Protocols to Reduce Seclusion in Inpatient Mental Health Units

June 2023

U.S. Department of Veterans Affairs
Veterans Health Administration
Health Services Research & Development Service

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PREFACE

The VA Evidence Synthesis Program (ESP) was established in 2007 to provide timely and accurate syntheses of targeted health care topics of importance to clinicians, managers, and policymakers as they work to improve the health and health care of Veterans. These reports help:

- Develop clinical policies informed by evidence;

- Implement effective services to improve patient outcomes and to support VA clinical practice guidelines and performance measures; and

- Set the direction for future research to address gaps in clinical knowledge.

The program comprises 4 ESP Centers across the US and a Coordinating Center located in Portland, Oregon. Center Directors are VA clinicians and recognized leaders in the field of evidence synthesis with close ties to the AHRQ Evidence-based Practice Center Program. The Coordinating Center was created to manage program operations, ensure methodological consistency and quality of products, interface with stakeholders, and address urgent evidence needs. To ensure responsiveness to the needs of decision-makers, the program is governed by a Steering Committee composed of health system leadership and researchers. The program solicits nominations for review topics several times a year via the [program website](#).

The present report was developed in response to a request from the VA Office of Mental Health and Suicide Prevention (OMHSP). The scope was further developed with input from Operational Partners (below), the ESP Coordinating Center, the review team, and the technical expert panel (TEP). The ESP consulted several technical and content experts in designing the research questions and review methodology. In seeking broad expertise and perspectives, divergent and conflicting opinions are common and perceived as healthy scientific discourse that results in a thoughtful, relevant systematic review. Ultimately, however, research questions, design, methodologic approaches, and/or conclusions of the review may not necessarily represent the views of individual technical and content experts.

ACKNOWLEDGMENTS

The authors are grateful to Gaelen Adam, MLIS for literature searching and the following individuals for their contributions to this project:

Operational Partners

Operational partners are system-level stakeholders who help ensure relevance of the review topic to the VA, contribute to the development of and approve final project scope and timeframe for completion, provide feedback on the draft report, and provide consultation on strategies for dissemination of the report to the field and relevant groups.

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To ensure robust, scientifically relevant work, the TEP guides topic refinement; provides input on key questions and eligibility criteria, advising on substantive issues or possibly overlooked areas of research; assures VA relevance; and provides feedback on work in progress. TEP members are listed below:

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Peer Reviewers

The Coordinating Center sought input from external peer reviewers to review the draft report and provide feedback on the objectives, scope, methods used, perception of bias, and omitted evidence (see Appendix K for disposition of comments). Peer reviewers must disclose any relevant financial or non-financial conflicts of interest. Because of their unique clinical or content expertise, individuals with potential conflicts may be retained. The Coordinating Center works to balance, manage, or mitigate any potential nonfinancial conflicts of interest identified.

ABBREVIATIONS TABLE

aOR	Adjusted odds ratio
BCW	Behavior change wheel
CI	Confidence interval
ESP	Evidence Synthesis Program
EssenCES	Essen Client Evaluation Schema
GRADE	Grading of Recommendations Assessment, Development and Evaluation
HR	Hazard ratio
KQ	Key questions
HBIPS	Hospital-based inpatient psychiatric services
MeSH	Medical subject headings
N	Sample size
NR	Not reported
NS	Not significant
NRCS	Nonrandomized comparative study
OMHSP	Office of Mental Health and Suicide Prevention
PCC	Patient-staff conflict checklist
PCC-SR	Patient-staff conflict checklist shift reports
RCT	Randomized controlled trial
RoB	Risk of bias
RR	Relative risk
SD	Standard deviation
TEP	Technical expert panel
US	United States
VA	Veterans Affairs
VHA	Veterans Health Administration

EXECUTIVE SUMMARY

Key Findings

We identified 37 protocols to reduce the practice of seclusion in psychiatric inpatient settings that were evaluated in a comparative design and 6 protocols described without empirical data. Based on our coding of protocols using a scheme of 9 intervention functions (*education, persuasion, incentivization, coercion, training, restriction, environmental restructuring, modelling,* and *enablement*), we categorized protocols into 5 groups: hospital/unit restructuring ($N = 4$), staff education/training ($N = 3$), sensory modulation rooms ($N = 7$), risk assessment and management protocols ($N = 7$), and comprehensive/mixed interventions ($N = 22$). Within the risk assessment and management protocol group, we call out studies using the Brøset Violence Checklist (as it was the most commonly studied risk assessment tool evaluated in 4 studies). Likewise, within the comprehensive/mixed interventions we call out the Safewards intervention (as it is one of the most well-described protocols to reduce seclusion). We note the confidence we had in the conclusions (or because of insufficient evidence, where we had no conclusion).

