Only a few years ago a Cochrane review¹ and an extensive systematic review by the Agency for Healthcare Research and Quality² were reporting a lack of evidence for strategies that purport to reduce seclusion and restraint. More recently an evidence base for strategies that are effective in reducing seclusion and restraint in mental health services is emerging.

The selected readings below include implementations of the Six Core Strategies, Safewards, REsTRAIN Yourself, and Behaviours of Concern approaches. The ACI has provided an evidence check and a framework for change in relation to trauma-informed care and practice. Also included are some selected articles on consumer experience and the importance of culture.

Citations on this list are presented in APA 7 to ed. format (other than the use of bold text on the titles and the links to the full text where available). Where full text is not freely available, the links are directed to a document delivery request addressed to the Brian Tutt Library. For any questions, or for further information on this topic please contact the Library at MOH-Library@health.nsw.gov.au.

- 1. Muralidharan S Fenton M. Containment strategies for people with serious mental illness (Review). Cochrane Database of Systematic Reviews. 2006(3 Art. No. CD002084):1-17.
- 2. Gaynes B N et al. Strategies To De-escalate Aggressive Behavior in Psychiatric Patients. Comparative Effectiveness Review No. 180. Rockville MD: Agency for Healthcare Research and Quality; 2016.

We acknowledge the Brian Tutt Library and Knowledge Services for their contribution to this document.

Articles

Agency for Clinical Innovation (2019). Trauma-informed care and mental health in NSW. Evidence Series. Sydney, NSW Agency for Clinical Innovation: 1-28. https://aci.health.nsw.gov.au/ data/assets/pdf_file/0008/561977/ACI-Trauma-informed-care-and-mental-health-in-NSW-evidence-series.pdf">https://aci.health.nsw.gov.au/ data/assets/pdf_file/0008/561977/ACI-Trauma-informed-care-and-mental-health-in-NSW-evidence-series.pdf

Agency for Clinical Innovation (2022). Trauma-informed care in mental health services across NSW. A framework for change. Sydney, Agency for Clinical Innovation NSW Government: 1-11. https://aci.health.nsw.gov.au/ data/assets/pdf_file/0006/719871/ACI-Trauma-informed-care-and-practice-in-mental-health-services-across-NSW-Framework.pdf">https://aci.health.nsw.gov.au/ data/assets/pdf_file/0006/719871/ACI-Trauma-informed-care-and-practice-in-mental-health-services-across-NSW-Framework.pdf">https://aci.health.nsw.gov.au/ https://aci.health.nsw.gov.au/ <a href="https://aci.

Azeem, M. W., Aujla, A., Rammerth, M., Binsfeld, G., & Jones, R. B. (2011). <u>Effectiveness of six core strategies based on trauma informed care in reducing seclusions and restraints at a child and adolescent psychiatric hospital</u>. *Journal of Child and Adolescent Psychiatric Nursing*, 24, 11-15.

The purpose of the study was to determine the effectiveness of six core strategies based on trauma informed care in reducing the use of seclusion and restraints with hospitalized youth. Hospital staff received training in March 2005 in the six core strategies. Medical records were reviewed for youth admitted between July 2004 and March 2007.

Data were collected on demographics, including age, gender, ethnicity, number of admissions, type of admissions, length of stay, psychiatric diagnosis, number of seclusions, and restraints. Findings from the study showed a downward trend in seclusions/restraints among hospitalized youth after implementation of National Association of State Mental Health Program Directors six core strategies based on trauma informed care.





Bowers, L., James, K., Quirk, A., Simpson, A., SUGAR, Stewart, D., & Hodsoll, J. (2015). Reducing conflict and containment rates on acute psychiatric wards: The Safewards cluster randomised controlled trial. International Journal of Nursing Studies, 52, 1412-1422.

