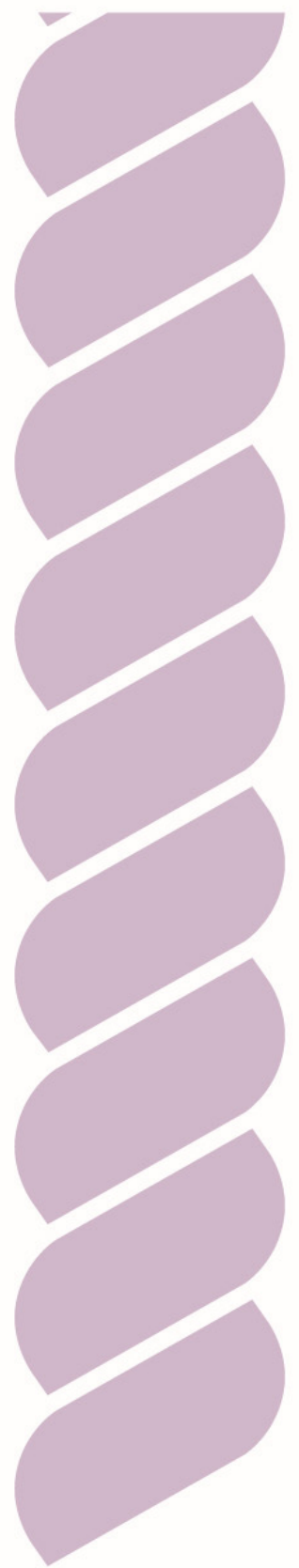


Implementation of Sensory Modulation within DHB Mental Health Services

2017 Stocktake



**Te Pou o te
Whakaaro Nui**

Published in October 2017 by Te Pou o te Whakaaro Nui

Te Pou o te Whakaaro Nui is a national centre of evidence based workforce development for the mental health, addiction and disability sectors in New Zealand.

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Foreword

Seclusion and restraint can be a highly traumatic experience both for people receiving mental health services and for staff delivering those services.

Reducing and working to eliminate seclusion and restraint is highlighted as a priority action in the Ministry of Health's *Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017*.

Te Pou o te Whakaaro Nui continues to support New Zealand's district health boards (DHBs) in this important work.

Sensory modulation is an approach involving learning to understand and use senses (including sight, sound, smell, touch, and taste) in a new way to self-calm and alleviate distress.

This latest report provides us with evidence on how the implementation of sensory modulation in New Zealand's mental health services is progressing.

The report builds on the foundation work that has been carried out since 2009 including training workshops for DHBs to support staff training and the setting up of sensory rooms.

I'd like to personally thank the directors of mental health nursing for their support of this project. I'd also like to thank all the DHB facilitators for sensory modulation who contributed to this report through their participation in the survey.

New Zealand has made good progress towards reducing seclusion and restraint, and we look forward to continuing this work in partnership with you.



Robyn Shearer
Chief Executive
Te Pou o te Whakaaro Nui

Acknowledgements

This report has been written by Te Pou o te Whakaaro Nui (Te Pou).

The authors of the report include Jennifer Lai (MSc), Angela Jury (PhD), and Frances Russell (BHSc).

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Te Pou sincerely thanks all the sensory modulation facilitators who completed the stocktake, and the directors of mental health nursing for their contribution in identifying representatives.

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Executive summary

Sensory modulation is a therapeutic approach that involves people learning to understand and use their senses (sight, sound, smell, touch, and taste) differently to self-calm and alleviate distress. Sensory modulation is an acknowledged workplace based reduction tool outlined in *Six Core Strategies for Reducing Seclusion and Restraint Use*[®], which is a key prevention framework for reducing the use of seclusion and restraint in mental health services (National Association of State Mental Health Program Directors, 2008).¹ In the past seven years, there has been nation-wide interest in implementing sensory modulation across mental health inpatient units. Te Pou o te Whakaaro Nui (Te Pou) has been working on research and practice development of sensory modulation. This has included piloting the use of sensory modulation in inpatient services, providing nation-wide training for sensory modulation champions, and collecting perspectives from staff and people accessing services. However, the implementation of sensory modulation in New Zealand's mental health services has not been reviewed to date.

A sensory modulation implementation stocktake was undertaken mid-2017 to examine the use of sensory modulation in New Zealand's district health board (DHB) mental health services. The survey aimed to gather a better understanding of:

- strategic planning and leadership for sensory modulation
- how sensory modulation has been adapted for use within services
- how sensory modulation has been implemented including guidelines/procedures, staff training, and resources
- monitoring and evaluation of sensory modulation practices including feedback from staff and people accessing services.

In total, 23 people who have been facilitating sensory modulation initiatives in their DHBs took part in the survey, representing 19 out of the 20 DHBs. Of the 22 respondents who provided their occupational roles, over half identified as occupational therapists (13), and the remaining were co-ordinator/managers (4), in nursing roles (3), or other clinical roles (2). Half were representative of both inpatient and community services (12 respondents), and six respondents were involved in forensic services.

Key findings from the survey are outlined below.

1. Sensory modulation is reportedly having a positive impact on people accessing services, based on service user and staff feedback. This finding highlights the benefit of continuing to implement sensory modulation in mental health services, and its role as a workplace reduction tool within *Six Core Strategies for Reducing Seclusion and Restraint Use*[®].
2. Staff training is limited by a need for updated resources, dedicated time, and designated trainers. There is a need for services to retain trained staff, train new staff when people leave, and regularly refresh staff training to ensure the utilisation of sensory modulation is safe and effective for everyone involved.

¹ Sensory modulation is outlined in *Six Core Strategies for Reducing Seclusion and Restraint Use*[®] under the fourth strategy: *Use of seclusion and restraint reduction tools*.

3. Leadership was reported as a key factor supporting the implementation of sensory modulation, and many services have established visible leadership support and sensory modulation champions. Areas for improvement that will require leadership support include the establishment of steering/governance groups, integration of sensory modulation into standard assessment processes and treatment plans, establishing formal monitoring processes, and the incorporation of culturally effective approaches.
4. Sensory modulation is not included in all DHB strategic work plans, and funding for sensory equipment is not always prioritised. The need for sufficient funding and resources to acquire and maintain the condition of sensory tools was identified as a key challenge amongst sensory modulation facilitators.

In conclusion, further workforce development for the implementation of sensory modulation requires a strategic multi-level and systemic approach which considers the knowledge and skills of individual workers, as well as the leadership required to support successful implementation, and a supporting infrastructure.

Recommendations based on the findings of this report are outlined below.

