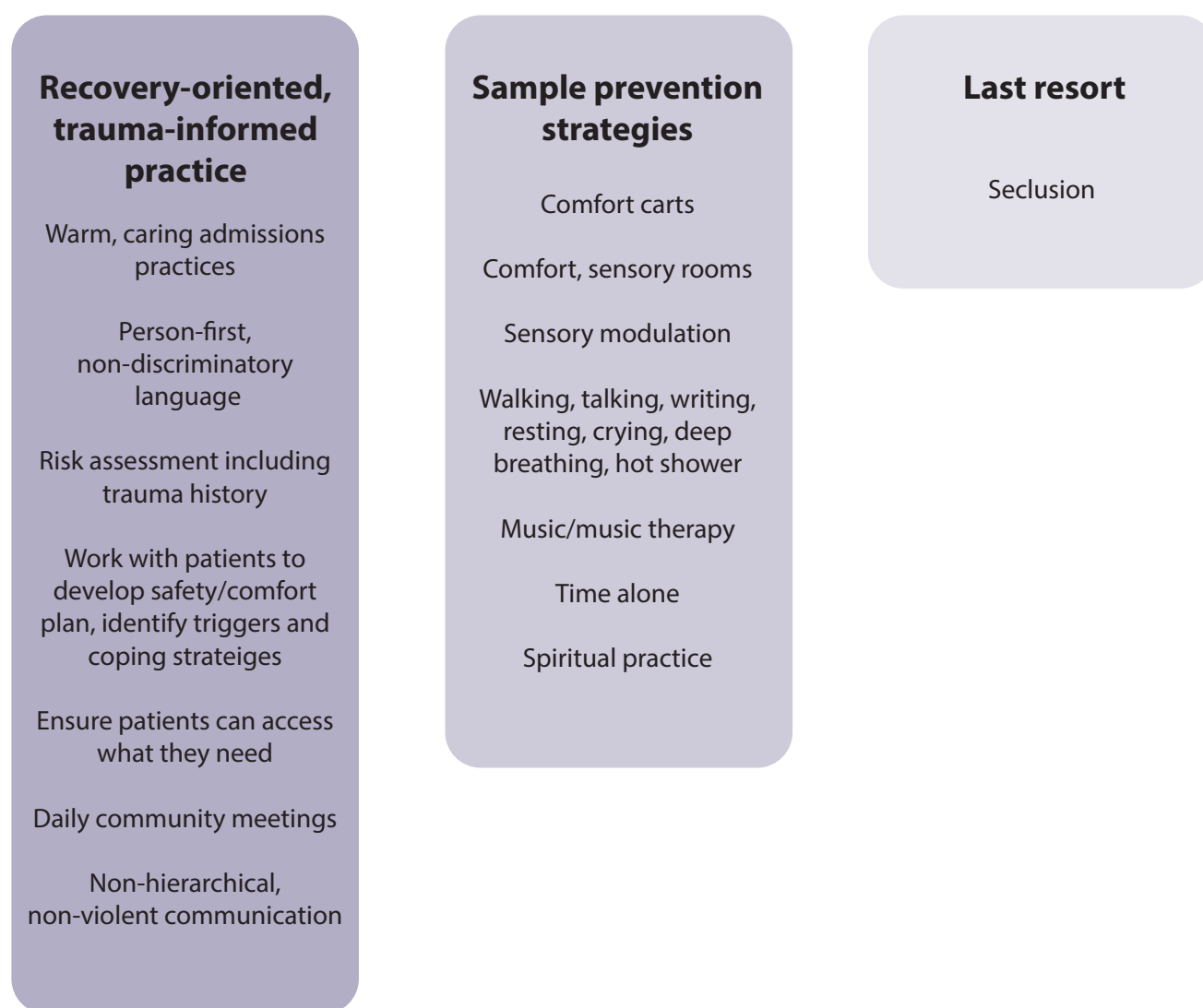
Trauma-informed practice addresses directly the wide-ranging impacts of trauma. In particular, it accounts for the ways in which trauma changes an individual's neurobiology and capacity for adaptive social functioning and emotional regulation, often causing the behaviours associated with a need for seclusion (Murphy & Bennington-Davis, 2005; Azeem et al., 2011; Delaney, 2006; Borckhardt et al., 2007; Bills & Bloom, 1998; Hammer et al., 2006; Ashcraft & Anthony, 2008; Champagne & Stromberg, 2004). The neurobiology of trauma leads individuals who perceive a new threat—whether precipitating admission, through the admission process or during their stay in a psychiatric unit—to experience "heightened vigilance, increased adrenaline..., fear that interferes with clear cognitive processes and impulse control, and interference with verbal processes." It is critical for staff to respond to patients in this state with empathy and understanding, recognizing that the behaviour they see is an involuntary response to particular stimuli based on that individual's biochemistry (Murphy & Bennington-Davis, 2005, pp. 107-8).

When a person's escalated behaviour is understood as a result of trauma, it makes little sense to respond to that behaviour with an intervention that patients say is traumatic in and of itself, and which they perceive to be coercive, shameful, humiliating, punitive and alienating (Murphy & Bennington-Davis, 2005; Georgieva et al., 2010).

A. Best practice: preventing and minimizing seclusion cont.

Treatment facilities that encourage healing and recovery and discourage introducing or reinforcing trauma need to consider carefully the evidence that many patients are likely to find seclusion distressing and confusing at best, no matter how carefully it is delivered (Kontio, 2011; Hyde et al., 2009; Bowers & Flood, 2006; Van Der Merwe et al., 2012).

Fig. 1: Summary of where seclusion fits within recovery-oriented, trauma-informed practice



A. Best practice: preventing and minimizing seclusion cont.

Preventing seclusion and achieving minimization

"They don't understand the pain I went through in that 12 hours [in seclusion], they've got no idea."
Source: Meehan et al., 2000, p. 375.

Two of the most often cited and implemented frameworks for prevention and reduction/minimization, both from the United States, are the National Association of State Mental Health Program Directors' (NASMHPD) Six Core Strategies for the Reduction of Seclusion and Restraint in Inpatient Facilities© (Huckshorn, 2006b; see Appendix D), first developed in 2003, and the engagement model (Appendix E), articulated most fully in this context in Murphy & Bennington-Davis' Restraint and Seclusion: The Model of Eliminating their Use in Healthcare (2005). Both the Engagement Model and Six Core Strategies are rooted in trauma-informed practice, and the Six Core Strategies, in particular, has been validated as an effective approach to reduction (Azeem, 2011). The following recommendations for preventing seclusion and achieving minimization synthesize the guidelines provided by both of these frameworks, as well as other useful contributions within the reduction literature and expert opinion.

Create a culture shift

A synthesis of the literature suggests that attention to facility culture overall is absolutely vital to successful prevention and reduction/minimization initiatives. As Happell & Harrow (2010) put it, "Workplace culture has been identified in the literature as a major determinant of the continued use of seclusion" (p. 164). Evidence indicates great value in shifting away from authoritarian styles of practice typically associated with the use of seclusion, and moving instead to a culture of collaboration and engagement, where staff are supported rather than simply directed, and where patients are encouraged to be active partners in their own care (Murphy & Bennington-Davis, 2005). The literature clearly indicates that leadership, physician and patient involvement are key elements to supporting this shift.

A mandate from facility leaders, who identify reduction as a key priority, is important to starting the reduction initiative and sustaining it over time.

Involve facility leadership

Facilities appear more likely to reduce their use of seclusion or deliver the intervention more appropriately when leadership is strong and supportive, and when leaders and senior staff model communication and practice styles that reinforce every individual's dignity and empowerment. Although it is crucial to have the cooperation of staff in order to implement a prevention and reduction/minimization initiative successfully, a clear and unwavering mandate from facility leaders, who identify reduction as a key priority, is important to getting the initiative started and to sustaining it over time (Ashcraft & Anthony, 2008; Scanlan, 2010; Murphy & Bennington-Davis, 2005; George et al., 2010; Happell & Harrow, 2010; Georgieva et al., 2010).

Facility leaders play a particularly important role in establishing a workplace culture that values prevention and minimization of physical interventions; monitors performance and accountability; commits to continuous quality improvement; and supports staff in delivering best practice treatment and developing alternate approaches to care (Pollard et al., 2007; Qurashi et al., 2010; Scanlan, 2010; D'Orio et

A. Best practice: preventing and minimizing seclusion cont.

al., 2007; Hyde et al., 2009). In addition to setting the tone for the workplace overall, leaders have the power to initiate the following specific changes related to prevention and reduction/minimization:

- Mandate minimization of seclusion;
- Reduce the maximum duration of seclusion orders;
- Set reduction targets; and
- Remove or re-purpose seclusion rooms (Scanlan, 2010, p. 414).

Involve physicians

Whether or not they hold a formal leadership title, physicians play at least a de facto leadership role in all health care facilities, and they are ultimately responsible for ordering seclusion interventions. As such, it is important to engage them early in the process of shifting toward trauma-informed and recovery-oriented practice, and specifically when implementing programs to reduce/minimize seclusion. Facility management should provide physicians with a clear, evidence-based and data-driven vision of the changes being implemented. Physicians should be invited to contribute to the change process because they are in a position to care for patients as well as train and mentor staff (Murphy & Bennington-Davis, 2005).

Involve patients

One of the most effective ways of instigating the initial culture shift required to begin working toward prevention and reduction/minimization is to invite current and former patients as well as staff to talk about their experiences with seclusion, either as the individual being secluded or the individual delivering the intervention.

Although there is considerable research evidence supporting prevention and reduction/minimization, there is unique power in first-hand reflections on the impact of the intervention. When the reduction team at St. Joseph's Hospital in Hamilton, Ontario, delivers education sessions on seclusion that include these types of stories, they ask staff to imagine, "If this was your parent/spouse/child, would you think twice before you lock the door?" By personalizing the intervention in this way, staff are reminded that patients are individuals who are more than their illnesses or problematic behaviors, and encouraged to treat them as they would wish their own loved ones to be treated (Lane et al., 2003; St. Joseph's consultation; Murphy & Bennington-Davis, 2005).

Implement specific preventive measures to make seclusion unnecessary

Seclusion should not be viewed as one alternative among many for managing aggressive or escalated behaviour. Rather, seclusion is an emergency containment intervention required only when all attempts to prevent its use have failed. By implementing specific preventive measures, facilities increase the chances of developing an environment where seclusion is mostly unnecessary (Mann-Poll et al., 2011; Morrison & Lehane, 1995), feeding the culture shift referenced above. The full spectrum of possible preventive measures is too broad to enumerate here. However, this review highlights a small handful of measures presented in the evidence consulted.

"A terrible feeling of loneliness. Especially these heavy doors and...they slam shut behind you and...I have never experienced such loneliness."
Source: Hoekstra et al., 2004, p. 280.

A. Best practice: preventing and minimizing seclusion cont.

Seclusion should not be viewed as one alternative among many for managing aggressive or escalated behavior. It is an emergency containment intervention required only when all attempts to prevent its use have failed.