Acute psychiatric wards manage patients whose actions may threaten safety (conflict). Staff act to avert or minimise harm (containment). The Safewards model enabled the identification of ten interventions to reduce the frequency of both. This study tested the efficacy of these interventions, and found that for shifts with conflict or containment incidents, the experimental condition reduced the rate of conflict events by 15% relative to the control intervention. The rate of containment events for the experimental intervention was reduced by 26.4%.

Duxbury, J., Baker, J., Downe, S., Jones, F., Greenwood, P., Thygesen, H., McKeown, M., Price, O., Scholes, A., Thomson, G., & Whittington, R. (2019). <u>Minimising the use of physical restraint in acute mental health services: The outcome of a restraint reduction programme (RESTRAIN YOURSELF)</u>. *International Journal of Nursing Studies*, 95, 40-48.

Minimising the use of restraint requires a multimodal approach to target both organisational and individual factors. The 'Six Core Strategies' underpinned by prevention and trauma informed principles, is one such approach. An adapted version of the Six Core Strategies was developed and its impact upon physical restraint usage in mental health Trusts in the United Kingdom evaluated. This became known as 'REsTRAIN YOURSELF'. The hypothesis was that restraint would be reduced by 40% on the implementation wards over a six-month period.

Results showed a significantly lower restraint rate on the intervention wards in the adoption phase compared to the baseline phase. Across all implementation wards there was an average reduction of restraint by 22%, with some wards showing a reduction of 60% and others less so (8%). The association between ward type and study phase was statistically significant. The study concluded that it is possible that reductions in the use of physical restraint are achievable using a model such as the Six Core Strategies.

Duxbury, J., Thomson, G., Scholes, A., Jones, F., Baker, J., Downe, S., Greenwood, P., Price, O., Whittington, R., & McKeown, M. (2019). <u>Staff experiences and understandings of the REsTRAIN Yourself initiative to minimize the use of physical restraint on mental health wards</u>. *International Journal of Mental Health Nursing*, *28*, 845-856.

An adapted version of the Six Core Strategies (6CS), called 'REsTRAIN Yourself' (RY), was devised to suit the UK context and evaluated using mixed methods. RY aimed to reduce the use of physical restraint in mental health inpatient ward settings through training and practice development with whole teams, directly in the ward settings where change was to be implemented. This paper presents qualitative findings from semi-structured interviews that report on staff perspectives of the impact and value of RY following its implementation. Eight themes are reported that highlight perceived improvements in every domain of the 6CS after RY had been introduced.

Staff reported more positively on their relationships with service users and felt their attitudes towards the use of coercive practices such as restraint were changed; the service as a whole shifted in terms of restraint awareness and reduction; and new policies, procedures, and language were introduced despite certain barriers. These findings need to be appreciated in a context wherein substantial reductions in the use of physical restraint were proven possible, largely due to building upon empathic and relational alternatives. However, yet more could be achieved with greater resourcing of inpatient care.





Fletcher, J., Spittal, M., Brophy, L., Tibble, H., Kinner, S., Steve Elsom, S., & Hamilton, B. (2017). Outcomes of the Victorian Safewards trial in 13 wards: Impact on seclusion rates and fidelity measurement. International Journal of Mental Health Nursing, 26, 461-471.

Reducing restrictive practices is the focus internationally of policy and legislative change, many initiatives, and a growing body of research. Safewards is a model and a set of 10 interventions designed to reduce conflict and containment in inpatient services. This study aimed to assess the impact of implementing Safewards on seclusion in Victorian inpatient mental health services. Thirteen wards opted into a 12-week trial to implement Safewards and 1-year follow up. The comparison group was all other wards with seclusion facilities in the jurisdiction, matched to service type.

The study showed that seclusion rates were reduced by 36% in Safewards trial wards but in the comparison wards seclusion rates did not differ from baseline to post-trial or to follow-up period. The findings suggest that Safewards is appropriate for practice change in Victorian inpatient mental health services more broadly than adult acute wards, and is effective in reducing the use of seclusion.