1. Ensuring the implementation of sensory modulation is supported with appropriate resources, and commitment is demonstrated in implementation plans.
2. Ensuring train-the-trainer workshops and refresher training for sensory modulation are made available nationally, which includes updated training content (involving associated risks and a trauma-informed care approach).
3. Improving the integration of sensory modulation into standard assessment processes during admission, and subsequent treatment, care or recovery plans.
4. Incorporating culturally effective approaches into sensory modulation activities to meet the needs of people accessing services. This will require the involvement of Māori people who specialise in kaupapa Māori based sensory approaches.
5. Formally monitoring and evaluating the use of sensory modulation to identify areas that are working well and areas for further development.
6. Establishing an interest group for sensory modulation facilitators, champions, and people accessing services to promote a community of practice, collaboration, and sharing of ideas.

Introduction

Sensory modulation is a therapeutic approach that involves people learning to understand and use their senses (sight, sound, smell, touch, and taste) differently to promote wellness and balance. This approach emerged from occupational therapy in the 1970s (King, 1974) and has since been widely implemented in mental health settings. In these settings, sensory modulation is used to support people who may experience problems with sensory processing which can contribute to their distress (Brown, Cromwell, Filion, Dunn, & Tollefson, 2002; Sutton & Nicholson, 2011). To help alleviate this distress, the use of sensory tools, such as weighted blankets, music, rocking, and sour lollies, can assist in identifying the person's preferential sensory stimulation. This enables people to utilise their preferred sensations as a self-calming technique, and to change their emotional and behavioural responses to stressful situations (Champagne, 2003; Lee, Cox, Whitecross, Williams, & Hollander, 2010; Sutton & Nicholson, 2011). Therefore, sensory modulation promotes wellbeing, facilitates self-regulation, and builds resilience in a way that is unique for each person.

Through teaching people how to self-calm and alleviate distress, sensory modulation has the potential to reduce behaviours that can lead to coercive events. For this reason, sensory modulation comes under *Use of seclusion and restraint reduction tools* in the *Six Core Strategies for Reducing Seclusion and Restraint Use*[®], which is a key prevention framework for reducing the use of seclusion and restraint in mental health services (National Association of State Mental Health Program Directors, 2008). To illustrate its effectiveness in this aspect, an Australian study showed the use of sensory modulation in a mental health inpatient unit was able to significantly reduce the frequency of seclusion compared to another inpatient unit which did not utilise the approach (Lloyd, King, & Machingura, 2014). Furthermore, sensory modulation can have a positive influence on staff confidence, particularly nurses, as well as the general care environment of mental health inpatient units by offering an alternative treatment approach that is person-centred and recovery-orientated (Björkdahl, Perseius, Samuelsson, & Lindberg, 2016).

To support the government's directive towards reducing seclusion and restraint (Ministry of Health, 2012; Standards New Zealand, 2008), Te Pou o te Whakaaro Nui (Te Pou) has been working on research and practice development of sensory modulation. In 2009, a pilot trial of sensory modulation involving four inpatient units led to nation-wide interest across mental health inpatient units (Te Pou, 2010). Following this, the perspectives of staff and people accessing services on the use of sensory modulation were examined (Sutton & Nicholson, 2011). As a result of the pilot trial, sensory modulation was perceived as an effective tool for facilitating a calming emotional state; increasing the awareness and ability of people to self-regulate their own emotions; improving the therapeutic experience of people accessing services; and supporting the development of trust and rapport for both staff and people accessing services (Sutton & Nicholson, 2011; Sutton, Wilson, Van Kessel, & Vanderpyl, 2013). Following the positive results from the pilot trial, Te Pou provided nation-wide training workshops for district health boards (DHBs) during 2011 – 2012 to support mental health services with staff training and setting up sensory rooms. This was followed by train-the-trainer workshops in 2012.

Effective workforce development requires a strategic multi-level and systemic approach. To support the implementation of sensory modulation in mental health services, consideration has been given to several factors

to ensure sensory modulation is effective and safe. These factors included strong leadership support; access to training workshops to promote understanding of the approach and increase staff confidence; ongoing funding to acquire and maintain sensory equipment; and clear procedures for the use of sensory rooms and equipment (Te Pou, 2012). While anecdotal evidence suggests implementation has been going well, the implementation of sensory modulation in New Zealand mental health services has not been formally reviewed to date.

Objectives

This project aimed to develop a better understanding of the implementation of sensory modulation within DHB mental health services in New Zealand, including what is working well and areas for improvement in relation to:

- strategic planning and leadership for sensory modulation
- how sensory modulation has been adapted for use within services
- how sensory modulation has been implemented including guidelines/procedures, staff training, and resources
- monitoring and evaluation of sensory modulation practices including feedback from staff and people accessing services.

Method

Survey

Based on the objectives above, the survey contained a series of multiple-choice and open-ended questions in relation to each domain of the *Getting it right* (Te Pou, 2017) workforce planning and development framework (see Figure 1). The four main sections of the survey included strategic planning, design, implementation, and monitoring and evaluation. A copy of the survey questionnaire is attached in the Appendix.

The survey was administered online via Survey Monkey® between May and June 2017. Participants were informed about the purpose of the survey, that participation was voluntary and they could receive a copy of the results once available.

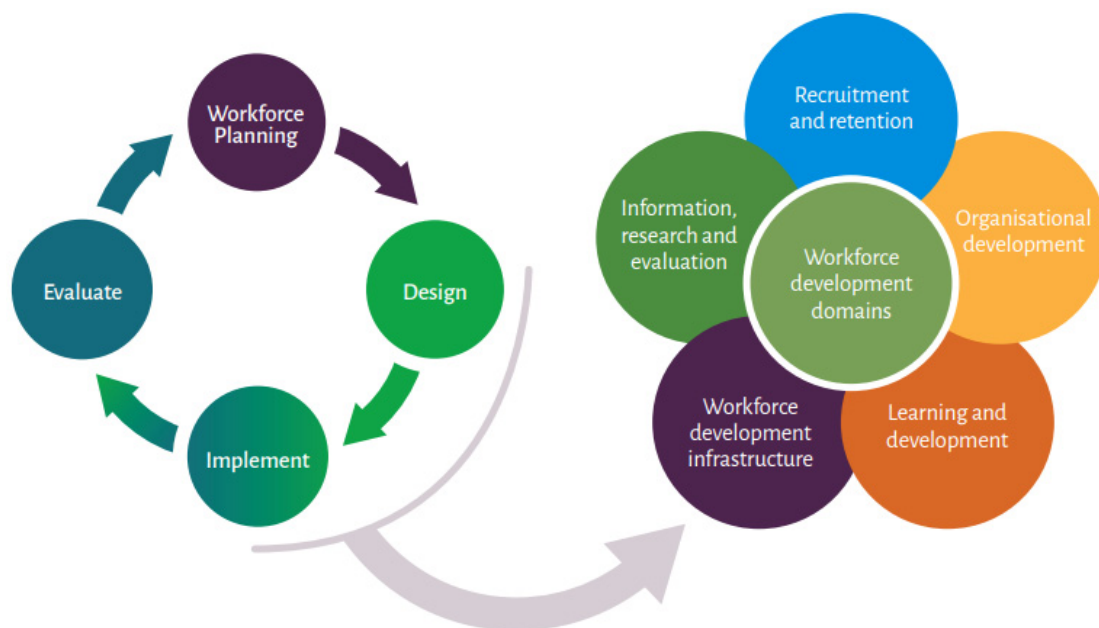


Figure 1. Getting it right workforce development process.