Offer a welcoming physical environment

Experts recommend doing a thorough assessment of the physical environment to establish the degree to which it either increases or aims to decrease agitation. Facility leaders should begin their assessment outside to observe the appearance of the entrance in detail, and imagine the impact on patients and families of arriving at the facility for admission. Every detail should be assessed—from the appearance of the doorway, to paint on the walls, to arrangement of furniture, to the type of signage and so forth—in order to determine whether there are changes that could make the environment more welcoming, calming and reassuring. The assessment should be repeated on a regular basis to gauge the success of changes and ensure continuous improvement (Gaskin et al., 2007; Murphy & Bennington-Davis, 2005; St. Joseph's consultation) and considered in the process of capital planning overall.

Promote a non-coercive approach to care

A non-coercive approach to care is one of the key strategies for preventing the agitation and aggression that often leads to or puts patients at risk for seclusion. A study of a small psychiatric intensive care unit (PICU) in the Netherlands found that implementing “a special non-coercive infrastructure and treatment policy” allowed staff to abandon coercive measures even though they were treating high-risk patients with extremely complex illness, who were admitted involuntarily, with histories of seclusion. In this case, the PICU lowered its staff-to-patient ratio, and emphasized recovery-focused care that balanced patient autonomy with the need for staff and patient security. According to the study's authors, “Staff approached patients in an empowering and humane way based on the assumption that each person possesses potential for maturation, learning and growth if an environment is offered that preserves their dignity and fosters mutual respect and acceptance” (Georgieva et al., 2010, p. 33).

Provide meaningful daily activities

Because there is a link between aggression and inactivity, it is important to provide meaningful activities every day for admitted patients. A structured daily program, designed by a qualified occupational therapist, might include a variety of therapies focusing on self-regulation and attachment, in both group and individual formats, as well as recreational programming such as physical activities, outdoor time (e.g., in an enclosed garden or similar type of area), crafting, and so on (Georgieva et al., 2010). Patients may be engaged and empowered through regular community meetings, held at minimum twice per week, and up to twice daily, depending upon the resources available on the unit. The meetings can be directed by recreational staff, and offer patients opportunities to talk about both successes and challenges on the unit. The reduction team at St. Joseph's Hospital recommends identifying a patient to chair the meeting and another to take minutes, which should be posted within 48 hours (Murphy & Bennington-Davis, 2005; St. Joseph's consultation).

A. Best practice: preventing and minimizing seclusion cont.

Offer private or quiet spaces

Research indicates benefits across all acute care settings when patients have access to single-occupancy rooms. These include protection from infectious disease as well as lowered stress, which can lead to increased patient compliance and better health outcomes (Chaudhury et al., 2005). Psychiatric patients staying in dormitory-style rooms are more likely to view seclusion positively, indicating their need for privacy and/or decreased stimulation. Staff should explore the reasons behind a patient's wish to be secluded and suggest alternatives to seclusion whenever possible (Van Der Merwe et al., 2012). Van Der Merwe et al. (2012) emphasize the need for areas on an inpatient psychiatric unit where patients can relax and self-soothe in order to mitigate the use of voluntary or forcible seclusion. Time-out rooms, quiet rooms or comfort rooms (see p. 19) can meet this need.

Make sensory interventions widely available

It is useful to offer patients access to sensory interventions at the earliest sign of agitation, before they have become aggressive or lost self-control (MacDaniel, 2009). Indeed, patients should be assisted to recognize the signs of agitation or escalation themselves; offered opportunities to provide input into the variety of sensory interventions available on the unit; and encouraged to seek out these interventions proactively. Sensory interventions are useful across populations, and have been shown to be effective for reducing challenging behaviour among people with intellectual disabilities (Heyvaert et al., 2010), and decreasing agitation among psycho-geriatric populations (Staal et al., 2007).

Sensory interventions are a component of person-centered, trauma-informed practice, and have been shown to improve care and promote a recovery focus. Sensory approaches can help people to organize their thoughts, prevent behavioral crises, and function better in their environment. The goal is to help people to self-organize, using highly individualized strategies and techniques (Champagne & Stromberg, 2004, p. 36 and p. 38). Depending on the person's needs, sensory interventions may be calming or activating, and should include strategies addressing all senses: sight, sound, smell, touch, taste, proprioception (i.e., sense of body movement and position), and vestibular motion (i.e., sense of orientation and balance). While sensory interventions have been used for decades with young people, their efficacy for preventing seclusion has not yet been fully evaluated, though there are numerous reports of their positive impact (McGann, 2011; MacDaniel, 2009).

There are multiple sensory techniques, including aromatherapy, therapeutic touch, brushing, joint compression, weight, multisensory rooms (including but not limited to Snoezelen rooms), and comfort rooms, carts or boxes (see box on p. 19)⁸. In all cases, interventions should be delivered by a trained occupational therapist (Champagne & Stromberg, 2004).

⁸ Snoezelen rooms are a type of multisensory environment composed of items produced under the Snoezelen trademark, and designed according to multisensory principles developed by the Snoezelen movement, originating in the Netherlands in the 1970s. See <http://www.snoezeleninfo.com/introduction.asp> for more information.

A. Best practice: preventing and minimizing seclusion cont.

Offer patients access to sensory interventions at the earliest sign of agitation, before they have become aggressive or lost self-control.

Assess and manage risk

Risk assessment and management are central to reducing the use of seclusion, and ensuring that when it is delivered, it is done safely and appropriately. In their Risk Management Guide for restraint and seclusion, Haimowitz et al. (2006) recommend that facilities develop strategies such as regular policy reviews, and a facility-wide task force and formal plan to promote reduction, which includes ongoing workforce training and data collection to set targets and measure performance. Performing thorough medical and psychiatric risk assessments for each patient upon admission provides an opportunity to establish potential triggers of escalated behavior that might require seclusion, and to develop an individualized behavioral care plan that identifies effective preventive measures to keep a person out of seclusion should he/she experience escalation or a psychiatric emergency (McGann, 2011; Flannery et al., 2007). It is important to ensure that each patient's risk assessment is clearly identified in his or her chart so that the information is readily available for staff when needed.

It is also useful to perform a trauma assessment in order to understand a patient's trauma history, and risk factors that may evoke intense fear responses, which could lead to dangerous behavior (Champagne & Stromberg, 2004, p. 36). At minimum, a trauma assessment should include:

- Type of trauma;
- Age at which trauma occurred;
- Perpetrator of the trauma; and
- Description of related symptoms (Champagne & Stromberg, 2004, p. 37).

It is important to remember, however, that people may not be ready or able to speak about experiences with trauma. As such, and given the high statistical prevalence of trauma for individuals admitted to a psychiatric unit, always assume that people...have been exposed to some form of abuse, coercion, and violence, and proceed on that assumption (Murphy & Bennington-Davis, 2005, p. 11). In other words, trauma-informed practice should be the default approach in psychiatric units in order to mitigate risk of violence and aggression and prevent restrictive interventions.

Trauma-informed practice should be the default approach in psychiatric units in order to mitigate risk of violence and aggression and prevent restrictive interventions

A. Best practice: preventing and minimizing seclusion cont.

Comfort Rooms

Comfort rooms are the sensory intervention discussed most frequently in the evidence consulted for this review. Comfort rooms are a low-cost preventive measure that are relatively easy to implement in most facilities, since they can be built in rooms that have been re-purposed, and they can also double as group therapy or activity spaces.

Comfort rooms are not time-out, containment or punitive spaces. They are spaces where patients go voluntarily in order to cope with their own rising agitation, and develop self-awareness and self-control. Patients may leave at any time, and the doors are never locked. Staff do not enforce the use of comfort rooms; rather, they support patients to use them as needed in order to maintain a non-coercive, non-violent unit (MacDaniel, 2009).

For facilities that are not able to develop a comfort room, a comfort cart or box is a good alternative, as it is portable, inexpensive and easy to store (Champagne & Stromberg, 2004; MacDaniel, 2009). Ideally, comfort rooms, carts and/or boxes are developed with input from patients, who can identify items and strategies that they find helpful, and so that the intervention can be responsive to the needs identified in their care plans. Items in the comfort room might include:

- Yoga mats
- Stereo
- Rocking chairs
- Recliners
- Bean bags
- Murals (painted or adhesive)
- Low or adjustable lighting
- Books
- Bubble wrap
- Hand lotion
- Aromatherapy products
- Weighted blankets
- Stress balls
- Photos of nature and calming scenes

Patients should be oriented to the comfort room upon admission (St. Joseph's consultation), and staff should be trained regarding benefits and appropriate use. These interventions should be implemented slowly, over a five- to six-month period, in order to allow staff and patients to contribute to their design, and to perform a thorough risk assessment. Staff should maintain a log to track the room's use and to compare usage with rates of seclusion, and each patient's use should also be documented in the individual's chart (MacDaniel, 2009).

A. Best practice: preventing and minimizing seclusion cont.

Allow evidence to drive practice

Central to providing appropriate oversight, facilities must collect and analyze data on seclusion interventions in order to inform practice and provide a basis for change (Haimowitz et al., 2006). Strong and accountable leadership may use this data and other information to foster organizational change through clear performance improvement plans that are evidence-based, facility-specific and individualized (Huckshorn, 2006; Haimowitz et al., 2006).

Monitoring and review are important for assessing the quality and outcomes of seclusion interventions and ensuring that staff are delivering best-practice care (Australian Psychological Society, 2010). Data should be collected on every intervention to create a database that enables review, both independently and in comparison with performance in equivalent facilities (Allen et al., 2002; see also Rocca et al., 2006). In Queensland, Australia, a state-wide seclusion database has been developed to help leaders and clinicians understand outcomes and monitor risk (Hyde et al., 2009). Based on practice in New Zealand, facility leaders may also wish to establish a seclusion committee that includes a clinical leader, two nurses, and a consumer adviser. The committee should meet at least bimonthly to review every seclusion event (Mosley, 2005).

Facilities must collect and analyze data on seclusion interventions in order to inform practice and provide a basis for change.

Document and report out on seclusion events and progress toward prevention and minimization

Documentation helps to reduce the prevalence of seclusion, assist facilities with performance improvement, and increase the safety of physical interventions when they are required. It provides a record of the incidents that took place prior to, during and after each seclusion episode, and thus enables accountability and quality improvement. There are significant risks associated with seclusion, and having clear documentation both protects the facility in the event of a negative outcome, and facilitates communication and good practice among staff responsible for delivering the intervention (Muir-Cochrane et al., 2002).

The value of reporting out on the use of seclusion cannot be underestimated. As Scanlan (2010) explains, documentation and reporting provide “an effective feedback loop, [allow] for benchmarking, [promote] healthy ‘competition’ between units and [highlight] the organizational commitment to change (especially where data are widely reported, both within the service and to the broader community)” (p. 414). Leaders in the seclusion reduction initiative at St. Joseph’s Hospital in Hamilton, Ontario, identify reporting as a key to their success. In order to build the initiative’s profile and make the initiative’s results easy to see, pie charts are framed and posted in each nurses’ station and team office so units can compare their progress and understand the state of practice in the facility (St. Joseph’s consultation).

A. Best practice: preventing and minimizing seclusion cont.

Document all Incidents of seclusion

Each incident of seclusion should be thoroughly documented and include the following information:

- A clear account of the rationale for the use of seclusion.
- A record of observation of the patient during and after seclusion.
- A record of the times at which seclusion began and ended.
- Clear evidence that the patient's food, fluid, hygiene and toilet needs were met.
- Evidence of clinical decision-making procedures.
- Indication of how staff will reduce the likelihood of the patient being secluded again.