- **Hospital/unit restructuring**

  o   Hospital/unit restructuring protocols involved implementing architecturally positive elements and *restructuring the environment* (including, in some cases, implementing an open-door policy).

  o   Hospital/unit restructuring may reduce seclusion events, seclusion duration, restraint duration, and forced medication use (all with low confidence). The impact on restraint events is mixed across studies and there is insufficient or no evidence regarding effects on composite measures of coercion events, patient outcomes (*eg*, aggressive incidents, injuries), or staff outcomes (*eg*, injuries, satisfaction) (all with no conclusion).

- **Staff education/training**

  o   Education/training interventions provided staff with de-escalation techniques and alternative strategies to seclusion. Common intervention functions across the described protocols were *persuasion, education, training,* or *modelling. Staffing* was the primary resource associated with the interventions.

  o   Staff education/training may reduce forced medication use and staff injuries (both low confidence). The impacts on seclusion events, restraint events, and coercion events are mixed across studies and there is insufficient or no evidence regarding effects on seclusion duration, restraint duration, and patient outcomes (all no conclusion).

- **Sensory modulation rooms**

  o   Sensory modulation rooms involved creating a dedicated space in the unit to meet the multisensory needs of patients (*ie,* intervention function *environmental restructuring*). Protocols describing sensory rooms also included elements of e*ducation, persuasion, enablement,* and *restrictions*. Primary resource needs included *space* and *equipment*.

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- o Sensory modulation rooms may reduce seclusion events and forced medication use (low confidence) but may not reduce seclusion duration (low confidence). The impacts on restraint events, coercion events, patient outcomes, and staff outcomes are mixed across studies, and there is insufficient or no evidence regarding effects on restraint events and restraint duration (all no conclusion).

- **Risk assessments and management protocols**

  - o Risk assessment and management protocols involved using a structured tool to help staff identify potentially aggressive patients to direct clinical efforts (*eg,* de-escalation techniques). Risk assessment and management protocols included intervention functions of e*nvironmental restructuring, education,* and *training.* Resource requirements included *documentation* and *time staff spent to perform checks on patients*.

  - o The **Brøset Violence Checklist** used as a risk assessment measure may reduce seclusion events and coercion events and may improve patient outcomes (low confidence). However, the checklist may not reduce restraint events and may increase restraint duration (both low confidence). The impact on seclusion duration is mixed across studies and there is no evidence regarding forced medication use and staff outcomes (all no conclusion).

  - o **Investigator developed risk assessment measures** may reduce restraint events and restraint duration (low confidence) but may not reduce seclusion duration or staff outcomes (both low confidence). Their impact on seclusion events and patient outcomes is mixed across studies and there is no evidence regarding coercion events and forced medication use (all no conclusion).

- **Comprehensive/Mixed Models**

  - o Comprehensive/mixed protocols were multi-component and included intervention functions of *education* and *training.* Protocols often included elements of *persuasion* to reinforce staff education and *environmental restructuring* to change the physical or social context of the wards. The most common resource needs explicitly stated in the protocols included *documentation* and *staffing* followed by *programming.*

  - o The **Safewards protocol** may reduce a composite measure of coercion and patient conflicts (both low confidence). There is insufficient or no evidence for this model regarding seclusion events, seclusion duration, restraint events, restraint duration, forced medication use, and staff outcomes (all no conclusion).

  - o **Other comprehensive models** may reduce seclusion events, seclusion duration, restraint events, restraint duration, and coercion events (all low confidence) but may not reduce forced medication use (low confidence). There is mixed evidence across studies regarding patient and staff outcomes (no conclusion).

INTRODUCTION

In psychiatric inpatient settings, conflict behaviors such as patient aggression, agitation, and self-harm require immediate intervention to prevent physical and emotional injury to the patient, other patients, and staff. Seclusion is commonly used to manage conflict behaviors that place patients and staff at risk of immediate harm. Seclusion generally consists of involuntarily confining a patient alone in a restricted area until the patient's conflict behaviors subside. There is large variation in the use of seclusion across the United States (US). For example, 1 large study of psychiatric facilities in the US found seclusion was used for 0.3 per 1,000 patient hours; however, the interquartile range was wide (0.02 to 0.22). When these data were stratified by hospital type in unadjusted analyses in 2014, for-profit psychiatric hospitals used seclusion the least and Veteran Affairs (VA) hospitals used it the most (mean 0.1 [standard deviation (SD) 0.7] vs 0.4 [SD 0.8] per 1,000 patient hours).