Participants

A purposive sampling method was used to recruit participants. The initial points of contact were the directors of mental health nursing (DOMHNs) who oversee nursing practice in DHB mental health services. The DOMHNs nominated a person/people who had been leading sensory modulation work in their DHB. These nominees were invited to participate in the survey.

In total, 23 people took part in the survey, representing 19 out of the 20 DHBs. Out of the 23 responses, there was one individual response that represented three collaborating DHBs. Conversely, there were five individual responses from one DHB representing different services.

Data analysis

Quantitative data was analysed using Microsoft Excel 2013. Frequencies and percentages were reported. Key messages that emerged from open-ended feedback were also identified. Key quotes were used to illustrate participants' responses.

There were concerns that the five individual responses from the same DHB may skew the results. To address this, the results were examined after the exclusion of these five responses. For all survey questions, the sensitivity analysis indicated the exclusion of the five responses did not lead to large differences or affect the overall results. Therefore, all 23 responses were included in the analysis.

Results

Results in this section are presented under the following sub-sections:

- people facilitating sensory modulation
- strategic planning
- design
- implementation
- monitoring and evaluation.

People facilitating sensory modulation

Of the 22 respondents who provided their occupational roles, approximately 60 per cent identified as occupational therapists (13 respondents). The remaining respondents were co-ordinator/managers (4 respondents), in nursing roles (3 respondents), or other clinical roles (2 respondents).

Many of the respondents facilitated sensory modulation initiatives across multiple service types within their DHB. Over half (52 per cent, 12 respondents) worked in both inpatient and community services. Six worked in forensic services. Respondents represented a mixture of adult services, older adult services, and child and adolescent services.²

Each of the 19 DHBs that were represented in the survey had at least one respondent who was interested in being linked with other sensory modulation facilitators in New Zealand.

Strategic planning

More than one-third of the respondents indicated sensory modulation was included in their DHB's strategic work plan; 30 per cent indicated somewhat; and 30 per cent did not know (see Figure 2).³

Leadership

About 60 per cent of the respondents indicated their service had visible leadership support, established champions for sensory modulation, and had an established work plan to continue with implementation (see Table 1). However, only 35 per cent had established a steering/governance group.

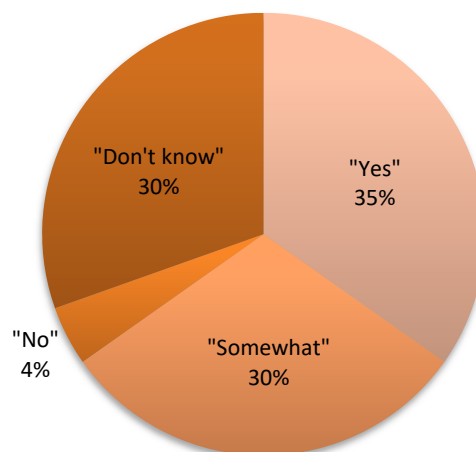


Figure 2. Sensory modulation is included in DHB strategic work plan (N= 23 respondents).

² Respondents were asked to select all the types of services in which they worked.

³ Pie graphs labels do not always sum up to 100 per cent due to rounding of the percentages.

Table 1. *Leadership Support for Sensory Modulation within DHBs (N= 23 Respondents)*

Survey question	Yes	Somewhat	No	Don't know
Is there visible leadership support in your service to implement sensory modulation?	61%	35%	4%	0%
Is there an established sensory modulation steering/governance group?	35%	17%	39%	9%
Are there sensory modulation champions established in your service?	61%	30%	4%	4%
Are stories of the benefits of sensory modulation conveyed to staff?	39%	52%	9%	0%
Is there an established work plan to continue with the implementation of sensory modulation?	57%	30%	0%	13%

Respondents indicated leadership was a key factor supporting implementation. For example:

“Management support/ a culture that supports the exploration of least restrictive alternatives.”

“Having senior nurses attend the training and champion for sensory modulation and ensuring it is embedded in other training.”

“Leadership across all levels of the mental health service support and encourage sensory modulation to be used.”

“Management coming back on board- largely re Seclusion issues and MOH [Ministry of Health] expectations and Te Pou resources/ promotion.”

Design

Customisation of sensory modulation

Thirty-five per cent reported their service had customised aspects of sensory modulation to fit the New Zealand context in their service (see Figure 3).

Examples provided included:

- visual displays of local landscapes, native flora and fauna
- sounds/music of native birds, local beaches, and the rain
- consultation with different cultural groups to identify their needs.

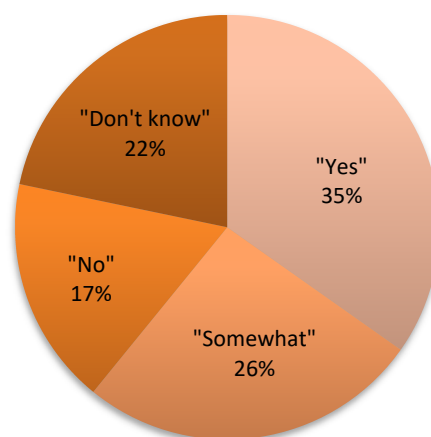


Figure 3. Customisation of sensory modulation to fit the New Zealand context (N= 23 respondents).

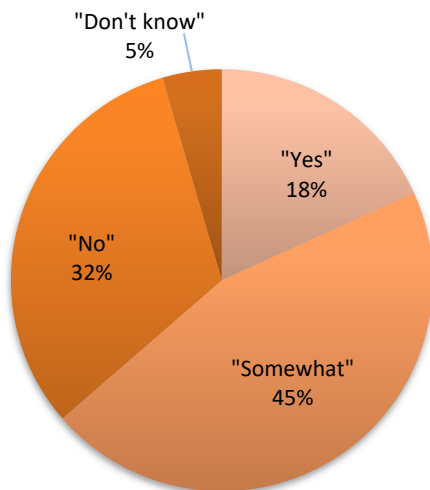


Figure 4. Incorporation of Māori and Pacific cultural perspectives into sensory modulation interventions (N= 22 respondents).