Fletcher, J., Buchanan-Hagen, S., Brophy, L., Kinner, S. A., & Hamilton, B. (2019). <u>Consumer perspectives of Safewards impact in acute inpatient mental health wards in Victoria, Australia</u>. *Frontiers in Psychiatry, 10*.

Inpatient mental health wards are reported by many consumers to be custodial, unsafe, and lacking in therapeutic relationships. These consumer experiences are concerning, given international policy directives requiring recovery-oriented practice. Safewards is both a model and a suite of interventions designed to improve safety for consumers and staff. Positive results in reducing seclusion have been reported. However, the voice of consumers has been absent from the literature regarding Safewards in practice. This study aimed to describe the impact of Safewards on consumer experiences of inpatient mental health services.

A post-intervention survey was conducted with 72 consumers in 10 inpatient mental health wards 9-12 months after Safewards was implemented. Quantitative data showed that participants felt more positive about their experience of an inpatient unit, safer, and more connected with nursing staff. Participants reported that the impact of verbal and physical aggression had reduced because of Safewards. Qualitatively, participants reported increased respect, hope, sense of community, and safety and reduced feelings of isolation. Some participants raised concerns about the language and intention of some interventions being condescending.

Gaynes, B. N., Brown, C., Lux, L. J., Brownley, K., Van Dorn, R., Edlund, M., Coker-Schwimmer, E., Zarzar, T., Sheitman, B., Palmieri Weber, R., Viswanathan, M., & Lohr, K. N. (2016). <u>Strategies to deescalate aggressive behavior in psychiatric patients</u>. *Comparative Effectiveness Review, 180*.

This study investigated the effectiveness of strategies to prevent and de-escalate aggressive behaviours in psychiatric patients in acute care settings, including interventions aimed specifically at reducing use of seclusion and restraint. Eligible studies were limited to acute care settings and adult patients with psychiatric disorders or severe psychiatric symptomatology (excluding dementia); they had to report on aggression or seclusion and restraint outcomes. Given the ethical imperative for treating all patients with dignity, the clinical mandate of finding evidence-based solutions to these mental health challenges, and the legal liability associated with failure to assess and manage violence risk across the treatment continuum, the need for evidence to guide decision making for de-escalating aggressive behaviour is critical.





The available evidence about relevant strategies is very limited. Only risk assessment decreased subsequent aggression or reduced use of seclusion and restraint (low strength of evidence). Evidence for de-escalating aggressive behaviour is even more limited. More research is needed to guide clinicians, administrators, and policymakers on how to best prevent and de-escalate aggressive behaviour in acute care settings.

Hammervold, U. E., Norvoll, R., Aas, R. W., & Sagvaag, H. (2019). <u>Post-incident review after restraint in mental health care -a potential for knowledge development, recovery promotion and restraint prevention.</u> A scoping review. *BMC Health Services Research*, 19(235).

Use of physical restraint is a common practice in mental healthcare, but is controversial due to risk of physical and psychological harm to patients and creating ethical dilemmas for care providers. Post-incident review (PIR), that involve patient and care providers after restraints, have been deployed to prevent harm and to reduce restraint use. However, this intervention has an unclear scientific knowledge base. Thus, the aim of this scoping review was to explore the current knowledge of PIR and to assess to what extent PIR can minimise restraint-related use and harm, support care providers in handling professional and ethical dilemmas, and improve the quality of care in mental healthcare.

Findings indicated that outcomes seemed promising, but no significant outcomes were related to using PIR alone. Patients and care providers reported PIR to: 1) be an opportunity to review restraint events, they would not have had otherwise, 2) promote patients' personal recovery processes, and 3) stimulate professional reflection on organizational development and care.

Muralidharan, S., & Fenton, M. (2006). Containment strategies for people with serious mental illness. Cochrane Database of Systematic Reviews, 2006(3), 1-17.