Seclusion is increasingly viewed as an intervention of last resort and there are multiple initiatives to reduce the practice. This includes the Veterans Health Administration (VHA) Handbook 1160.06, which directs clinicians in inpatient units to explore ways to prevent, reduce, and eliminate seclusion. Reducing a units' use of seclusion requires safe and effective alternative interventions. Multiple protocols have been devised to help reduce challenging patient behaviors that precede seclusion in an effort to reduce seclusion itself. The effect of protocols to reduce seclusion on patient and staff outcomes and the resource needs required to implement these protocols remain unclear.

The VA Evidence Synthesis Program (ESP) was asked by the VA Office of Mental Health and Suicide Prevention (OMHSP) for an evidence review on protocols to reduce seclusion practices for adults hospitalized in inpatient mental health units. In collaboration with VA stakeholders, we developed the following Key Questions (KQs):

KQ1: What protocols have been described to reduce seclusion practices for adult patients in inpatient mental health units?

    KQ1.1: What are the described resource needs (such as personnel and space needs) of these protocols?

KQ2: What are the comparative effects of protocols to reduce seclusion practices on resource use, staff and unit practices, patient experiences, and staff experiences versus usual protocols?

METHODS

We searched for peer-reviewed articles in Medline (via PubMed), Embase, the Cochrane Register of Clinical Trials, PsycINFO, CINAHL, cairn.info, and ClinicalTrials.gov from date of inception to September 6, 2022. Eligible records for KQ1 (protocol descriptions) were organizational documents of protocols to reduce seclusion in inpatient psychiatric units for patients ≥18 years of age (produced by organizations in the US or Canada or implemented or intended to be implemented in the US or Canada). These records did not have to report outcomes. For KQ2 (effects of implementing protocols), eligible studies included adults ≥18 years of age with psychiatric conditions being treated in inpatient units or the frontline staff who worked in these units. Our focus was on the effects (or comparative effects) of protocols to reduce seclusion. Eligible articles compared unit-level protocols to reduce seclusion to a

comparison group (*eg,* usual care or the same unit pre-intervention). Studies could be randomized or observational. For KQ2, we included protocols intended to be implemented in the US or any other high-income country. For both KQs, studies were excluded if they included incarcerated or institutionalized populations. We defined protocols as including multiple components or a general overall policy to reduce seclusion (*ie,* not a single strategy only). We extracted protocol elements into 1 of 9 intervention functions defined by the Behavior Change Wheel, which characterizes behavior change interventions. We used this framework to describe the protocols since the protocols tried to change behavior (staff, patients, or both) to reduce seclusion events. The 9 intervention functions include *education*, *persuasion*, *incentivization*, *coercion*, *training*, *restriction*, *environmental restructuring*, *modelling*, and *enablement*. Prioritized outcomes included the use of seclusion, restraint, composite measures of seclusion and restraint, forced medication use, patient outcomes (aggression or injuries), and staff outcomes (injuries and satisfaction). We extracted data into standardized forms and assessed risk of bias of each study. We conducted a narrative synthesis of the evidence. The study results were not amenable to meta-analysis. Using GRADE (Grading of Recommendations Assessment, Development and Evaluation) methodology, we determined certainty of evidence for each major finding. A preregistered protocol for this review can be found on the PROSPERO international prospective register of systematic reviews (http://www.crd.york.ac.uk/PROSPERO/; registration number CRD42022363787).

RESULTS

We identified 6 protocols that were described without empirical data and an additional 37 protocols that were evaluated in a comparative design. Seventeen of the 37 comparative studies (with reported results) were from the US (4 of which were from the VA). Most of the evidence for protocols came from studies using a pre-post design ($N = 28$), followed by NRCSs with concurrent comparisons ($N = 5$) and RCTs ($N = 4$). All interventions were multicomponent and often targeted both patient and staff factors to reduce the likelihood of aggressive events or use of seclusion, respectively. Based on our coding of the interventions using the 9 intervention functions, we identified 5 intervention groups (from least to most intensive): hospital/unit restructuring ($N = 4$), staff education/training ($N = 3$), sensory modulation rooms ($N = 7$), risk assessment and management protocols (the Brøset Violence Checklist described separately $N = 4$, and investigator developed risk assessments $N = 3$), and comprehensive/mixed interventions (including Safewards, described separately $N = 2$, other mixed protocols $N = 14$, and mixed protocols without empirical data $N = 6$).