Māori and Pacific cultural perspectives

Four respondents (18 per cent) reported their service had incorporated Māori and Pacific perspectives into their sensory modulation approaches (see Figure 4).

Examples provided included:

- incorporation of kapa haka, waiata, karakia, and weaving
- engagement with whānau
- involvement of cultural advisors, such as kaumātua and kaitakawaenga roles, to develop a cultural perspective
- training of staff to implement cultural perspectives.

Implementation

Uptake by staff

Respondents reported their perspectives regarding staff motivation and confidence. Thirty per cent (7 respondents) indicated staff in their service were very motivated in using sensory modulation (see Figure 5). Only 13 per cent (3 respondents) of staff were reportedly very confident in using sensory modulation.

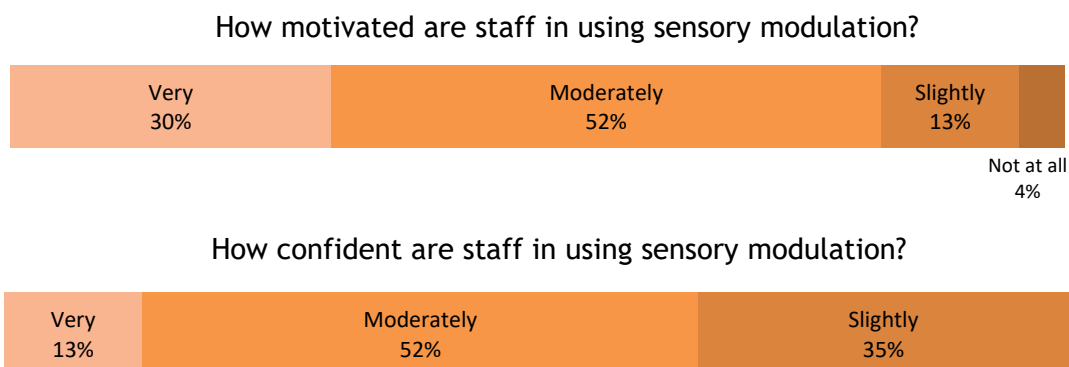


Figure 5. Staff motivation and confidence as perceived by sensory modulation facilitators (N= 23 respondents).

Respondents indicated staff motivation and confidence were key factors supporting implementation. For example:

“Passionate staff willing to utilise alternative therapies into daily practice”

“Staff seeing the value and embracing its use.”

“People’s general enthusiasm for SM [sensory modulation], especially OT’s but also other disciplines once they have done the training, who quickly grasp the clinical utility - its appealing, flexible, effective, fun as a modality.”

Sensory modulation was most frequently used by occupational therapists (within 96 per cent of DHB services) and nurses (within 87 per cent of DHB services). To a lesser extent, sensory modulation was used by consumer and service user leads (35 per cent), social workers (35 per cent), psychologists (22 per cent), and psychiatrists (13 per cent).⁴

Guidelines and procedures

Nearly three-quarters of respondents indicated their service had guidelines or policies established for the use of sensory modulation. More than half reported their service had well established procedures for the use of sensory modulation rooms and tools, see Table 2.

Most respondents (70 per cent) indicated sensory modulation was only partly integrated into treatment, care or recovery plans (see Table 2). Moreover, one-third indicated sensory assessments were not integrated into the standard assessment process during admission.

Table 2. Survey Responses about Sensory Modulation Guidelines and Procedures (N= 23 Respondents)

Survey question	Yes	Partly	No	Don't know
Does your service have guidelines or policies established for the use of sensory modulation?	74%	17%	9%	0%
Are there well-established procedures in your service for the use of the sensory room and sensory tools?	52%	43%	4%	0%
Is a sensory assessment done with people as a part of the standard assessment process during admission to unit or administered within 72 hours of arrival?	9%	39%	35%	17%
Is sensory modulation integrated into treatment/care/recovery plans?	17%	70%	13%	0%

⁴ Respondents were asked to select all the professions that utilised sensory modulation in their service.

Training

Nearly one-third (30 per cent) reported relevant staff in their service had *not* received training in sensory modulation (see Figure 6). Only one respondent indicated that all relevant staff in their service received training in sensory modulation; 17 per cent (4 respondents) mostly received training; and 48 per cent (11 respondents) partly received training.

Where staff training was provided (16 respondents), sensory modulation training was predominantly delivered by occupational therapists (94 per cent), and nurses/nurse educators (63 per cent).⁵

The length of training varied across services:

- 38 per cent provided full day training
- 31 per cent provided half day training
- 31 per cent provided 1-2 hours of training.

Of the respondents from services that had trained their staff (16 respondents), one-quarter indicated their service monitored the number of staff receiving sensory modulation training; and half partly monitored this. Most respondents agreed that training had increased staff confidence in implementing sensory modulation (see Figure 7).⁶

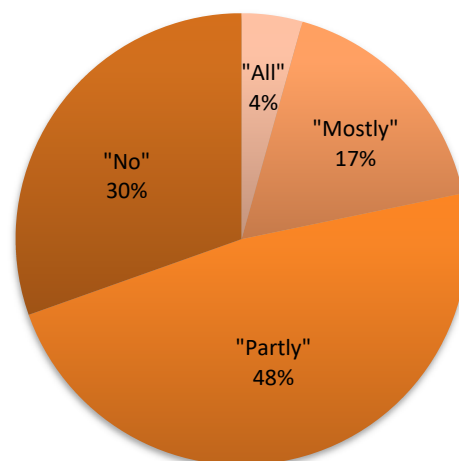


Figure 6. Relevant staff training in sensory modulation (N= 23 respondents).

"Staff confidence in implementing sensory modulation has increased as a result of training"



Figure 7. Staff confidence in response to sensory modulation training (N= 16 respondents).

Respondents indicated the following types of support were provided by their service to help implement the knowledge and skills gained through training into practice:

- establishment of champions for sensory modulation
- mentoring and support from occupational therapists and highly experienced staff available at all times
- resources, such as handbooks and information kits, were available to staff
- development of a community of practice through regular meetings and interest groups to share success stories and problem solving.

⁵ Respondents were asked to select all the professions that delivered sensory modulation training in their service.

⁶ Respondents ranked staff confidence in response to sensory modulation training on a scale ranging from disagree to strongly agree.

Open-ended feedback highlighted some of the challenges around the availability of staff training and trainers:

“Very little formal training has occurred. Introductory training only.”

“Training for OTs (as lead clinicians), and other staff occurred in 2012; I am not aware of training occurring since but this is being addressed.”