(Source: Muir-Cochrane et al., 2002, p. 141)

The American Academy of Child and Adolescent Psychiatry (AACAP) Practice Parameter places particularly stringent emphasis on facility oversight and accountability. The AACAP standards require the facility to institute an oversight committee for seclusion, and to maintain a seclusion log enumerating all incidents. Facilities must also institute a performance improvement process and collect data including information about shift staff who initiated the intervention; duration of seclusion; the date, day and time of initiation; injuries sustained by the patient; the patient's age and sex; if there are multiple episodes of seclusion within a single 12-hour period; and episodes of seclusion lasting more than 12 hours. Data collected should be reviewed on a regular basis with the treatment team and relevant staff committees (Masters et al., 2002).

Support facility staff

Staff responsible for delivering seclusion interventions should work in a team of adequate size, and participate in continuous training and professional development in order to build, maintain and enhance skills to prevent and/or respond to escalated behaviour (Huckshorn, 2006; Visalli & McNasser, 2000; Johnson, 2010).

Adequate staffing levels

Although ideal numbers of staff were not found in the literature, research does show improvements in the rate of seclusion when there is a low ratio of patients to staff (Kontio, 2011; Mann-Poll et al., 2006; Scanlan, 2010). Overall, there should be adequate numbers of staff to prevent the need for physical intervention, and if despite all attempts to the contrary it becomes required, to meet all patients' needs while providing one-to-one, continuous observation of the individual in seclusion throughout the duration of the episode (Allen et al., 2002; Rocca et al., 2006; Mosley 2005). An 8-bed PICU in the Netherlands reduced seclusion and delivered person-focused, recovery-oriented care successfully, with the following staffing model: nurses: 9.0 FTEs; occupational therapist: 0.1 FTE; and social worker: 0.05 FTE (Georgieva et al., 2010).

A. Best practice: preventing and minimizing seclusion cont.

Education and workforce development

Support for ongoing staff training is essential to prevention and reduction efforts (Gaskin et al., 2007; Scanlan, 2010; Georgieva et al., 2010). Training programs should include stories of recovery, told to staff directly by former patients, in order to emphasize the importance of hope, and belief that patients can get better (Ashcraft & Anthony, 2008). Researchers have identified the following key training areas:

- Delivering preventive interventions so that seclusion is not required (Gaskin et al., 2007). This includes training to implement new models of care with reduction/minimization as an explicit goal, such as collaborative problem-solving, trauma-informed practice, non-violent communication, and/or recovery-oriented practice (Gaskin et al., 2007; Scanlan, 2010; Ashcraft & Anthony, 2008; Georgieva et al., 2010; Mosley, 2005; Mann-Poll et al., 2011; Huckshorn, 2004).
- Promoting attitudinal changes among staff toward patients and seclusion (Scanlan, 2010).
- Addressing common assumptions about seclusion, specifically that it promotes safety and compliance (Scanlan, 2010; Huckshorn, 2004).
- Informing staff about systematic and regulatory efforts to reduce/minimize or eliminate seclusion (Keski-Valkama et al., 2007).
- Engaging patients rather than increasing control. This could include the ability to allow patients “to express anger or confusion,” so that engagement can occur even in acute phases of illness (Ashcraft & Anthony, 2008; Georgieva et al., 2010, p. 34).
- Early recognition of agitation and aggression (Georgieva et al., 2010; D’Orio et al., 2007; Flannery et al., 2007).
- Incorporating peer support workers into the treatment environment (Ashcraft & Anthony, 2008).

Physical interventions, like seclusion, are only associated with patient violence about 11 per cent of the time. While the risk of violence is the usual justification for delivering seclusion, the justification does not reflect the actual risk.

New staff should be screened during the hiring process in order to gauge familiarity with and attitude toward trauma-informed, recovery-oriented, person-focused treatment. Staff who lack familiarity should be provided with appropriate training (Murphy & Bennington-Davis, 2005).

Address staff concerns about violence

Patient assaults on staff are a serious concern and ensuring both staff and patient safety is paramount. Although there is a common perception that seclusion may protect staff from violent assaults, there is little evidence to support this claim. According to research performed by the American federal Substance Abuse and Mental Health Services Administration (SAMHSA), physical interventions are only associated with patient violence about 11 per cent of the time, so while the risk of violence is the usual justification for delivering seclusion, the justification does not reflect the actual risk (US DHSS, 2011, p. 6).

A. Best practice: preventing and minimizing seclusion cont.

Indeed, seclusion and restraint often cause rather than prevent or respond to violence (US DHSS, 2011). This is particularly the case when secluding individuals with histories of trauma, as retraumatization may lead to additional behavioral dysregulation, which increases the risk of physical injury to clients and staff (Hammer et al 2006, p. 574). SAMHSA states that restraint and seclusion contribute to a cycle of workplace violence that accounts for:

- 23-50 per cent of staff time
- 50 per cent of staff injuries
- 60 per cent increase in risk of injury to patients and staff
- Increased length of stay for patients
- Increased costs of care (US DHSS, 2011, p. 4).

Moreover, fears that initiatives to reduce the use of seclusion will result in increased violence against staff are largely unwarranted. In one of the few studies that showed an increase in violence following the implementation of a reduction program, there is no clear indication that reduction caused the increase. There is, however, clear evidence that reduction was carried out improperly, as it was mandated without sufficient staff training, and staff's acceptance or knowledge of alternative or preventive measures was not known (Kahdivi et al., 2004; see also Scanlan, 2010).

Prevention and reduction/minimization of seclusion are best understood as components of violence prevention, rather than risk factors for increased violence.

Reduction is much more frequently associated with lower staff injury, as well as lower staff turnover and absenteeism, and increased job satisfaction. A 75-per cent reduction in restraint and seclusion at Johns Hopkins University Hospital in Baltimore, Maryland, for example, was achieved with no increase at all in either staff or patient injuries (US DHSS, 2011, p. 15). A facility with leaders and an overall culture that minimize physical interventions, and create an environment rooted in trauma-informed care, is likely to reduce the risk of assault to both patients and staff (Flannery et al., 2007, p. 88). In facilities that have adopted reduction strategies such as those outlined in this review, safety has not generally been compromised (Scanlan, 2010, p. 416).

In fact, prevention and reduction/minimization of seclusion are best understood as components of violence prevention rather than risk factors for increased violence. Reducing violence on the unit overall—not only the potential for violence perpetrated by patients, but also the violence that researchers, clinicians and patients attest is inherent in physical interventions – is the best way to prevent injury and mitigate risk. An effective response to the risk of violence is one that improves staff attitudes and working practices (Bowers & Flood, 2006, p. 166) and is multi-factorial, encompassing a simultaneous focus on everything from security measures, through individual, team and organizational work practices, to organizational policies, codes of practice and arrangements for everything from job and work design to post incidence support and counselling (Beech & Leather, 2006, p. 32).

A. Best practice: preventing and minimizing seclusion cont.

Partnerships between patients, families and caregivers must be the guiding force determining inpatient psychiatric policies and practice in general, and for reducing seclusion in particular.

Emphasize partnerships with patients

Conflict is common in inpatient psychiatric units, particularly when patients are admitted for treatment on an involuntary basis. Models of care built on the assumption that staff must demonstrate power and control over patients increase the likelihood that conflict will escalate, whereas facilities may see improvements in relationships and behaviour when they implement practices that emphasize collaboration and partnerships. Even in programs utilizing coercive measures, patients seem more likely to find such interventions acceptable when delivered in the context of carefully developed, mutual relationships with direct-care staff (Oloffson & Norberg, 2001; Van Der Merwe et al., 2012).

When it comes to establishing and maintaining a therapeutic environment, commonplace actions by staff – such as jingling keys, confiscating patients' clothing, posting institutional signs to communicate unit rules, interacting with patients from behind a counter or through glass, and making patients ask for everything they need – often do more harm than good. In order to reduce the likelihood of aggressive behaviour by patients, staff need to understand the degree to which routine practice might make patients feel powerless and out of control, and implement changes that send messages of reassurance and caring, and promote empowerment and autonomy. For example:

- Upon admission: attempt to provide relief from symptoms, even while a patient may be waiting in the emergency department, interacting with police, or coming out of an involuntary transport: Have the sole goal of welcoming a newcomer to the environment and a mission to set the person at ease (Murphy & Bennington-Davis, 2005, p. 43; Strike et al., 2008).
- Offer patients food, drink, blankets, or other items that they might require.
- Avoid judging patients for being ill, and view them as “partners with the healthcare staff in figuring out how to recover” (Murphy & Bennington-Davis, 2005, p. 46). Partnerships between patients, families and caregivers must be the guiding force determining inpatient psychiatric policies and practice in general, and for reducing seclusion in particular. Family involvement is critical to safe service delivery for children and adolescents (Masters et al., 2002).

By working together, especially during initial risk assessments and treatment planning, caregivers can support individuals to identify the most appropriate, individualized strategies for coping with escalated or aggressive behaviour, increasing the likelihood that interventions are acceptable and effective (Gaskin et al., 2007; Scanlan, 2010; Masters et al., 2002). At least one qualitative analysis suggests that physicians, nurses and patients all value engagement and human connection (Olofsson & Norberg, 2001), and one expert explains, “Collaboration is the best way to help patients remain in behavioral control” (McGann, 2011). When patients remain in control, and are approached using patient-focused techniques, the need for seclusion is either reduced or eliminated.

A. Best practice: preventing and minimizing seclusion cont.

"...I was in the meeting when we planned my treatment. I wanted to have this treatment plan for myself and I want everything on paper. Written papers can help me, because I cannot remember the oral plans and talks."

Source: Kontio, 2011, p. 5.

Employ peer support workers

Employing peer support workers is a valuable way for facilities to demonstrate respect for patients and belief in recovery. Peer support workers can offer empathy and first-hand understanding of what a patient is experiencing. They can advocate for change from a consumer perspective, help teach coping and life skills, and they can function as examples to patients that it is possible to engage in meaningful activities outside of their illness (Ashcraft & Anthony, 2008; Davidson et al., 1999; Jorgenson, 2004).

B. Safety and quality of care in the delivery of seclusion: program elements

When seclusion must take place, it is a short-term, emergency intervention designed to protect and enhance the safety of the individual patient and others on the unit.

Given the known risks involved, it is critical that clinicians and other professionals prioritize safety and quality of care when delivering seclusion. When seclusion must take place, it is a short-term, emergency intervention designed to protect and enhance the safety of the individual patient and others on the unit. Seclusion should take place only in a room designed specifically for that purpose, conform to protocols that are part of a facility's standard operating procedure, and not be delivered on an ad hoc basis (Pereira et al., 2007).

Because of patients' vulnerability, staff should ensure that they treat patients with care and respect, and monitor their physical and emotional health and wellbeing. Following any incident of seclusion, staff must document the entire process thoroughly, and conduct debriefing sessions that involve facility leaders, and the patient and/or an advocate.

Evidence base

There are no randomized or controlled trials supporting the practice of seclusion. Indeed, a Cochrane Collaboration systematic review of existing evidence notes a "complete lack of trial-derived evidence" for seclusion and its delivery (Sailas & Fenton, 2009, p. 8).