The objective of this study was to compare the effects of various strategies used to contain acutely disturbed people during periods of psychiatric crisis (excluding seclusion and restraint and the use of 'as prescribed' medication). The study examined relevant randomised controlled trials involving people hospitalised with serious mental illness, comparing any non-pharmacological interventions aimed at containing people who were at risk of harming themselves or others. Of the reports retrieved in the search, only six seemed to have the potential to be relevant, but once they were obtained it was clear they could not be included. None focused upon nonpharmacological methods for containment of violence or self-harm in people with serious mental illness.

The authors conclude that current non-pharmacological approaches to containment of disturbed or violent behaviour are not supported by evidence from controlled studies. Clinical practice is based on evidence that is not derived from trials and continued practice entirely outside of well designed, conducted and reported randomised studies is difficult to justify.

Price, O., Baker, J., Bee, P., Grundy, A., Scott, A., Butler, D., Cree, L., & Lovell, K. (2018). <u>Patient perspectives on barriers and enablers to the use and effectiveness of de-escalation techniques for the management of violence and aggression in mental health settings</u>. *Journal of Advanced Nursing*, 74(3), 614-625.

Investigates patient perspectives on barriers and enablers to the use and effectiveness of de-escalation techniques for aggression in mental health settings. Inpatient interviews exploring staff, patient and environmental factors influencing the use and effectiveness of staff de-escalation were conducted mid-2014. The dominant view was that restrictive practices, rather than de-escalation techniques, are used in response to escalating patient behaviour. Under-use of de-escalation techniques was attributed to lack of staff reflection on culture and practice, and a need to retain control/dominance over patients.





Ward rules, patient factors and a lack of staff respect for patients diluted their effectiveness. Participants identified a systematic process of de-escalation, rule subversion, reduced social distance and staff authenticity as enablers of effective de-escalation.

Price, O., Baker, J. A., Bee, P., & Lovell, K. (2018). <u>The support-control continuum: An investigation of staff perspectives on factors influencing the success or failure of de-escalation techniques for the management of violence and aggression in mental health settings</u>. *International Journal of Nursing Studies*, 77, 197-206.

The objective of this study was to obtain staff descriptions of de-escalation techniques currently used in mental health settings and explore factors perceived to influence their implementation and effectiveness. Study participants described 14 techniques used in response to escalated aggression applied on a continuum between support and control. Techniques along the support-control continuum could be classified in three groups: 'support' (e.g. problem-solving, distraction, reassurance) 'non-physical control' (e.g. reprimands, deterrents, instruction) and 'physical control' (e.g. physical restraint and seclusion).

Charting the reasoning staff provided for technique selection against the described behavioural outcome enabled a preliminary understanding of staff, patient and environmental influences on de-escalation success or failure. Importantly, the more coercive 'non-physical control' techniques are currently conceptualised by staff as a feature of de-escalation techniques, yet there was evidence of a link between these and increased aggression/use of restrictive practices. Risk was not a consistent factor in decisions to adopt more controlling techniques. Moral judgements regarding the function of the aggression; trial-and-error; ingrained local custom; knowledge of the patient; time-efficiency and staff anxiety had a key role in escalating intervention.

Putkonen, A., Kuivalainen, S., Louheranta, O., Repo-Tiihonen, E., Ryynänen, O.-P., Kautiainen, H., Tiihonen, J. (2013). <u>Cluster-randomized controlled trial of reducing seclusion and restraint in secured care of men with schizophrenia</u>. *Psychiatric Services, 64*(9), 850-855.

This trial studied whether seclusion and restraint could be prevented in the psychiatric care of persons with schizophrenia without an increase of violence. Over the course of a year, 13 wards of a secured national psychiatric hospital in Finland received information about seclusion and restraint prevention. Four high security wards for men with psychotic illness were then stratified by coercion rates and randomly assigned to two equal groups. In the intervention wards, staff, patients, and doctors were trained for six months in applying six core strategies to prevent seclusion-restraint; six months of supervised intervention followed.