“We don't have enough trainers, there are very few people who are confident in delivering the training, so no one volunteers to be a facilitator.”

“We have had incidences of staff using it, without training and are also supported by managers to use it without training so they don't have to be released to attend training. This is concerning.”

Resources

Thirty-nine per cent of respondents worked in services that were well resourced with sensory modulation tools, and just over half were partly resourced (see Figure 8).

Respondents were asked whether their service had a sensory room, sensory space, and/or portable sensory tools. Thirty per cent (7 respondents) indicated their service had all three types of resources; 48 per cent (11 respondents) had two types of resources; and 17 per cent (4 respondents) had one. Only one respondent indicated their service did not have any sensory modulation spaces or tools.

Thirty-five per cent (8 respondents) indicated their service had funding for resources when they needed replacing, were broken, or lost; 48 per cent (11 respondents) were partly funded; and 13 per cent (3 respondents) had no funding. One respondent noted the need for knowledge and resources to clean weighted blankets in particular.

More than half (12 respondents) reported using sensory modulation resources developed by Te Pou, and 22 per cent had partly used them. Open-ended responses indicated that Te Pou resources have been incorporated into some DHB programs or shared with staff, but respondents also indicated the need for these to be updated.

Open-ended feedback highlighted some of the challenges around resources and funding:

“Funding for resources, finding a room suitable for sensory modulation, getting enough time to do the work associated with getting sensory modulation started.”

“Colleagues are open to it but short on time and confidence overall- as well as resources.”

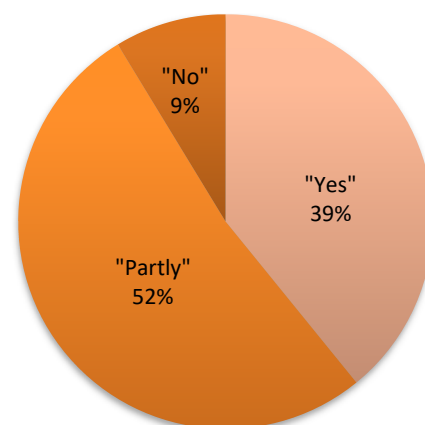


Figure 8. Service is well resourced with sensory modulation tools (N= 23 respondents).

“It is very difficult to access funding, I am unsure how much we are allocated but it is a struggle to keep the room in good working condition.”

“Funding is always an issue within the DHB. I had to ask for 18 months for funding for sensory resources. Finding a space that is quiet and big enough is a challenge - we don't specifically design spaces in most areas. One of our rooms is so small, it is difficult to fit the client and their support staff.”

Barriers and supports

Based on open-ended feedback, the following were frequently identified as key challenges in implementing sensory modulation:

- need for updated resources, dedicated time, and designated trainers to provide sensory modulation training for relevant staff
- turnover of trained and experienced staff leading to a loss of knowledge and skills
- need for prioritising time and staff within busy schedules to provide comprehensive sensory modulation assessments and interventions
- limited funding to acquire and maintain sensory modulation resources.

The following were most commonly identified as factors supporting implementation:

- strong leadership support that encourages and models implementation
- motivated, passionate, and flexible staff that see the value of implementing sensory modulation
- collaboration between staff and people accessing services to increase confidence in using sensory modulation interventions
- having visible resources and clear procedures to support implementation.

Monitoring and evaluation

Seventeen per cent (4 respondents) indicated their service monitored the use of sensory modulation; 39 per cent (9 respondents) partly monitored its use; and 35 per cent (8 respondents) did not monitor use (see Figure 9).

Examples of monitoring included:

- record books and log sheets to monitor the use of sensory modulation room and tools
- methods for recording feedback from staff and people accessing services after each time sensory tools had been utilised
- review of clinical notes and treatment plans
- regular discussions with sensory modulation champions and relevant staff.

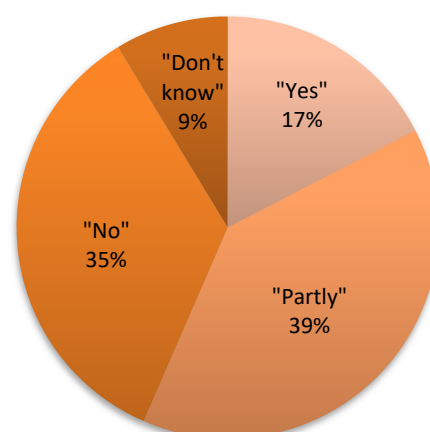


Figure 9. Monitored use of sensory modulation (N= 23 respondents).

Examples of how sensory modulation is currently monitored:

“Each time a client uses the sensory room, staff complete a self-rating tool with them. Staff also make their own observations about how the client presented before and after the session.”

“We collect sensory preferences collected on admission to our IPU's [inpatient units], both within and outside of the 72 hour period. We also audit whether sensory preferences were collected and whether this was offered prior to seclusion events, as well as post seclusion events. We also collect feedback from every group we run in the community and collate that at the end of every year.”

“Sheets for staff to sign in and out of the rooms but only some people do this”

“Informal monitoring- checking in with the service champions as to what is happening in their service.”

Feedback from people accessing services

Nearly 60 per cent perceived feedback from people accessing services on the use of sensory modulation had been extremely positive (see Figure 10). The remaining respondents perceived feedback from people accessing services had been moderately or mildly positive.

Feedback from people accessing your services on the use of sensory modulation has been:

Extremely positive 58%	Moderately positive 21%	Mildly positive 21%
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Figure 10. Feedback from people accessing services about sensory modulation (N= 19 respondents).

Feedback from people accessing services may reflect differences in staff uptake of sensory modulation. Further analysis based on the small number of available responses showed a positive association between staff motivation and confidence, and feedback from service users on the use of sensory modulation. That is, where staff confidence and motivation was higher, feedback from people accessing services was likely to be more positive.

Respondents indicated people accessing services had identified the following areas for improvement in the use of sensory modulation:

- more time, space, and resources for people to access sensory modulation interventions
- funding for people to acquire their own resources
- improved maintenance and replacement of sensory modulation tools

- the availability of sensory modulation tools for community teams.

Open-ended feedback from respondents describing the reactions from people accessing services included:

“Service users find it really helpful, not rocket science but real and practical.”

“Most of the feedback has been very positive. Clients appreciate a non-pharmaceutical intervention and one that they feel in control of.”

Staff feedback

More than half (57 per cent, 13 respondents) did not gather staff feedback on the implementation of sensory modulation (see Figure 11). Two respondents indicated their service gathered staff feedback on how well sensory modulation was being implemented; five respondents partly gathered feedback.

Of the seven respondents who gathered staff feedback, four respondents strongly agreed that staff feedback indicated sensory modulation has had a positive impact on people accessing services, and three respondents moderately agreed.