Hospital/Unit Restructuring

Four comparative studies described protocols that involved *environmental restructuring* of the unit. The 4 studies described the implementation of architecturally positive spaces and restructured patient programs (including 2 studies that implemented an open-door policy). For example, 1 study explicitly described changing from a locked unit into 3 programs that included an intensive care unit, an unlocked day program, and a transitional residential program. Another study described a contemporary building that replaced the existing 19th century building, outfitting it with open, naturally lit rooms.

Based on evidence from 4 pre-post studies, restructuring units to include architecturally positive elements (and in some cases implementing an open-door policy) may reduce episodes of seclusion, duration of seclusion, duration of restraint, and forced medication use. We have low

confidence in these findings because studies had serious methodological limitations (they relied on self-reported outcome data and conducted crude analyses) and there was some inconsistency in findings between studies for episodes of seclusion and episodes of restraint. Studies provide insufficient evidence (no conclusion) regarding episodes of restraint, other patient outcomes, and staff outcomes. The studies did not evaluate a composite measure of coercion.

Staff Education/Training

Three comparative studies evaluated the impact of staff education and/or training on seclusion practices. The common intervention function across the 3 interventions was *persuasion* (*ie,* using communication to stimulate action), with elements of *education*, *training*, or *modelling* also present. *Staffing* was the primary resource named across the 3 studies with the interventions employing multidisciplinary teams.

Based on the evidence from 3 pre-post studies, education and training of staff (*eg,* de-escalation, alternative strategies to seclusion, and preventing violence) may reduce staff injuries and use of forced medication. We have low confidence in these findings because of methodological limitations (mostly unadjusted analyses) and inconsistent findings within and between studies. Studies provide insufficient evidence (no conclusion) for episodes of seclusion, episodes of restraint, other patient outcomes (*eg*, aggression), and composite measures of coercion. Studies did not report on duration of seclusion or duration of restraint.

Sensory Modulation

Seven comparative studies evaluated the effect of sensory modulation rooms, which required changes to the physical ward (*ie, environmental restructuring* intervention function) to influence both staff and patients. Six of the protocols included elements of *education* and *persuasion* (to educate staff and patients about the rooms and how to use them), 3 protocols included elements of staff or patient *enablement*, and 2 protocols included elements of patient *restrictions*. The most common resource need for sensory modulation interventions was the *space* and *equipment* to facilitate the intervention.

Based on evidence from 2 concurrent comparison and 5 pre-post studies, episodes of seclusion, but not duration of seclusion, may be reduced by sensory modulation rooms on inpatient wards. Sensory modulation rooms may also reduce use of forced medication. We have low confidence in these findings due to serious methodological limitations, inconsistent findings across studies for some outcomes, and sparse reporting of data. Studies provide insufficient evidence (providing no conclusion) regarding episodes of restraint, composite measures of coercion, patient outcomes (*eg,* self-injury, patient-to-patient assault), and staff outcomes (patient-to-staff assault). Studies did not report on duration of restraint.

Risk Assessment and Management Protocols

Seven comparative studies evaluated risk assessment tools with management protocols. All 7 protocols involved the intervention function *environmental restructuring* affecting both staff and patients, as the implementation of the risk assessments changed the social context of how patients were managed in the unit. Protocols also involved elements of *education* and *training* (*eg,* training staff how to use the assessment tools). The 7 protocols included resource

requirements related to *documentation*, and 2 protocols explicitly reported resources related to *time staff spent to perform checks on patients.*

Brøset Violence Checklist

Based on evidence from 2 RCTs and 2 pre-post studies, episodes of seclusion, a composite measure (psychotropic medications, seclusion, and restraint), and patient aggressive incidents may be reduced by risk assessment protocols that include the Brøset Violence Checklist. We have low confidence in these findings due to serious methodological limitations, inconsistent findings for some outcomes, and sparse reporting of data. There is no evidence of differences in episodes of restraint and some evidence to suggest duration of restraint may increase (low confidence). The studies provide insufficient evidence regarding duration of seclusion (no conclusion). The studies did not evaluate forced medication use or staff outcomes.