B. Safety and quality of care in the delivery of seclusion: program elements cont.

Instead, evidence supporting policy and practice derives from:

- less rigorous but still informative retrospective and statistical analyses of facility-specific data (Qurashi et al., 2010; Chan & Chung, 2005; Mosley, 2005; Needham et al., 2010; Flannery et al., 2007);
- comparisons of outcomes over time (Pollard et al., 2006; Morrison & Lehane, 1995; Bowers & Flood, 2006);
- observation of secluded patients (Iversen et al., 2010);
- surveys and interviews involving service users and staff (Keski-Valkama et al., 2010; Kontio, 2011; Kontio et al., 2011; Mayers et al., 2010; Strike et al., 2008; Hoekstra et al., 2004; Larue et al., 2010; Mosley, 2005);
- evidence reviews (Sailas & Fenton, 2009; Scanlan, 2010; Rocca et al., 2006; Glassheim, 2008; D'Orio et al., 2007; Borckhardt et al., 2007; Johnson, 2010; Beech & Leather, 2006), position papers (Allen et al., 2002; Vanderpool 2004; Huckshorn, 2006a);
- program descriptions (Hyde et al., 2009; Metherall et al., 2006; Visalli & McNasser, 2000; Bills & Bloom, 1998); and
- expert commentary (Pereira et al., 2007; Muir-Cochrane et al., 2002; Haimowitz et al., 2006).

One unique study (Mann-Poll et al., 2011) analyzes 64 clinical vignettes rated by 82 clinicians in the Netherlands in order to determine factors that influence the decision to initiate seclusion. Sample sizes for all studies are typically small (a notable exception is Flannery et al., 2007, with a sample size of over 4,000 subjects), and qualitative research dominates much of the literature.

While this body of evidence lacks scientific rigor, it provides a valuable qualitative base from which to understand a number of critical issues such as patients' and staff's experiences of seclusion, and how delivery might be improved for service users and providers. In addition, the relatively large proportion of evidence reviews, program descriptions, expert commentary and position papers enables a clear understanding of practices currently supported and/or opposed by clinicians and relevant professional organizations.

B. Safety and quality of care in the delivery of seclusion: program elements cont.

Program elements for delivering seclusion – research conclusions at a glance:

- Provide patient-centered care that accounts for patients' views, expectations and critiques.
- Care for patients' emotional wellbeing by maintaining constant contact and communication between patient and staff throughout every incident of seclusion.
- Care for patients' physical health by attending to their basic needs at all times and delivering seclusion using methods that protect them from injury and harm.
- Follow a two-step debriefing process after each incident, including facility leaders, staff, and the patient and/or advocate. One step addresses the details of the incident and offers an opportunity to review the patients' treatment plan. The other step is a more formal critical incident review to enable service-wide improvements.
- Provide continuous training for staff involved with service delivery.
- Meet the particular developmental needs of children and adolescents.

Patient-centered service delivery

Patients may provide unique and valuable information critical to developing patient-centered best-practice policies for delivering seclusion (Kontio, 2011; BILD, 2002a, p. 3). It is worth creating a structure through which facility leaders and staff may receive patients' feedback, especially given the evidence in several studies that patients' experiences with seclusion are typically negative (Kontio et al., 2011; Hyde et al. 2009; Hoekstra et al., 2004; Van Der Merwe et al., 2012).

B. Safety and quality of care in the delivery of seclusion: program elements cont.

A survey of 30 individuals who experienced seclusion in a Finnish hospital generated the following suggestions for improved practice of seclusion and restraint (Kontio 2011, p. 41):

Improvement of seclusion practice	Patients' expectations regarding the elements and interventions which they would like to receive if they need seclusion as part of their treatment.
Humane treatment	Interaction with nurses and physicians; respectful attention, i.e. as an equal human being instead of as an aggressive and harmful patient in the secure room.
External evaluators	Examples: ombudsman, or the hospital chaplain with whom they wanted to talk about their seclusion experience.
Up-to-date information	Patient access to information about their own condition, treatment plan and when and why they needed seclusion
Written agreements	Written treatment plan that patients can view and amend.
Patient-friendly environment	Increased humanity, comfort and safety in the secure rooms.

Protect emotional wellbeing

"I couldn't speak to anyone for all that time, when I really needed to talk to someone.

It was horrific."

Source: Meehan et al., 2000, p. 375.

As this review has already noted, fostering patients' sense of dignity and empowerment is fundamental to minimizing the use of seclusion, and it remains fundamental in situations where seclusion cannot be avoided. Although seclusion is a restrictive intervention, facility staff should, as much as possible, continue to respect patients' rights, privacy and autonomy and maximize their sense of control in order to minimize the negative impact that a physical intervention might have (Rocca et al., 2006; Hoekstra et al., 2004; Kontio et al., 2011; Mayers et al., 2010; Van Der Merwe et al., 2012).

Maintain communication throughout the intervention

Maintaining constant communication between staff and patient throughout the seclusion episode is a central method of ensuring that patients perceive support and respect from staff, and are thus less likely to have a negative experience of seclusion (Mayers et al., 2010; Iversen et al., 2010; Kontio et al., 2011; Chan & Chung, 2005; Van Der Merwe et al., 2012). Although constant observation may seem intrusive, patients have stated that they appreciate continuous contact with a nurse or other clinician (Iversen et al., 2010; Kontio et al., 2011; Van Der Merwe et al., 2012). It is considered

B. Safety and quality of care in the delivery of seclusion: program elements cont.

A nurse must always be “within sight and sound” of the patient, and both staff and patients should be in constant contact throughout the duration of the seclusion intervention.

“I only wanted the real presence of a human being, with nurses and physicians, more communication, human touch...”

Source: Kontio, 2011, p. 5.

good practice for nurses to stay in close communication with the patient throughout the seclusion episode, talking with and showing interest in them in order to offer reassurance and information, and to help provide positive stimuli that can promote a sense of calm and reduce stress (Chan & Chung, 2005; Strike et al., 2008; Kontio, 2011; Kontio et al., 2011; Hoekstra et al., 2004; Mosley, 2005).

In order to facilitate communication, a nurse must always be within sight or sound of the patient, and both staff and patients should be in constant contact so that the patient remains well-informed about what is happening to him or her (Pereira et al., 2007, p. 78). Staten (2001) argues that patients should be monitored continuously, meaning uninterrupted observation, involving direct eye contact” although this can take place through a window or doorway if necessary (p. 17). Staff should be trained to communicate with patients who may seem unapproachable, and prepared to tell the patient multiple times what is happening and provide frequent updates about the reasons for and process of the intervention (Mann-Poll et al., 2011; Rocca et al., 2006). This may be a significant element in shifting the culture on the units, as it is common practice to see communications limited by no intercom systems or systems turned off, and no ability for staff to sit in the immediate proximity of the secure room.

In addition to the standards provided by the American Academy of Child and Adolescent Psychiatry (AACAP), the American Federation of Families for Children’s Mental Health recommends that children in seclusion be attended one-on-one throughout the intervention by professionals trained in de-escalation and conflict resolution (Bower et al., 2002).

Communicate with families and caregivers

In addition to policies requiring communication with the patient, facilities should also have policies regarding communication between staff and with families or other caregivers, both on and off the unit. Good documentation practices and a cooperative workplace culture may enable better communication between nurses and physicians, which can improve patients’ experiences of seclusion as nurses may then have better information regarding physicians’ orders and the process of the intervention (Kontio, 2011). Families and other significant people in the patient’s life may also require information. Staff should endeavour to provide such information in order to support collaborative approaches to care, while also being mindful of policies on privacy and confidentiality (Vanderpool, 2004).

When caring for children and adolescents, families must be notified when a child or adolescent is secluded, and involved with the child or adolescent’s treatment as much as possible (Masters et al., 2002).

B. Safety and quality of care in the delivery of seclusion: program elements cont.

Monitor and protect physical health

Physical interventions pose a clear risk to patients' physical health and wellbeing. For this reason, facilities must be vigilant in their efforts to protect patients from harm by providing a safe environment and reassuring approach to delivering care.

Meet patients' basic needs at all times

A patient's basic needs must be addressed at all times. Patients should not have to wait for food, water or other necessities such as access to fresh air or sanitary facilities (Allen et al., 2002). Clinical research suggests that meaningful activities that engage the patient during seclusion may be classified as basic needs and should be promoted (Kontio et al., 2011, pp. 7-8).

Individuals who are secluded require regular physical monitoring to ensure that they are not at risk of health complications, injury or death. All clinical staff including psychiatrists, physicians and nurses should be highly aware of the risks involved with secluding a patient, and on alert for any signs of physical decompensation (Allen et al., 2002; Chan & Chung, 2005).

Individuals who are secluded require regular physical monitoring to ensure that they are not at risk of health complications, injury or death.

In the US, nurses are required to assess secluded patients at least every 15 minutes for this reason (Rocca et al., 2006), and the dangers of seclusion prompted the development of a one-hour rule in 2000. This federal regulation requires a physician to be available at all times to assess any adult or child who has been secluded within one hour of the intervention. Implementing the 1-hour rule was a complicated and onerous process for many facilities, which challenged staffing practices, nurses' and psychiatrists' clinical autonomy, and established chains of command. Despite widespread opposition from medical and clinical bodies, however, the rule remains in place. In contrast to medical bodies, American consumer groups approve widely of the one-hour rule, particularly those who advocate trauma-informed and recovery-oriented treatment frameworks (Huckshorn, 2006a).

Children and adolescents

In addition to the standards in the AACAP's Practice Parameter, which match the general standards for appropriate care during seclusion, the American Federation of Families for Children's Mental Health recommends continuous one-to-one care in seclusion episodes lasting no longer than 15 minutes total. If an episode is prolonged, the child should have access to additional supports as well as contact with parents or other relevant caregivers (Bower et al., 2002).

B. Safety and quality of care in the delivery of seclusion: program elements cont.

Medical Emergency Response Teams

Medical Emergency Response Teams (MERT), developed in the UK, have required establishing new training systems to prepare a particular staff member to monitor a secluded patient's physical health. As part of the procedure, facilities set a schedule in advance for a nurse on each shift to be MERT-trained and act as a MERT Assessor for the organization. As of 2006, the MERT procedure had been implemented in two UK mental health trusts, with plans to extend to more as soon as possible (Metherall et al., 2006).

Debrief after each seclusion incident

During the debriefing process, seclusion events are treated as very serious and unusual, and are "understood and discussed as a system failure."

Staff and patients both benefit from an opportunity to debrief and review circumstances after an incident of physical intervention (see box on p. 32 for a description of a post-seclusion debriefing process) (Larue et al., 2010; Hoekstra et al., 2004; Mosley, 2005; Needham et al., 2010; Van Der Merwe et al., 2012). Families should participate in debriefing following the seclusion of a child or adolescent (Masters et al., 2002) and may be valuable for adults and geriatric populations where families are engaged in the individual's care. The purpose of debriefing is to prevent future use of seclusion, reverse or minimize the negative effects of the episode, and to address organizational issues and make improvements (O'Hagan et al., 2008, p. 11).

During debriefings, seclusion events are treated as very serious and unusual, and are always understood and discussed as a system failure, rather than a particular individual's responsibility. Senior leaders should be involved, acknowledging the degree to which staff and patients might both have found the intervention distressing. Leaders should offer an apology to staff and patients who either experienced the intervention firsthand or witnessed it taking place, in order to emphasize the facility's responsibility for what has occurred, leaders' accountability, and a shared desire to improve practice (Huckshorn, 2006b; Murphy & Bennington-Davis, p. 65, and pp. 68-74 for detailed examples of debriefing processes and questions to ask facility leaders and staff, as well as patients).