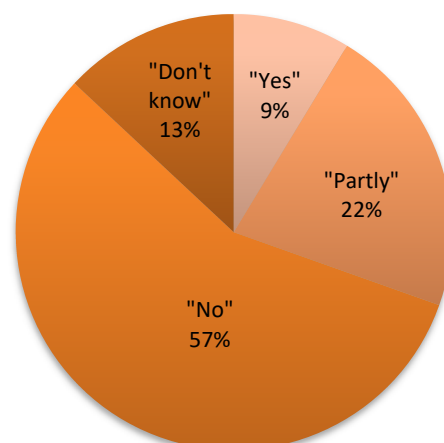


Figure 11. Staff feedback gathered on the implementation of sensory modulation (N= 23 respondents).

Discussion

The stocktake reviewed the implementation of sensory modulation in New Zealand's DHB mental health services, including strategic planning and leadership, the design and implementation of sensory modulation, and monitoring and evaluation. The stocktake identified areas that appear to be working well, and areas for improvement. These findings have implications for mental health services that are discussed further in this section.

Strategic planning of sensory modulation

Most DHBs and services have included sensory modulation in their strategic work plans. However, one-third of people facilitating the implementation of sensory modulation within their DHB did not know. This suggests a need for DHBs and services to clearly communicate work plans with people who facilitate sensory modulation initiatives.

Leadership

Leadership support is important for the successful implementation of programmes, including the implementation of sensory modulation (Te Pou, 2017). Services have been doing well in establishing visible leadership support, sensory modulation champions, and work plans to support the implementation of sensory modulation. In comparison, areas needing improvement include establishing steering/governance groups, and conveying the benefits of sensory modulation to staff across professional groups and with people accessing services.

The design of sensory modulation

Customisation of sensory modulation

One-third of services have customised sensory modulation to fit the New Zealand context, and were able to provide excellent examples of how they have been achieving this, such as visual and/or audio displays of local landscapes as well as native flora and fauna.

Māori and Pacific cultural perspectives

There is a clear need for all services to actively include and develop sensory modulation options that incorporate Māori, Pacific, and other cultural perspectives. Examples of incorporating cultural perspectives included kapa haka, waiata, karakia, and weaving. In addition to empowering cultural identity, a local study has shown the use of culturally responsive sensory modulation activities, especially participation in kapa haka groups, are beneficial for the mental health of Māori people by helping them to feel grounded in their bodies (Hollands, Sutton, Wright-St. Clair, & Hall, 2015).

The implementation of sensory modulation

Uptake by staff

Sensory modulation is most frequently used by occupational therapists and nurses; and to a lesser degree by consumer and service user leads, social workers, psychologists, and psychiatrists. Respondents perceived that only one-third of staff were very motivated in using sensory modulation, and confidence in using sensory modulation was lower. This indicates an area for improvement. Staff, particularly nurses, have a key role in initiating visits to sensory rooms because people accessing services are unlikely to initiate visits by themselves (Björkdahl et al., 2016). Thus, motivated and confident staff are necessary for the effective implementation of sensory modulation. Improving staff motivation and confidence will require strong leadership and access to effective training.

Training

About one-third of relevant staff have *not* received any training in sensory modulation. This is concerning because training is necessary to ensure the utilisation of sensory modulation is safe and effective for everyone involved. Staff need to understand the use of sensory modulation equipment and the potential risks associated with them. For example, weighted blankets can lead to claustrophobic experiences and negative emotions, especially for people who have experienced previous trauma (Björkdahl et al., 2016). This illustrates that in addition to sensory modulation training, staff will benefit from understanding trauma-informed care.

While the findings suggest that staff confidence improves with training, the need for designated trainers and dedicated time to train staff was a key challenge to ensuring staff receive sensory modulation training. The clinical implications of this finding include updating and standardising sensory modulation training across mental health services. Recent research has shown that training workshops or e-learning packages are effective for training staff in sensory modulation approaches, and should be considered in the planning of long term training solutions (Azuela & Robertson, 2016; Meredith et al., 2016). This will need to be supported by train-the-trainer workshops to increase the number of people that can train and supervise staff in DHBs, as well as regular refresher training to minimise the loss of knowledge and skills from the workforce that can inevitably occur.

Guidelines and procedures

Most services have well established guidelines, policies, and procedures for the use of sensory modulation. However, services need to improve the integration of sensory modulation into standard assessment processes during admission, and subsequent treatment, care or recovery plans. This is currently done by a small number of services.

Most respondents worked in services that were well resourced with sensory modulation tools, and had funding to replace resources that were broken or lost. However, the need for funding and resources was commonly identified as a key challenge for the implementation of sensory modulation.

Barriers and supports

Based on open-ended feedback, key factors supporting the implementation of sensory modulation included: strong leadership, staff motivation and engagement, collaboration between staff and people accessing services, and resources and procedures to support the use of sensory modulation. Key challenges included: a need for updated resources, designated trainers, and dedicated time to provide comprehensive staff training and sensory modulation interventions, and limited funding to acquire and maintain sensory modulation resources. These key challenges corroborate with the responses described in other sections and indicate the need for a strategic multi-level approach to effectively implement sensory modulation in mental health services.

Monitoring and evaluation of sensory modulation

One-third of services did not monitor the use of sensory modulation, suggesting this is an area in need of improvement. Those who did monitor the use of sensory modulation in their service used a wide variety of methods. Given the engagement in sensory modulation and positive practice direction, it is likely that evaluation data would assist in supporting future requests for resource allocation, developing business cases within services, and identifying areas for improvement allowing better outcomes for people accessing services.

Feedback from staff and people accessing services

It is important that services gather and address feedback from staff and people accessing services to improve the experience of sensory modulation for everyone involved. Overall, respondents reported that feedback from people accessing services on the use of sensory modulation has been largely positive. However, people accessing services have identified several areas for improvement, including more time, space, and resources for people to access sensory modulation interventions.

From the services that gathered staff feedback, sensory modulation has reportedly had a positive impact on people accessing services. However, more than half of services do not gather staff feedback, suggesting this is another area in need of more formal and consistent monitoring and evaluation.

Limitations

It is important to note that the stocktake results were based on the information available to, and perceptions of people who facilitate the implementation of sensory modulation in DHB mental health services. Therefore, results may not necessarily reflect services or the perceptions of other staff. Despite these limitations, valuable insights into the implementation of sensory modulation within DHB mental health services have been gained.

Summary of key findings

The current strengths in the implementation of sensory modulation as reported by DHB sensory modulation facilitators, as well as areas for improvement are summarised in Table 3.