Results showed the proportion of patient-days with seclusion, restraint, or room observation declined from 30% to 15% for intervention wards versus from 25% to 19% for control wards. Seclusion-restraint time decreased from 110 to 56 hours per 100 patient days for intervention wards but increased from 133 to 150 hours for control wards. Incidence of violence decreased from 1.1% to 0.4% for the intervention wards and from 0.1% to 0% for control wards. Between-groups differences were significant for seclusion-restraint-observation days and seclusion-restraint time but not for violence. A similar reduction may also be feasible under less extreme circumstances. The authors list what is essentially the "6 Core Strategies" of Huckshorn et al as the elements of their intervention (p 450).

Shah A Ayers T et al (2022). "<u>The mental health safety improvement programme: a national quality improvement collaborative to reduce restrictive practice in England</u>." British Journal of Healthcare Management 28(5): 128-137.





In 2018, 38 mental health inpatient wards belonging to NHS trusts across England took part in the national reducing restrictive practice collaborative project, which aimed to reduce the use of rapid tranquillisation, restraint and seclusion of patients by 33%.

Teams were supported to use quality improvement tools by skilled coaches as part of a national collaborative learning system. At the end of the programme, the overall use of restrictive practice had reduced by 15%. Of the teams that achieved improvements, the average reduction in restrictive practice was 61%. Across the collaborative there were improvements in the mean monthly use of restraints and rapid tranquillisation, and in the total use of all three measures of restrictive practice combined. Support from quality improvement coaches allowed ideas to be tested across the collaborative, enabling the creation of a theory of change for reducing restrictive practice based on areas with a high degree of belief to inform future improvement work in this area.

See also the National Collaborating Centre for Mental Health brief booklet on this collaborative.

Whitecross, F., Lee, S., Bushell, H., Kang, M., Berry, C., Hollander, Y., Sonmez, G., & Rauchberger, I. (2020). <u>Implementing a psychiatric behaviours of concern team can reduce restrictive</u> <u>intervention use and improve safety in inpatient psychiatry</u>. *Australasian Psychiatry*, 28(4), 401-406.

Harmful behaviours are common in inpatient psychiatry and can negatively impact patient care and staff wellbeing. To encourage proactive intervention and build frontline staff capacity in managing harmful behaviours, we implemented a psychiatric behaviour of concern (Psy-BOC) team. This paper describes the process for implementation and measured impact. A "Plan, Do, Study, Act" (PDSA) methodology was used to understand the need for, design, and refine a multidisciplinary team-based response.

While the experience and impact of Psy-BOC was evaluated via mixed methods, the paper presents data on how Psy-BOC operated and changes in behaviours of concern and restrictive intervention use in the 6-months post- vs pre-implementation. In the 6-months post Psy-BOC implementation, 92 Psy-BOC responses occurred, most often for aggression episodes. When Psy-BOC responded, physical aggression episodes were less likely to use seclusion or physical restraint and more likely to use sensory modulation. A reduction of 23-50% in measured BOCs was also observed following Psy-BOC implementation.

Wilson, C., Rouse, L., Rae, S., & Kar Ray, M. (2018). <u>Mental health inpatients' and staff members' suggestions for reducing physical restraint: A qualitative study</u>. *Journal Psychiatric Mental Health Nursing*, *25*(3), 188-200.

Physical restraint has negative consequences for all involved, and international calls for its reduction have emerged. Some restraint reduction interventions have been developed, but limited qualitative research explores suggestions on how to reduce physical restraint (and feasibility issues with implementation) from those directly involved. The study explored mental health patients' and staff members' suggestions for reducing physical restraint.

Findings centred on four overarching themes: improving communication and relationships between staff/patients; making staff-related changes; improving ward environments/spaces; and having more activities. However, concerns were raised around practicalities/feasibility of their implementation. Continued research is needed into best ways to reduce physical restraint, with an emphasis on feasibility/practicality and how to make time in busy ward environments. Fundamental issues related to understaffing, high staff turnover and lack of time/resources need addressing in order for these suggestions to be successfully implemented.