It may be best for debriefing to follow a standardized framework so that information may be used for keeping records and monitoring progress, and in order to enable short- and long-term continuity of care. Debriefing procedures should be transparent, and communicated to patients through brochures or other easily accessible formats (Needham et al., 2010, p. 229).

B. Safety and quality of care in the delivery of seclusion: program elements cont.

Implement a Two-Step Debriefing Process

Researchers and clinicians support implementing a two-step debriefing process. There is broad consensus that the first session should take place immediately following the incident of seclusion and the second should occur several days later. The evidence is more equivocal, however, regarding the sequence of content addressed in each step. This review, therefore, offers the following steps as examples of how a facility might approach debriefing; in practice, there should be significant leeway in determining the specific focus of each session.

Step 1

A synthesis of the evidence suggests that the first session might address the details of the incident itself to confirm the safety of the practice, review documentation, and connect with both staff and the patient to share feelings and perceptions, review clinical data, and revise the patient's treatment plan. A senior staff member should lead the session with participation from as many of the people present during the incident as possible, including the patient and/or an advocate.

Step 2

The second step could be a formal critical incident review that takes a more systematic approach to determining whether or not the situation could have been handled differently, and addresses potential service-wide improvements. Participants would include the treatment team, the attending psychiatrist, a representative from the facility's management team, and perhaps the patient and/or an advocate if appropriate.

(Source: Huckshorn, 2006b; Glassheim, 2008; Allen et al., 2002; Vanderpool, 2004; O'Hagan et al., 2008.)

Continuous training for staff

Well-prepared staff members who demonstrate both expertise and empathy may be the most important component in delivering safe seclusion.

Facilities implementing seclusion interventions require more than just enough staff to deliver treatment; they also require staff with sufficient experience, specific skills and competencies. Well-prepared staff who demonstrate both expertise and empathy may be the most important component in delivering safe seclusion interventions (Allen et al., 2002; Kontio, 2011; Morrison & Lehane 1995).

Research recommends committed, continuous training and professional development to ensure that staff members are up to date on current practice, including professional guidelines and ethical and legal issues (Allen et al., 2002; Kontio, 2011; Morrison & Lehane, 1995). Continuous training has also been shown to encourage best-practice decision-making among staff responsible for seclusion interventions (Hyde et al., 2009).

B. Safety and quality of care in the delivery of seclusion: program elements cont.

Training and workforce development may be delivered through regular in-service sessions (Mosley, 2005) and/or clinical supervision (Mann-Poll et al., 2011). Kontio's study (2011) of nursing practice in Finland suggests that eLearning is a promising method that is as effective as face-to-face instruction and shows a high rate of acceptance among staff.

However it is delivered, training should focus on developing key competencies and understanding the context for safe, high-quality delivery of seclusion. Staff must understand that seclusion is an intervention of last resort, which is never used as a punishment or threat in order to modify a patient's behaviour (Pereira et al., 2007).

Key Areas of Competency for Staff Delivering Seclusion Interventions

1. Ability to identify issues or events for patients that may trigger problematic behavior.
2. Possession of nonphysical intervention skills.
3. Ability to choose the least restrictive intervention possible.
4. Knowledge of safe and appropriate use of seclusion and restraint.
5. Ability to recognize when to discontinue seclusion and restraint.
6. Ability to monitor a patient's physical and psychological wellbeing.
7. Certification in CPR and First Aid.

(Source: D'Orio et al., 2007, p. 3)

C. Safety and quality of care: secure room environment and design

Seclusion should only take place in a room designed expressly for that purpose.

First and foremost, seclusion should take place only in a room designed expressly for that purpose. In new buildings, the location of the secure room should be determined early in the design process, and all decisions about the secure environment should be made jointly between the architect or builder and an appointed clinical liaison (Curran et al., 2005).

The design of the secure area has a direct impact on a patient's treatment. Patients often perceive secure rooms negatively as the rooms frequently lack features that enable patients to maintain their dignity and at least a minimal degree of privacy, autonomy and engagement, while ensuring their safety. Studies of patients' perceptions suggest that seclusion experiences often feel punitive because of inadequate seclusion environments (Masters et al., 2002; Kontio et al., 2011; Mayers et al., 2010; Curran et al., 2005; Strike et al., 2008; Van Der Merwe et al., 2012). Vaaler et al. (2005) suggest it may be beneficial to offer secure rooms that are welcoming and home-like, rather than the typical "often-dismal," "stimulus-reducing" type (p. 24; see also Kontio et al., 2011).

While there is not a great deal of research literature identifying best practice in designing secure rooms, the literature that does exist is fairly detailed, offering a variety of recommendations for optimal physical specifications. The room should be large enough to accommodate one patient and up to six staff members, approximately 50 square feet minimum, and contain limited furnishings such as a simple mattress with heavy duty covering, laid loose on the floor (Masters et al., 2002, p. 16S; Curran et al., 2005, p. 24). Overall, design should focus equally on safety and functionality, ensuring that the room protects the patient at all times and is durable enough to withstand potential abuse. All features must be designed to protect the patient from harm (self-inflicted or otherwise), and should be fully washable and durable, as patients who are very distressed or acting violently may subject structural elements to maximum stress (Gutheil & Daly, 1980, p. 268; Curran et al., 2005).

C. Safety and quality of care: secure room environment and design cont.

Design elements for secure rooms – research conclusions at a glance:

- Seclusion must only be delivered in a room designed expressly for that purpose.
- The secure room is designed to minimize the traumatic potential of seclusion interventions.
- The location of the secure room and design details must be discussed early and decided upon jointly between the architect, builder, and clinical liaison.
- The secure room must be placed near enough to nursing station to enable constant observation of the patient through the observation window; and away from other patients, areas that are the site of frequent non-clinical interaction, and elevators, stairs and exits.
- The secure room must be large enough to accommodate up to six staff members (approximately 50 square feet).
- The secure room contains limited furnishings.
- The secure room is designed to enable protection of the patient, and prevent harm to self and others by eliminating or avoiding any weak points, ligature points, corners, edges or other safety hazards.
- All features of the secure room are durable, tamper- and impact-resistant, washable, and can withstand significant and repeated force.
- Walls and floors are of seamless construction, and may be padded.
- Walls are painted a calm, definitive colour (not grey or white), using lead-free, non-toxic, water-based and water-proof paint.
- Ceilings are at least 3 metres high, out of patients' reach.
- The secure room should have an unbreakable window allowing natural light into the space, and a view of a natural or outdoor setting. The window should be large enough and placed so that a patient may be able to see out of it while sitting on the floor, and cannot kick the window sill. It should be fitted with blinds that nursing staff can operate remotely.
- Lighting in the secure room is mounted securely, unbreakable, and operated on patient request via the nurses.
- The door to the secure room is heavy, solid-core, and opens outward on a spring loaded mechanism stalled securely with attention to preventing self-harm. The door contains a glazed observation panel with a blind on the outside to be controlled by staff.
- Door locks are operated from exterior, with a mechanism that is easy to operate, and set to unlock automatically if the fire alarm is triggered.
- The secure room is fitted with sanitary facilities including a hospital-grade toilet and sink.
- The secure room has adequate airflow and a healthy air temperature, and should be air-conditioned.
- The secure room is fitted with appropriate safety mechanisms, including a staff-operated alarm system and carefully mounted security mirrors.

C. Safety and quality of care: secure room environment and design cont.

Evidence base

No randomized trials or systematic reviews exist to support the development of guidelines and standards for secure room design, and the paucity of evidence in this area requires the use of comparatively old academic literature (e.g. Gutheil & Daly, 1980; Christenfield et al., 1989).

The best evidence for design derives from:

- qualitative, exploratory and/or descriptive studies of patients' and staff's experiences of secure rooms (Kontio, 2011; Kontio et al., 2011; Mayers et al., 2010; Strike et al., 2008; Mosley, 2008; Van Der Merwe, 2012); position papers (Allen et al., 2002; Masters et al., 2002);
- evidence reviews and expert opinion (Masters et al., 2002; Gutheil & Daly, 1980; Nestor, 2002; Curran et al., 2005);
- a handful of quantitative studies based on very small samples (Chan & Chung, 2005; Christenfield et al., 1989; Vaaler et al., 2005);
- Canadian Standards Association standards for mental health and addictions services (2011); and
- extrapolation from general discussions of psychiatric inpatient environments (Karlin & Zeiss, 2006).

Although not peer-reviewed, Gamble and Kroon's study (2010) is particularly valuable to consider when developing standards and guidelines for BC. Gamble and Kroon base their findings on published evidence as well as the results of comprehensive interviews with front-line staff in B.C.'s Interior Health, and thus provide recommendations appropriate for their particular needs. Gamble and Kroon's study is not cited extensively here; rather, this review focuses primarily on the published evidence upon which that report is based. However, the guidance provided below is compatible with Gamble and Kroon's conclusions.

Placement

The placement of the secure room must enable constant observation of the patient by nursing staff, while also sparing the patient the disruption of conversation and non-clinical interaction in immediately adjacent areas, and insulating non-secluded patients from potentially troubling episodes of physical intervention (Allen et al, 2002; Strike et al., 2008). In an overview of best practices in facilities design, Karlin and Zeiss (2006) recommend locating seclusion rooms near and within sight of nursing stations but outside of main patient corridors and activity areas (p. 1377). Curran et al. (2005) refer to this nursing area as an observation room, i.e. an area from which nursing staff observe the secluded patient.

Benefits may derive from placing the secure room within a larger seclusion or intensive care suite, separate from the rest of the unit. It is desirable to have a separate entrance to the secure area, away from public view and visitation (Mosley, 2005; Curran et al., 2005).

C. Safety and quality of care: secure room environment and design cont.

Communication and engagement tools

Patients are less likely to have a negative experience of seclusion when staff take steps to engage them through constant contact. Secure rooms, therefore, should have an intercom system that allows patients to call for assistance at any time, and that is connected immediately to the room/area from which the nurse observes the patient. Staff should be able to control the intercom's volume, but should not be able to switch the system off entirely.

In addition, it may be valuable to paint important information on the wall of the secure room such as hospital and unit information and how to call for assistance, in order to help patients remain oriented and reassured that they are being cared for safely and are not being held as punishment for wrongdoing. It may also be helpful for the patient if the facility mounts a large clock in the nurses' observation area, visible from inside the secure room, clearly displaying the time and date (Curran et al., 2005).

Walls, floors and ceilings

The walls of the secure room should be painted a definitive but calming colour, perhaps with a soothing mural or scene; they should not be painted grey or white. Paint should be non-toxic, lead-free, water-based and water-proof (Gutheil & Daly, 1980; Christenfield et al., 1989; Karlin & Zeiss, 2006; Chan & Chung, 2005; Curran et al., 2005). It may be beneficial to include auditory or visual stimuli in a secure room (Masters et al., 2002).

Patients are less likely to have a negative experience of seclusion when nursing staff take steps to engage them through constant contact.