Investigator Developed Assessments

Based on evidence from 3 pre-post studies, there is no difference in the duration of seclusion and staff satisfaction between interventions that include investigator-developed risk assessment tools compared to usual care, but episodes and duration of restraint may be reduced by these interventions. We have low confidence in these findings due to serious methodological limitations and sparse data. The studies provide insufficient evidence regarding episodes of seclusion and other patient outcomes (no conclusion). The studies did not evaluate a composite measure of coercion or use of forced medication.

Comprehensive/Mixed Interventions

Safewards Model

Two comparative studies evaluated the effect of the Safewards model, which consists of 10 components to reduce conflict and use of coercive measures on inpatient wards. The components of the Safewards model include *education*, *persuasion*, *incentivization*, *training*, *environmental restructuring* (including restructuring of the social context), *modelling*, and *enablement*. Both studies reported resource needs for *equipment* (*eg*, sensory crates) and *staffing* since the intervention required nurses to engage in the care model.

Based on evidence from 1 RCT and 1 pre-post study, the comprehensive Safewards model may reduce a composite measure of coercion (restraint and seclusion and/or forced medication use) and patient conflicts. We have low confidence in these findings because studies had serious methodological concerns. The studies provide insufficient evidence (no conclusion) for staff outcomes. Studies did not report on seclusion, restraint (other than as a composite outcome), or forced medication use.

Other Comprehensive/Mixed Interventions

Six reports without empirical data and 14 comparative studies described comprehensive/mixed protocols using multiple intervention functions targeting both staff and patients. Most protocols included intervention functions of *education* and *training*, but the content varied between interventions. Protocols often described elements of *persuasion* to reinforce staff education and training and *environmental restructuring* to change the physical or social context of the wards for both patients and staff. A few protocols included elements of *modelling (eg,* expert staff

demonstrating behaviors to other staff) or *restriction*. The most common resource needs explicitly stated in the protocols included *documentation* and *staffing* followed by *programming*.

Based on evidence from 1 RCT, 2 concurrent comparison studies, and 11 pre-post studies, episodes of seclusion, duration of seclusion, duration of restraint, episodes of composite measures of coercion, and duration of composite measures of coercion may be reduced by comprehensive/mixed interventions. There is no evidence of differences for episodes of restraints and forced medication use. We have low confidence in all these findings due to serious methodological limitations (self-reported outcome data and crude analyses) and sparse data. Studies provide insufficient evidence (no conclusion) for other patient outcomes and staff outcomes.

DISCUSSION

Despite great interest from policymakers, staff, and patients for effective alternatives to seclusion, there are limited data on the benefits of protocols designed to reduce seclusion in adult inpatient mental health wards. We identified 48 reports that described 43 protocols to reduce seclusion, but, overall, the evidence base is limited, allowing at best low confidence conclusions. Protocols were diverse, highlighting that intervention designers are attempting to build complex solutions to address a complex practice problem. Two-thirds of protocols targeted both patients and staff to reduce the likelihood of a precipitating behavior requiring seclusion. Eight of 9 intervention functions were identified in efforts to reduce staff's use of seclusion (*education, incentivization, persuasion, training, restriction, environmental restructuring, modelling, enablement*), and 7 of the 9 intervention functions were identified in efforts to reduce patients' aggressive behavior (*education, persuasion, incentivization, training, restriction, environmental restructuring, enablement*).

The protocols we identified align with contemporary perspectives of patient-oriented recovery-focused mental health care. However, the evidence supporting the effectiveness of protocols to reduce seclusion (or their component intervention functions) needs to be interpreted with caution due to methodological limitations. First, all the studies relied on self-reported outcome data: staff were either the target or implementers of interventions and were also the outcome observers. Since most interventions were explicit in their aims to reduce seclusion, staff could have changed their behavior or measured their behavior differently to meet expectations (*ie,* performance bias). Second, there was inconsistent or sparse reporting of outcomes. Individual studies reported only select outcomes related to coercion (*eg,* a study would report use of seclusion but not use of restraints). Outcomes such as patient aggression, patient/staff injuries, and patient/staff satisfaction were infrequently reported. This made it challenging to compare outcomes between studies and to understand trade-offs (if any) between reducing seclusion and other forms of managing patients such as forced medication or restraint. Third, most studies were observational and they conducted crude (unadjusted) analyses that did not adequately account for confounding.