Table 3. *Sensory Modulation Implementation in Relation to the Five Domains of Workforce Development*

Domains of workforce development	Key factors supporting implementation	What are the current strengths?	What are the areas for improvement?
Organisational development	Leadership	Leadership was identified as a key supporting factor for implementation. Many services have established visible leadership support and sensory modulation champions.	Many DHBs do not have steering/governance groups that include all key stakeholders to guide program development.
	Work plans	Services have established work plans to support the implementation of sensory modulation.	Sensory modulation is not included in all DHB strategic work plans. Facilitators are not aware of their own DHB strategic work plan contents.
	Guidelines and procedures	Services have well-established guidelines, policies, and procedures for the use of sensory modulation.	Sensory modulation is not included in all standard assessment processes during admission, and subsequent treatment, care or recovery plans.
Workforce development infrastructure	Funding and resources	Most services have sensory rooms and tools available for people accessing services. Most respondents have used the sensory modulation resources developed by Te Pou.	Sufficient funding and resources to acquire, maintain and replace sensory tools are not always prioritised. There is a need for Te Pou to update and develop new resources for sensory modulation.
	Cultural approaches	Some services provided excellent examples of how they have customised sensory modulation to incorporate Māori, Pacific, and other cultural perspectives, eg kapa haka, waiata, karakia, and weaving.	Many DHBs do not incorporate cultural approaches to match the needs of people accessing services.

Domains of workforce development	Key factors supporting implementation	What are the current strengths?	What are the areas for improvement?
Learning and development	Staff training	Services have provided support to help staff implement the knowledge and skills gained through training, eg establishing champions, information kits, and interest groups. Staff confidence has increased in response to sensory modulation training.	Nearly one-third (30 per cent) of respondents reported relevant staff in their service had not received training. Staff training is limited by a need for resources, dedicated time, and designated trainers.
	Staff motivation and confidence	Motivated, passionate, and flexible staff were identified as key supporting factors for implementation.	Only a small proportion of staff were perceived as very motivated or confident in using sensory modulation.
Recruitment and retention	Key professional roles	Sensory modulation is primarily being utilised, trained, and supervised by the same professions across DHBs, namely occupational therapists and nurses.	Retention of trained staff to support high quality sensory modulation development and delivery is a key challenge.
Information, research and evaluation	Monitoring and evaluation	Services have made efforts to monitor the use of sensory rooms and tools using methods such as record books and log sheets.	Regular, consistent, and formal monitoring processes for the use of sensory modulation are not always implemented.
	Gathering feedback	Feedback from staff and people accessing services suggest sensory modulation has had a positive impact on people accessing services.	Feedback from staff and people accessing services is not always gathered regularly.

Key findings from the survey are outlined below.

1. Sensory modulation is reportedly having a positive impact on people accessing services, based on service user and staff feedback. This finding highlights the benefit of continuing to implement sensory modulation in mental health services, and its role as a workplace reduction tool within *Six Core Strategies for Reducing Seclusion and Restraint Use*[®].
2. Staff training is limited by a need for updated resources, dedicated time, and designated trainers. There is a need for services to retain trained staff, train new staff when people leave, and regularly refresh staff training to ensure the utilisation of sensory modulation is safe and effective for everyone involved.
3. Leadership was reported as a key factor supporting the implementation of sensory modulation, and many services have established visible leadership support and sensory modulation champions. Areas for improvement that will require leadership support include the establishment of steering/governance groups, integration of sensory modulation into standard assessment processes and treatment plans, establishing formal monitoring processes, and the incorporation of culturally effective approaches.
4. Sensory modulation is not included in all DHB strategic work plans, and funding for sensory equipment is not always prioritised. The need for sufficient funding and resources to acquire and maintain the condition of sensory tools was identified as a key challenge amongst sensory modulation facilitators.

Conclusion

The sensory modulation implementation stocktake captured a snapshot of the sensory modulation work currently happening across New Zealand's DHB mental health services. The survey was well received by the respondents enabling it to effectively identify aspects of sensory modulation that are working well, and areas that need improvement. Workforce development for the implementation of sensory modulation requires a strategic multi-level and systemic approach which considers not only the knowledge and skills of individual workers, but also the leadership required to support successful implementation, and a supporting infrastructure.

Recommendations based on the findings of this report are outlined below.

1. Ensuring the implementation of sensory modulation is supported with appropriate resources, and commitment is demonstrated in implementation plans.
2. Ensuring train-the-trainer workshops and refresher training for sensory modulation are made available nationally, which includes updated training content (involving associated risks and a trauma-informed care approach).
3. Improving the integration of sensory modulation into standard assessment processes during admission, and subsequent treatment, care or recovery plans.
4. Incorporating culturally effective approaches into sensory modulation activities to meet the needs of people accessing services. This will require the involvement of Māori people who specialise in kaupapa Māori based sensory approaches.
5. Formally monitoring and evaluating the use of sensory modulation to identify areas that are working well and areas for further development.
6. Establishing an interest group for sensory modulation facilitators, champions, and people accessing services to promote a community of practice, collaboration, and sharing of ideas.

Appendix: Sensory modulation survey questions

Sensory Modulation Implementation Stocktake

Information about the stocktake

Te Pou has been working with the Mental Health and Addictions sector since 2007 promoting the use of Sensory Modulation to support least restrictive practice initiatives. Further information about this work can be found on the Te Pou website.

Te Pou is currently undertaking a stocktake to capture a snap-shot of Sensory Modulation work that is going on nationally amongst the DHBs. We are inviting Sensory Modulation leaders and champions to complete an online survey about how Sensory Modulation is being implemented at their DHB. You have been nominated by your DHB's Director of Mental Health Nursing to participate in the survey.

The stocktake aims to gather a better understanding of:

- Strategic planning and leadership for Sensory Modulation
- How Sensory Modulation has been adapted for use within your DHB
- Implementation of Sensory Modulation including guidelines/procedures, staff training and resources
- Monitoring and evaluation of Sensory Modulation including service user and staff feedback.

The stocktake should take 10-15 minutes to complete and involves a series of multiple choice and open ended questions. Participation is voluntary and your DHB's information will not be identifiable in reports. Your information will be combined with others and reported at a national and DHB region level. On completion of the survey you can ask that a summary report be sent to you once results are available. The report will also be published on the Te Pou website.

Thank you for your time and engagement in this process.

If you have any questions regarding the stocktake please don't hesitate to contact:

Frances Russell - Project lead

09 261 3411

Frances.Russell@tepou.co.nz

Further information about Sensory Modulation can be found on the Te Pou website, on the Reducing Seclusion and Restraint initiatives page: <https://www.tepou.co.nz/initiatives/reducing-seclusion-and-restraint/102>

Planning: Strategic Planning

This survey is comprised of four sections - planning, design, implementation and monitoring & evaluation. This first section includes questions on strategic planning and leadership for Sensory Modulation within your DHB.