To reduce the risk of harm to self, others or the facility, researchers recommend a design that avoids weak points, corners, edges, and other features that may be used for grip (Gutheil & Daly, 1980). Walls should be extremely durable, able to resist impact, and show no splinters, fragments, mouldings or free edges (Gutheil & Daly, 1980). They may be covered with sheet cushioned vinyl, and construction should be masonry-dense brick or block, with a minimum thickness of 140 mm for structural security and to reduce transmission of noise to adjacent areas (Curran et al., 2005).

Walls and floors could be lined with a welded seam vinyl surface, and floors may also be covered with sheet cushioned vinyl secured to the walls (Curran et al., 2005). All floor coverings should be easy to clean with seamless installation. Floors should never be left as uncovered, raw concrete (Gutheil & Daly, 1980).

In order to ensure safety, ceilings should be solid, and too high for patients to reach, ideally three metres minimum (Gutheil & Daly, 1980; Curran et al., 2005). Curran et al. (2005) recommend British Gypsum M/F solid ceiling-double skin, screw-fixed comprising 12.5 mm wallboard, face layer 12.5 mm Duraline Board, with expanded metal lath trapped between each layer.

C. Safety and quality of care: secure room environment and design cont.

Windows

It is ideal to include a window in the secure room that allows the patient beneficial natural light and a view of a natural or outdoor setting (Gutheil & Daly, 1980; Curran et al., 2005). The window should be large and fitted with interstitial blinds operated by remote switch from the nurses' observation area. Curran et al. (2005) note the following specifications for secure room windows:

- Structural opening: 1360 mm wide by 1350 mm high. Outer fixed, double glazed, polyester powder coated, aluminum window, with enhanced specifications for security fixings/protections to prevent removal of any part of the assembly or component parts.
- Window sill: at least 900 mm from the floor, and 'bull nosed' and splayed in order to prevent patients gaining a foothold and possible access to the ceiling.
- Glazing: 24 mm double glazed unit comprising 6 mm toughened clear float outer pane; 8 mm air-filled cavity with black spacer; 9.5 mm clear float laminate safety glass inner pane with 2 panes of 4 mm toughened clear float and a 1.53 mm clear PVB interlayer. An inner single glazed window (aluminum or timber frame) ideally set flush with internal wall face locked and hinged for access. Glazed with 13.5 mm laminated safety glass with a 1.52 mm clear PVB interlayer-beading to be on cavity side of screen.

Lighting

Lighting should be mounted to the ceiling, flush with the surface and without exposed wires. Fixtures should be unbreakable, and light levels operated on patient request via dimmers located in the nurses' observation area. Ideally, there should be a main light, night light, and over-bed light in the secure room (Gutheil & Daly, 1980; Curran et al., 2005; Allen et al., 2002; Masters et al., 2002).

Doors and locks

Doors and locks are critical safety elements. The door to the secure room should be heavy, solid-core, steel or hardwood in a steel frame and typically 2100 mm high by 1000 mm wide by 50 mm thick. Doors should open outward on a spring loaded mechanism, and hinges should be mounted on the outside of the door using non-return screws. Handles should be recessed to prevent use as a ligature point, and located on the exterior of the door. Door locks should be operated from the exterior by keys, which all staff members possess. Locks should be multi-point, with a cylinder deadbolt of at least two to four cm (Gutheil & Daly, 1980; Nestor, 2002; Curran et al., 2005), and set to unlock automatically in the event of a fire or other event that triggers the fire alarm system (Masters et al., 2002).

C. Safety and quality of care: secure room environment and design cont.

The door to the secure room must be equipped with a glazed observation panel to enable continuous visual monitoring. The observation panel should be scratch-resistant, unbreakable safety glass, maximum size 25 cm by 25 cm, welded into the interior of the door and bolted to the exterior with no sharp edges. There should be a blind affixed to the outside and controlled by staff (Gutheil & Daly, 1980; Curran et al., 2005).

SUMMARY TABLES: Secure room doors (Source: Curran et al., 2005)

Secure Room Door Frame		
Type of construction	Wood	Steel
Dimensions of frame	125 mm x 65 mm	125 mm x 50 mm

Secure Room Door		
The seclusion room door leaf should be solid core (hardwood or steel) construction comprising at least		
Dimensions	Hardwood	Steel
Thickness	125 mm x 65 mm	50 mm
Height	2100 mm	2100 mm
Width	1000 mm	1000 mm

Sanitation

The design of the secure room must enable a patient to maintain a sense of dignity. Therefore, all secure rooms must allow independent access to adequate and safe sanitary facilities (Mosley, 2005; Kontio et al., 2011; Kontio 2011; Allen et al., 2002). Curran et al. (2005) and Gamble & Kroon (2010) recommend robust sanitary ware including an anti-suicide stainless steel combination lavatory with a touch button to flush toilet, and touch-tap system to sink. It is critical that staff control the flow of water from outside the secure room (shut-off valve must be easily accessible) in order to prevent flooding resulting from a clogged sink or toilet. To facilitate easy and effective cleaning, the secure room floor is fitted with a sealed drain placed opposite of the mattress. The floor should have a maximum slope of two degrees.

C. Safety and quality of care: secure room environment and design cont.

Airflow and temperature

In order to avoid illness or death, it is imperative that secure rooms have adequate airflow and maintain a healthy air temperature. The secure room should be air-conditioned (even if no other rooms in the facility are air-conditioned) with temperature and smoke sensors in the room and a digital temperature control mechanism in the nurses' observation area. Vents and air grilles should be mounted flush into the ceiling, out of patient reach to avoid tampering (Gutheil & Daly 1980; Curran et al., 2005; see also Allen et al., 2002; Kontio, 2011; Masters et al., 2002).

Safety precautions

For overall protection, the secure area including structure and contents should have a one-hour fire rating, and not produce toxic fumes if burned (Masters et al., 2002, p. 175). Facilities with secure rooms should install a staff-operated alarm system that may include panic buttons and personal alarms. To protect staff while treating a secluded patient, a convex, unbreakable mirror should be mounted inside the secure room at the junction of the wall and ceiling to eliminate blind spots (Curran et al., 2005). A closed-circuit television system can also be useful for this purpose.

Staff should inspect the secure room for damages or potentially harmful objects following each episode of seclusion (Masters et al., 2002).

Works Consulted

- Allen, Michael, et al. (2002). Report and Recommendations Regarding Psychiatric Emergency and Crisis Services: A Review and Model Program Descriptions. APA Task Force on Psychiatric Emergency Services. Retrieved March 28, 2012, from www.emergencypsychiatry.org/data/tfr200201.pdf.
- Alty, Ann. (1997). Nurses' learning experience and expressed opinions regarding seclusion practice within one NHS trust. *Journal of Advanced Nursing*, 25: 786-793.
- APA Task Force on Patient Safety. (2003). Patient Safety and Psychiatry: Recommendations to the Board of Trustees of the American Psychiatric Association. Washington, D.C., American Psychological Association. Retrieved March 28, 2012, from www.psych.org/lib_archives/archives/tfr200301.pdf.
- Ashcraft, Lori & Anthony, William. (2008). Eliminating seclusion and restraint in recovery-oriented crisis services. *Psychiatric Services* 59 (10).
- Australia. (2005). National safety priorities in mental health: a national plan for reducing harm. National Mental Health Strategy. Retrieved March 28, 2012, from [www.health.gov.au/internet/main/publishing.nsf/content/A6A9123C4FA8E49FCA257230001F3C41/\\$File/safety.pdf](http://www.health.gov.au/internet/main/publishing.nsf/content/A6A9123C4FA8E49FCA257230001F3C41/$File/safety.pdf).
- Australian Psychological Society. (2010). Evidence-based psychological interventions that reduce the need for restrictive practices in the disability sector: A practice guide for psychologists. Retrieved March 28, 2012, from www.groups.psychology.org.au/Assets/Files/Evidence_based_practice_guide_for_psychs.pdf
- Azeem, Muhammad Waqar. (2011). Effectiveness of six core strategies based on trauma informed care in reducing seclusions and restraints at a child and adolescent psychiatric hospital. *Journal of Child and Adolescent Psychiatric Nursing*, 24: 11-15.
- Beech, Bernard, and Leather, Phil. (2006). Workplace violence in the health care sector: A review of staff training and integration of training evaluation models. *Aggression and Violent Behavior*, 11: 27-43.
- Behroozi, Dara, Mazowita, Garey, and Davis, Michael. (2008). Collaboration in caring for psychiatric inpatients: Family physicians team up with psychiatrists and psychiatric nurses. *Canadian Family Physician*, 54 (10): 57.
- Bills, Lyndra, and Bloom, Sandra. (1998). From Chaos to Sanctuary: Trauma-Based Treatment for Women in a State Hospital System. First published in *Women's Health Services: A Public Health Perspective*. Ed. Bruce Labotsky Levin, Andrea Blanch, and Ann Jennings. Thousand Oaks, CA: Sage Publications. Retrieved November 7, 2011, from www.sanctuaryweb.com/PDFs/Bills%20Chaos%20to%20Sanctuary.pdf.
- Blank, Fidela, et al. (2004). A humane ED seclusion/restraint: legal requirements, a new policy, procedure, "psychiatric advocate" role. *Journal of Emergency Nursing*, 30: 42-6.

Works consulted cont.

- Boardman, Jed and Parsonage, Michael. (2007). Delivering the Government's Mental Health Policies: Services, Staffing and Costs. Sainsbury Centre for Mental Health. Retrieved March 9, 2010 from www.scmh.org.uk/pdfs/scmh_delivering_govt_mental_health_policy.pdf.
- Borckhardt, Jeffrey, Grubaugh, Anouk, Pelic, Christopher, Danielson, Carla Kmett, Hardesty, Susan, Frueh, B. Christopher. (2007). Enhancing Patient Safety in Psychiatric Settings. *Journal of Psychiatric Practice*, 13 (6): 355-61.
- Bower, Fay, et al. (2000). A synthesis of what we know about the use of physical restraints and seclusion with patients in psychiatric and acute care settings. *The Online Journal of Knowledge Synthesis for Nursing*, 7(2).
- Bowers, L., et al. (2006). Preliminary outcomes of a trial to reduce conflict and containment on acute psychiatric wards: City Nurses. *Journal of Psychiatric and Mental Health Nursing*, 13: 165-172.
- Brickell, Tracey, et al. (c. 2010). Patient safety in mental health. BC Mental Health and Addiction Services. Retrieved March 28, 2012, from www.patientsafetyinstitute.ca/english/research/commissionedresearch/mental%20health%20paper.pdf.
- British Institute of Learning Disabilities (BILD). (2002a). Guidance on the use of seclusion.
- British Institute of Learning Disabilities (BILD). (2002b). The Use of Restrictive Physical Interventions for Staff Working with Adult Services Users with a Learning Disability. Retrieved March 28, 2012, from www.cambridgeshire.gov.uk/NR/rdonlyres/239359A7-85D9-4A77-962B-7F5407E0F588/0/disability52.pdf.
- Champagne, Tina, and Stromberg, Nan. (2004). Sensory Approaches in Inpatient Psychiatric Settings: Innovative Alternatives to Seclusion and Restraint. *Journal of Psychosocial Nursing*, 42(9): 35-44.
- Chan, CC, and Chung, CH. (2005). A retrospective study of seclusion in an emergency department. *Hong Kong Journal of Emergency Medicine*, 12(1): 6-13.
- Chaudury, Habib, Mahmood, Atiya, and Valente, Maria. (2005). Advantages and Disadvantages of Single- Versus Multiple-Occupancy Rooms in Acute Care Environments. *Environment and Behavior*, 37: 760-86.
- Christenfield, Roger, Wagner, James, Pastva, Gary, and Acrish, Wendy. (1989). How physical settings affect chronic mental patients. *Psychiatric Quarterly*, 60(3): 253-265.
- Clarke, Steve. (2004). Acute Inpatient Mental Health Care: Education, Training and Professional Development for All. Sainsbury Centre for Mental Health. Retrieved March 8, 2010, from www.scmh.org.uk/publications/acute_inpatient.aspx?ID=523

Works consulted cont.