We restricted the review to studies conducted in countries that may be most applicable to inpatient mental health units in the US, but the unique elements of interventions may not generalize to all inpatient psychiatric hospitals. Most studies described protocols that were tailored to the local context and designed with stakeholder engagement. Safewards may be the most generalizable protocol, given the comprehensive nature of the intervention and that evidence comes from an RCT and observational study (it is well investigated but few studies of

Safewards met our review eligibility criteria). Importantly, resource needs associated with the interventions may be substantial, including increased personnel, equipment, and time for staff to complete training.

Implications for VA Policy

Several findings from this review may generalize to the VA. Four pre-post studies evaluated comprehensive/mixed interventions that involved creating a patient-centered ward culture in the VA. Consistent with VHA Handbook 1160.06 and the Design Guide for Inpatient Mental Health & Residential Rehabilitation Treatment Program Facilities, the studies we identified found that modifying the environment (*eg,* sensory rooms) may reduce the practice of seclusion. VA inpatient mental units should continue to view the environment as a component of treatment.

As the VA continues to implement protocols to reduce the practice of seclusion, there are opportunities for system-level approaches to evaluate efforts. VA-wide improvement efforts have already been implemented towards standardized documentation in the electronic health record, such as the Violence Risk Assessment; however, further opportunities exist for reporting on seclusion events and the use of least restrictive means prior to seclusion. Once data are uniformly reported, front-line staff and leadership can evaluate trends and identify units with above/below average process and outcome measures. With standardizing measures, it is also possible for the VA to conduct secondary database analyses to develop interventions to identify Veterans at high risk for seclusion or who exhibit conflict behaviors.

Research Gaps/Future Research

Most studies were observational and used data from the electronic medical records, but they did not account for potential confounding between groups. Future observational studies can account for confounders in their analyses by, at a minimum, conducting regression adjustment that includes patient characteristics that are also routinely captured in the electronic medical record. Studies should also make efforts to study effect modification based on demographics, diagnoses, or acuity. For hospitals that are part of large systems, there are opportunities to use electronic medical record data and quasi-experimental methods to compare units that do and do not implement interventions. Such larger studies should use more sophisticated methods to account for potential confounders (such as propensity score matching or inverse probability weighting). Reporting different forms of coercion as separate outcomes (*ie,* rather than reporting seclusion, restraint, and medication use as a combined outcome) would allow decision-makers to understand the trade-offs between reducing seclusion and other interventions. Finally, studies should use standardized reporting guidelines to clearly document intervention elements.

Limitations

We followed contemporary standards for conducting systematic reviews. The systematic review was broad enough to include all possible protocols to reduce seclusion but limited to restrict to protocols that could be feasibly delivered in US health care settings. A strength of this review was our detailed coding of the intervention functions of the protocols. This provided a structure to group the protocols into meaningful categories and can be used to inform future practice for units that aim to implement all or parts of these interventions. Although the coding and grouping of interventions into conceptually similar categories is a strength, it is possible the conclusions could change if groupings of interventions changed. Similarly, in operationalizing the review, the

review team had to make decisions about whether an intervention met our definition of a protocol of an alternative strategy to seclusion. It is possible we missed protocols in our operationalizing of our definition.

Conclusions

Reducing the use of seclusion has the potential to align care that respects patients' rights and autonomy (as long as it does not increase use of other coercive measures). Restructuring units to include architecturally positive designs, sensory/comfort rooms, structured risk assessments that include the Brøset Violence Checklist, and comprehensive/mixed interventions may reduce seclusion. Restructuring units may also reduce the use of restraints and forced medication. There is no difference in episodes of restraint for other comprehensive interventions or structured risk assessments that include the Brøset Violence Checklist. It is unknown if sensory rooms reduce episodes of restraint or whether staff training alone or investigator-developed risk assessment tools reduce seclusion. However, at best, we have low confidence in the conclusions due to methodological limitations of the studies and sparseness of studies addressing most interventions. Thus, it is likely that future research may change some conclusions and it remains unclear what specific interventions may be most effective. Nevertheless, these findings may generalize to the VA, which is already implementing several strategies demonstrating reductions in seclusion. Opportunities for future research and practice include standardizing reporting of process and outcome measures and conducting analyses that account for confounders. Users of this report may consider implementing evidence-informed elements of protocols that map to their local clinical contexts or complement existing protocols.