Is Sensory Modulation included in the strategic work plan for your DHB?

Yes	No	Somewhat	Don't know
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify

Planning: Leadership

Leadership

	Yes	No	Somewhat	Don't know
Is there visible leadership support in your service to implement Sensory Modulation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is there an established Sensory Modulation steering/governance group?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are there Sensory Modulation champions established in your service?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are stories of the benefits of Sensory Modulation conveyed to staff?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is there an established work plan to continue with the implementation of Sensory Modulation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments/feedback on leadership support for Sensory Modulation within your DHB

Design

This section includes questions on the design of Sensory Modulation in your DHB to fit the New Zealand context

Have you customized any aspects of Sensory Modulation to fit the New Zealand context in your service?

Yes	No	Somewhat	Don't know
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If yes, please provide some examples

Have you incorporated Māori and Pacific cultural perspectives into the Sensory Modulation interventions in your service?

Yes	No	Somewhat	Don't know
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If yes, please provide some examples

Implementation: Workforce uptake of Sensory Modulation

This section includes questions about the implementation of Sensory Modulation within your DHB, including uptake, guidelines & procedures, training, resources and barriers & supports.

How motivated are staff in using Sensory Modulation?

Not at all	Slightly	Moderately	Very	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How confident are staff in using Sensory Modulation?

Not at all	Slightly	Moderately	Very	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which professions in your workplace commonly utilise Sensory Modulation? (Tick all that apply)

- ☐ Occupational therapists
- ☐ Psychologists
- ☐ Social workers
- ☐ Nurses
- ☐ Medical professionals
- ☐ Psychotherapists
- ☐ Consumer and service user leads
- ☐ Psychiatrists
- ☐ Other (please specify)

Implementation: Guidelines/procedures

Guideline/procedures

	Yes	No	Partly	Don't know
Does your service have guidelines or policies established for the use of Sensory Modulation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are there well established procedures in your service for the use of the sensory room and sensory tools?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a sensory assessment done with people as a part of the standard assessment process during admission to unit or administered within 72 hours of arrival?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is Sensory Modulation integrated into treatment/care/recovery plans?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any additional comments about guidelines/procedures

Implementation: Training

Have all relevant staff received training in Sensory Modulation?

4

No	Partly	Mostly	All
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any additional comments on Sensory Modulation training in your service

Implementation: Training

How long is the Sensory Modulation training offered at your DHB?

- ☐ Half day
- ☐ Full day
- ☐ Other (please specify)

Who delivers this training?

- ☐ Occupational therapist
- ☐ Psychologist
- ☐ Social worker
- ☐ Nurse/ Nurse educator
- ☐ Medical professional
- ☐ Psychotherapist
- ☐ Consumer and service user leads
- ☐ Psychiatrist
- ☐ Other (please specify)

Please indicate how much you agree with the following statement:

Staff confidence in implementing Sensory Modulation has increased as a result of training

Disagree	Mildly Agree	Moderately Agree	Strongly Agree	Don't Know
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What support is provided to help implement the knowledge and skills gained through training in practice?

Are the numbers of staff trained in Sensory Modulation being monitored to ensure that all relevant staff receive training?

- ☐ Yes
- ☐ No
- ☐ Partly
- ☐ Don't know

Implementation: Sensory Modulation Resources

Is your service well resourced with Sensory Modulation tools? Eg. weighted blankets, massage chairs, essential oils, lava lamps

- ☐ Yes
☐ No
☐ Partly

Does your service have a sensory room, sensory space, or access to tools? (Tick all that apply)

- ☐ Sensory room
☐ Sensory space
☐ Portable sensory tools
☐ None of the above
☐ Other (please specify)

Is there funding for resources that need replacing, are broken or lost?

- ☐ Yes
☐ No
☐ Partly
☐ Don't know

Can you describe any challenges in accessing Sensory Modulation resources?

Implementation: Te Pou Resources

Have you used the Te Pou Sensory Modulation resources? Such as training workshops, and information available on the Te Pou website (e.g. factsheets & reports)

Yes No Partly Don't know

☐☐☐☐

If yes, what did you find useful?

Implementation: Barriers and supports

What have been the key challenges in implementing Sensory Modulation at your DHB?

What have been the key factors that have supported implementation of Sensory Modulation in your DHB?

Monitoring and evaluation: Data

This section includes questions on the collection and use of data from staff and service users in your DHB.

Do you monitor the use of Sensory Modulation in your service?

Yes	No	Partly	Don't Know
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How do you monitor the use of Sensory Modulation? Please provide some examples

Monitoring and evaluation: Feedback from Service Users

Feedback from people accessing your services on the use of Sensory Modulation has been:

Negative	Mildly positive	Moderately positive	Extremely positive
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional comments

Have people accessing your services identified any areas for improvement on the use of Sensory Modulation?

Monitoring and evaluation: Staff feedback

We gather staff feedback on how well Sensory Modulation is being implemented in our service

Yes	No	Partly	Don't Know
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate how much you agree with the following statement:

Staff feedback indicates that Sensory Modulation has a positive effect on people accessing the service

Disagree	Mildly Agree	Moderately Agree	Strongly Agree	Don't Know
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments/ feedback on the monitoring and evaluation of Sensory Modulation in your service

Personal information and receiving feedback

Please provide the following details about yourself and indicate whether you would like to receive any feedback related to the stocktake

Your Name

Email address

Role

Service type (tick all that apply to you)

- ☐ Inpatient
- ☐ Community
- ☐ Forensic
- ☐ Adult services
- ☐ Older adult services
- ☐ Other (please specify)

*** DHB**

Would you like to receive a copy of the summary results of this stocktake once they're available?

☐ Yes

☐ No

Would you like to receive regular updates from Te Pou? (Tick all the mailing lists that you would like to sign up to)

☐ Te Pou e-bulletin - A fortnightly e-newsletter packed with information such as news, events, job vacancies and latest research for the mental health and addiction sector.

☐ Disability Workforce Development newsletter - An e-newsletter delivered to your inbox every two months. It profiles the latest disability sector news, stories, events and grant funding opportunities.

☐ Matua Raki newsletter - An e-newsletter delivered to your inbox three times a year profiling the work of Matua Raki and news from the addiction sector.

☐ Handover newsletter - Handover is a quarterly newsletter for mental health and addiction nurses. Selected stories from Handover will be delivered to your inbox monthly.

Would you be interested in being linked with other Sensory Modulation clinicians in New Zealand?

☐ Yes

☐ No

Any other comments or feedback about this survey

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