- Cormac, I., et al. (2005). Review of seclusion policies in high secure hospitals and medium secure units in England, Scotland and Wales. *Journal of Psychiatric and Mental Health Nursing*, 12: 380-382.
- Curie, Charles. (2005). SAMHSA's Commitment to Eliminating the Use of Seclusion and Restraint. *Psychiatric Services*, 56(9): 1139-1140.
- Curran, Christopher, et al. (2005). Seclusion: factors to consider when designing and using a seclusion suite in a mental health hospital. *Mental Health Hospitals*, January: 19-27.
- Davidson, Larry, et al. (1999). Peer Support Among Individuals with Severe Mental Illness: A Review of the Evidence. *Clinical Psychology: Science and Practice*, 62(2): 165-187.
- Delaney, Kathleen R. (2006). Evidence base for practice: reduction of restraint and seclusion use during child and adolescent psychiatric inpatient treatment. *Worldviews on Evidence-Based Nursing*, First Quarter: 19-30.
- Dix, Roland and William, Kelwyn. (1996). Psychiatric intensive care units, a design for living. *The Psychiatrist*, 20: 527-529.
- Dobrohotoff, John and Llewellyn-Jones, Robert. (2011). Psychogeriatric inpatient unit design: a literature review. *International Psychogeriatrics*, 23(2): 174-189.
- Donovan, A., et al. (2003). Seclusion and restraint reform: an initiative by a child and adolescent psychiatric hospital. *Psychiatric Services*, 54(7): 958-9.
- D'Orio, Barbara, et al. (2007). Reducing risk associated with seclusion and restraint. *Psychiatric Times*, 24(8): 1-6.
- El-Badri, Selim & Mellsop, Graham. (2002). A study of the use of seclusion in an acute psychiatric service. *Australian and New Zealand Journal of Psychiatry*, 36: 399-403.
- Evans, David, Wood, Jackie, and Lambert, Leonnie. (2002). Physical Restraint – Part 2: Minimisation in Acute and Residential Care Facilities. *Best Practice: Evidence Based Practice Information Sheets for Health Professionals*. 6 (4), 1-6. Retrieved March 29, 2010, from sz.jbiconnect.org/connect/docs/jbi/pdf/BPISEng_6_4.pdf
- Evans, Gary W. (2003). The Built Environment and Mental Health. *Journal of Urban Health*. 80(4): 536-556.
- Fauman, Michael A. (1989). Quality Assurance Monitoring in Psychiatry. *American Journal of Psychiatry*, 146 (9): 1121.
- Federation of Families for Children's Mental Health. (n.d.) Position on the use of seclusion and restraints. In *Roadmap to Seclusion and Restraint Free Mental Health Services*.

Works consulted cont.

- Finke, Linda. (2001). The use of seclusion is not evidence-based practice. *Journal of Child and Adolescent Psychiatric Nursing*, 14(4).
- Flannery, Raymond, et al. (2007). Psychiatric Patient Assault and Staff Victim Gender: Fifteen-year Analysis of the Assaulted Staff Action Program (ASAP). *Psychiatric Quarterly*, 78: 83-90.
- Frueh, Christopher, et al. (2005). Patients' reports of traumatic or harmful experiences within the psychiatric setting. *Psychiatric Services*, 56(9): 1123-1133.
- Fryer, M.A., et al. (2004). Seclusion use with children and adolescents: an Australian Experience. *Australian and New Zealand Journal of Psychiatry*, 38(1-2): 26-33.
- Gair, Donald. (1984). Guidelines for Children and Adolescents. In Kenneth Tardiff (Ed.), *Psychiatric Uses of Seclusion and Restraint* (pp. 73-85). New York: American Psychiatric Press.
- Gamble, L. & Kroon, J. (2010). Optimizing staff and patient safety through the environmental design of psychiatric and emergency department seclusion rooms and external courtyards. Conference proceedings, 2010 International Conference on Violence in the Health Sector.
- Gaskin, C., Elsom S. & Happell, B. (2007). Interventions for reducing the use of seclusion in psychiatric facilities: Review of the literature. *British Journal of Psychiatry*, 191: 298-303.
- Kuruville, G., et al. (2010). Reducing Restraints and Seclusion in an Acute Aged Persons Mental Health Unit. Power Point Presentation. Retrieved March 31, 2012, from www.alzheimers2011.com/downloads/presentations/Hemalatha%20Sivakumaran.ppt.
- Georgieva, I., de Haan, G., Smith, W., & Mulder, C.L. (2010). Successful reduction of seclusion in a newly developed psychiatric intensive care unit. *Journal of Psychiatric Intensive Care*, 6(1): 31-38.
- Glassheim, Barbara. (2008). *A Guide to Evidence-Based Practices for Psychiatric Hospitalization: Adults with Mental Illnesses and Co-Occurring Substance Use Disorders*. Saginaw County Community Mental Health Authority.
- Glod, Carol A., et al. (1994). Modifying quiet room design enhances calming of children and adolescents. *Journal of the Academy of Child and Adolescent Psychiatry*, 33(4): 558-566.
- Gross, Raz, Sasson, Yehuda, Zarhy, Moshe, and Zohar, Joseph. (1998). Healing environment in psychiatric hospital design. *General Hospital Psychiatry*, 20(2): 108-114.
- Gulak, M.B. (1991). Architectural guidelines for state psychiatric hospitals. *Hospital Community Psychiatry*, 40: 705-707.

Works consulted cont.

- Gutheil, Thomas, and Daly, Morgan. (1980). Clinical considerations in seclusion room design. *Hospital and Community Psychiatry*, 31(4): 268-70.
- Haimowitz, Stephan, Urff, J., and Huckshorn, K.A. (2006). *Restraint and Seclusion – A Risk Management Guide*. Alexandria, VA: National Technical Assistance Center, NASMHPD. Retrieved September 25, 2012, from <http://www.nasmhpd.org/docs/publications/docs/2006/R-20RISK%20MGMT%2010-10-06.pdf>.
- Hammer, Joseph, et al. (2011). The Relationship Between Seclusion and Restraint Use and Childhood Abuse Among Psychiatric Inpatients. *Journal of Interpersonal Violence*, 26(3): 567-579.
- Happell, Brenda & Harrow, Alison. (2010). Nurses' attitudes to the use of seclusion: A review of the literature. *International Journal of Mental Health Nursing*, 19: 162-168.
- Happell, Brenda & Koehn, Stefan. (2010). From numbers to understanding: the impact of demographic factors on seclusion rates. *International Journal of Mental Health Nursing*, 19: 169-76.
- Harris, John. (2004). New Guidance on the Use of Restrictive Physical Interventions. *Learning Disability Review*, 9(2): 23-31.
- Heyvaert, M., Maes, B., and Onghena, P. (2010). A meta-analysis of intervention effects on challenging behaviour among persons with intellectual disabilities. *Journal of Intellectual Disability Research*, 54(7): 634-49.
- Hoeskstra, T. et al. (2004). Seclusion: the inside story. *Journal of Psychiatric and Mental Health Nursing*, 11: 276-283.
- Huckshorn, Kevin Ann. (2006a). Re-Designing State Mental Health Policy to Prevent the Use of Seclusion and Restraint. *Administration and Policy in Mental Health and Mental Health Services Research*, 33(4).
- Huckshorn, Kevin Ann. (2006b). *Creating Violence Free and Coercion Free Mental Health Treatment Environments for the Reduction of Seclusion and Restraint: A Snapshot of the Six Core Strategies for the Reduction of S/R*. National Executive Training Institute, Training curriculum for the reduction of seclusion and restraint. Alexandria, VA: National Technical Assistance Center, National Association of State Mental Health Program Directors (NASMHPD).
- Huckshorn, Kevin Ann. (2004). *Reducing the Use of Seclusion and Restraint: A National Initiative for Culture Change and Transformation*. Lincoln, NB: Policy Summit, Roman Hruska Law Center.
- Hyde, Sandra, et al. (2009). A clinical improvement project to develop and implement a decision-making framework for the use of seclusion. *International Journal of Mental Health Nursing*, 18: 398-408.

Works consulted cont.

- Isherwood, Tom. (2006). Restraint and seclusion in services for people with mental health problems and learning disabilities: a literature review. *Mental Health and Learning Disabilities Research and Practice*, 3(2): 127-142.
- Iversen, Valentina, et al. (2010). Patients' perceptions of their stay in a psychiatric seclusion area. *Journal of Psychiatric Intensive Care*, 7(1): 1-10.
- Johnson, Mary E. (2010). Violence and Restraint Reduction Efforts on Inpatient Psychiatric Units. *Issues in Mental Health Nursing*, 31(3): 181-97.
- Jones Warren, Barbara. (2002). The Interlocking Paradigm of Cultural Competence: A Best Practice Approach. *Journal of the American Psychiatric Nurses Association*, 8: 209-13.
- Kahdivi, A., et al. (2004). Association between seclusion and restraint and patient-related violence. *Psychiatric Services* 55(11): 1311-1312.
- Kallert, Thomas W., Glockner, Matthias, Onchev, Georgi, Raboch, Jiri, Karastergiou, Anastasia, Solomon, Zahava, Magliano, Lorenza, Dembinskas, Algirdas, Kiejna, Andrzej, Nawka, Petr, Torres-Gonzalez, Francisco, and Kjellin, Lars. (2005). The EUNOMIA project on coercion in psychiatry: study design and preliminary data. *World Psychiatry*, 4 (3): 168-73.
- Karlin, Bradley E., Zeiss, Robert A. (2006). Environmental and therapeutic issues in psychiatric hospital design: Toward best practices. *Psychiatric Services*, 57: 1376-1378.
- Keski-Valkama, Alice, et al. (2010). A 15-year national follow-up: legislation is not enough to reduce the use of seclusion and restraint. *Social Psychiatry and Psychiatric Epidemiology*, 42: 747-752.
- Kontio, Raija. (2011). Patient seclusion and restraint practices in psychiatric hospitals—towards evidence based clinical nursing. PhD dissertation, University of Turku, Finland.
- Kontio, Raija, et al. (2011). Seclusion and restraint in psychiatry: patients' experiences and practical suggestions on how to improve practices and alternatives. *Perspectives in Psychiatric Care*. First published online 16 February 2011.
- Kumar, Shailesh, Ng, Bradley, Simpson, Alexander, Fischer, Jesse, and Robinson, Elizabeth. (2008). No evidence for restrictive care practices in Maori admitted to a New Zealand psychiatric inpatient unit: do specialist cultural teams have a role? *Social Psychiatry and Psychiatric Epidemiology*, 43(5): 387-91.
- Kumble, Surabhi & McSherry, Bernadette. (2010). Seclusion and restraint: rethinking regulation from a human rights perspective. *Psychiatry, Psychology and Law*, 17(4): 551-61.
- Lane, Bluebird & Jorgenson. (2003). Reducing the Use of Seclusion and Restraint: The Experience of Seclusion and Restraint – Consumer Roles in Inpatient Settings. Presentation, Policy Summit, Roman Hruska Law Centre, Lincoln, NB. Retrieved from www.hogg.utexas.edu/uploads/documents/experiences.ppt, March 31, 2012.

Works consulted cont.

- Larue, Caroline, et al. (2010). The nursing decision making process in seclusion episodes in a psychiatric facility. *Issues in Mental Health Nursing*, 31: 208-215.
- LeBel, Janice & Goldstein, Robert. (2005). The Economic Cost of Using Restraint and the Value Added by Restraint Reduction or Elimination. *Psychiatric Services*, 56(9): 1109-1114.
- LeGris, J., Walters, M. and Browne, G. (1999). The impact of seclusion on the treatment outcomes of psychotic in-patients. *Journal of Advanced Nursing*, 30(2), 448-59.
- MacDaniel, Megan. (2009). Comfort Rooms: A preventative tool used to reduce the use of restraint and seclusion in facilities that serve individuals with mental illness. New York State Office of Mental Health.
- Mann-Poll, Patricia, et al. (2011). Factors contributing to mental health professionals' decision to use seclusion. *Psychiatric Services*, 62(5): 498-503.
- Martin, Andres, et al. (2008). Reduction of Restraint and Seclusion Through Collaborative Problem Solving: A Five-Year Prospective Inpatient Study. *Psychiatric Services*, 59(12): 1406-1412.
- Mason, Tom. (1996). Seclusion and learning disabilities: research and deduction. *British Journal of Developmental Disabilities*, 83(July): 149-60.
- Masters, Kim, et al. (2002). Practice parameter for the prevention and management of aggressive behaviour in child and adolescent psychiatric institutions, with special reference to seclusion and restraint. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41(2 Supplement): 4S-25S.
- Mayers, Pat, et al. (2010). Mental health service users' perceptions and experiences of sedation, seclusion and restraint. *International Journal of Social Psychiatry*, 56(1): 60-73.
- McGann, Elizabeth. (2011). The sensory room: an alternative to seclusion and restraint—an expert interview with Janice Adam, RN-BC, and Timothy Meeks, BSN, RN-BC. *Medscape Medical News*. November 21.
- Meehan, T., et al. (2000). Patients' perceptions of seclusion: a qualitative investigation. *Journal of Advanced Nursing*, 31(2): 370-77.
- Mental Health Commission of Canada (MHCC). (2009). *Toward Recovery and Well-being: A Framework for a Mental Health Strategy for Canada*. Retrieved January 31, 2012, from http://www.mentalhealthcommission.ca/SiteCollectionDocuments/board/docs/15507_MHCC_EN_final.pdf.
- Mental Health Commission of Canada (MHCC). (2012). *Changing Directions, Changing Lives: The Mental Health Strategy for Canada*. Retrieved August 6, 2012, from [strategy.mentalhealthcommission.ca/pdf/strategy-images-en.pdf](http://www.mentalhealthcommission.ca/pdf/strategy-images-en.pdf).

Works consulted cont.

- Metherall, Alan, Worthington, Raili, and Keyte, Alan. (2006). Twenty four hour emergency response teams in a mental health in-patient facility—New approaches for safer restraint. *Journal of Psychiatric Intensive Care*, 2(1): 21-9.
- Morrison, Eileen & Love, Colleen Carney. (2003). An Evaluation of Four Programs for the Management of Aggression in Psychiatric Settings. *Archives of Psychiatric Nursing* 17(4): 146-155.
- Morrison, Paul & Lehane, Michael. (1995). Staffing levels and seclusion use. *Journal of Advanced Nursing*, 22: 1193-1202.
- Mosley, Barbara Joy. (2005). Seclusion management in an acute in-patient unit. Unpublished MN thesis, Victoria University of Wellington, Australia.
- Muir-Cochrane, E., et al. (2002). Law and policy in relation to the use of seclusion in psychiatric hospitals in Australia and New Zealand. *Contemporary Nurse*, 13(2-2): 136-45.
- Murphy, T., and Bennington-Davis, M. (2005). *Restraint and Seclusion: The Model for Eliminating their Use in Healthcare*. Marblehead, Massachusetts: HCPro, Inc.
- Needham, Heather, et al. (2010). Post-seclusion debriefing: a core nursing intervention. *Perspectives in Psychiatric Care*, 46(3): 221-33.
- New Zealand. (2008). *Human Rights and Seclusion in Mental Health Services*. Human Rights Commission.
- O'Hagan, M., Divis, L., Long, J. (2008). *Best practice in the reduction and elimination of seclusion and restraint; Seclusion: time for change*. Auckland, New Zealand: Te Pou Te Whakaaro Nui: the National Centre of Mental Health Research, Information and Workforce Development. Retrieved March 31, 2012, from www.maryohagan.com/resources/FINAL-SECLUSION-REDUCTION-BEST-PRACTICE-Research-Report.pdf.
- Oloffson, B. & Norberg, A. (2001). Experiences of coercion in psychiatric care as narrated by patients, nurses and physicians. *Journal of Advanced Nursing*, 33(1): 89-97.
- Paley, Sharon. (2010). Key considerations in physical interventions. British Institute of Learning Disabilities (BILD). Retrieved March 31, 2012, from www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CCwQFjAA&url=http%3A%2F%2Fwww.bild.org.uk%2FEasySiteWeb%2FGatewayLink.aspx%3Falld%3D2524&ei=AQB5T4qfFab-iQKL_KinDg&usq=AFQjCNFsvC_mxM3KA39n_PJehiRQT6A_3w&sig2=Zhladr4oVtl-PoSSmgXh05A.
- Paley, Sharon. (2009). Fact sheet: Time out and seclusion. British Institute of Learning Disabilities (BILD). Retrieved March 31, 2012, from <http://www.bild.org.uk/EasySiteWeb/GatewayLink.aspx?alld=2526>.

Works consulted cont.

- Pereira, Stephen, et al. (2007). Management of behavioural emergencies. *Journal of Psychiatric Intensive Care*, 2(2): 71-83.
- Pollard, Richard, et al. (2007). Organizational and unit factors contributing to reduction in the use of seclusion and restraint procedures on an acute psychiatric inpatient unit. *Psychiatric Quarterly*, 78: 73-81.
- Powell, Hazel, et al. (2008). The use of seclusion in learning disability services. *Learning Disability Practice*, 11(5): 12-17.
- Powell, Sharon, and Northfield, John. (2002). Fact sheet on physical interventions. British Institute of Learning Disabilities (BILD).
- Psychiatric Patient Advocate Office. (2001). Review of Seclusion and Restraint Practices in Ontario Provincial Psychiatric Hospitals: Perspectives of Patients, Clinicians and Advocates. Retrieved March 29, 2010, from www.ppao.gov.on.ca/pdfs/pos-sec.pdf
- Qurashi, Inti, et al. (2010). Reduction in the use of seclusion in a high secure hospital: a retrospective analysis. *Journal of Psychiatric Intensive Care*, 6(2): 109-115.
- Robins, Cynthia, et al. (2005). Consumers' Perceptions of Negative Experiences and "Sanctuary Harm" in Psychiatric Settings. *Psychiatric Services*, 56(9): 1134-1138.
- Rocca, Paola, et al. (2006). Managing the aggressive and violent patient in the psychiatric emergency. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 30: 586-598.
- Sailas, EES & Fenton, M. (2009). Seclusion and restraint for people with serious mental illnesses (review). *Cochrane Database of Systematic Reviews*, 1.
- Sailas, Eila & Wahlbeck, Kristian. (2005). Restraint and seclusion in psychiatric inpatient wards. *Current Opinion in Psychiatry*, 18: 555-559.
- Scanlan, Justine Newton. (2010). Interventions to reduce the use of seclusion and restraint in inpatient psychiatric settings: what we know so far a review of the literature. *International Journal of Social Psychiatry*, 56(4): 412-423.
- Sequeira, Heather and Halstead, Simon. (2001). "Is it meant to hurt, is it?": Management of violence in women with developmental disabilities. *Violence Against Women*, 7: 462-76.
- Staal, Jason, Sacks, Amanda, Matheis, Robert, Collier, Lesley, Calia, Tina, Hanif, Henry and Kofman, Eugene. (2007). The Effects of Snoezelen (Multi-Sensory Behavior Therapy) and Psychiatric Care on Agitation, Apathy, and Activities of Daily Living in Dementia Patients on a Short Term Geriatric Psychiatric Inpatient Unit. *International Journal of Psychiatry in Medicine*, 37(4): 357-70.
- Staten, Patricia. (2001). Restraint, seclusion standards raise questions. *Nursing Management*, 32(7): 17.

Works consulted cont.

- Steel, Elizabeth. (2011). Seclusion and restraint practice standards: a review and analysis. Mental Health America. Retrieved March 31, 2012, from www.ncstac.org/index.php?option=com_content&view=article&id=94%3Aseclusion-and-restraint-practice-standards-a-review-and-analysis&catid=34&Itemid=53.
- Strike, Carol, et al. (2008). Unintended impact of psychiatric safe rooms in emergency departments: the experiences of suicidal males with substance use disorders. *Brief Treatment and Crisis Intervention*, 8(3): 264-273.
- Sullivan, Dan, et al. (2004). Effects of patient-focused care on seclusion in a psychiatric intensive care unit. *International Journal of Therapy and Rehabilitation*, 11(11): 503-508.
- United States. Department of Health and Human Services. (2011). The Business Case for Preventing and Reducing Restraint and Seclusion Use. Substance Abuse and Mental Health Services Administration (SAMHSA). Retrieved March 31, 2012, from store.samhsa.gov/shin/content//SMA11-4632/SMA11-4632.pdf.
- United States. Department of Veterans Affairs. Office of Construction and Facilities Management. (December 2010). Design Guide: Mental Health Facilities. Retrieved March 31, 2012, from www.cfm.va.gov/til/dGuide/dgMH.pdf.
- Vaaler, Arne, Morken, Gunnar, Linaker, Olva. (2005). Effects of different interior decorations in the seclusion area of a psychiatric acute ward. *Nordic Journal of Psychiatry*, 59: 19-24.
- Van Der Merwe, M., Muir-Cochrane, E., Jones, J., Tziggili, M., and Bowers, L. (2012). Improving seclusion practice: implications of a review of staff and patient views. *Journal of Psychiatric and Mental Health Nursing*, July: 1-13.
- Vanderpool, Donna. (2004). Use of seclusion and restraint: Patient safety, risk management considerations. *Psychiatric News*, 39(5): 20.
- Van Doeselaar, Marjan, et al. (2008). Professionals' Attitudes Toward Reducing Restraint: The Case of Seclusion in the Netherlands. *Psychiatric Quarterly*, 79: 97-109.
- Visalli, Hank, and McNasser, Grace. (2000). Reducing Seclusion and Restraint: Meeting the Organizational Challenge. *Journal of Nursing Care Quality*, 14(4): 35-44.
- Zun, Leslie, and Downey, LaVonne. (2005). The use of seclusion in emergency medicine. *General Hospital Psychiatry*, 27: 365-371.