

**Medication Management Checklist for Supportive Living
Early Adopter Initiative**

Final Report

June 2013

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Executive Summary

Background and Method

Following publication and distribution of the Medication Management Checklist for Supportive Living in the summer of 2012, an early adopter initiative was undertaken with Alberta Health Services Senior's Health (AHS-SH). The purpose of the initiative was to:

- Encourage supportive living sites and their corporate organizations (where applicable) to use the checklist as part of a team self-assessment process to identify opportunities to improve medication safety within the site.
- Establish a baseline for medication management practices in supportive living in Alberta.

Supportive living (SL) sites and personal care homes (PCH) with spaces contracted to AHS were invited to voluntarily complete the checklist and submit their results to the Health Quality Council of Alberta (HQCA) between November 1, 2012 and January 31, 2013. Follow-up interviews with site managers and case managers were done to gather feedback on their experience with the checklist and self-assessment process.

Results

Of the 147 eligible SL sites in the province, 56 (38%) submitted data to the project; 10 of 30 eligible PCH operators submitted checklist results for at least one of their homes (Table 1). Participation rates varied between AHS zones, from 25% of sites in the Central Zone to 52% of sites in the South Zone.

Aggregate results at the provincial level shows strength ($\geq 90\%$ of sites rated themselves as fully implemented) in the following areas:

- Policies documenting the type of medication support offered to clients.
- Documentation of client medication support needs.
- Processes for documenting and sharing information on medication adverse reactions.
- Adjustment of medications in pre-packaged supplies by a pharmacy professional.
- Method of recording medication support provided to a client.
- Collection of expired and contaminated medications by pharmacy.
- Secure medication storage.
- Adequate lighting in areas where medication support activities take place.
- Medication administration/assistance record to document medication support.
- Process for ensuring clients receive their medication when a medication is missing or contaminated.
- Disposal of material with confidential client information.
- Established communication channels and lines of authority related to medications.

Aggregate results at the provincial level suggest there are challenges ($\leq 50\%$ of sites rated themselves as fully implemented) in implementing best practices in the following areas:

- Documentation in the care plan of explicit instructions related to the use of as needed (PRN) medications.
- Review of care and medication-related issues with the client and family six to eight weeks after admission.

- Faxing of medication orders restricted to urgent situations.
- Implementation of a delayed start policy for non-critical medications.
- Regular expiry date checks for medications not regularly exchanged by pharmacy.
- Process to regularly update photographs used for client identification.
- Documentation of transdermal patch and injection location and time, including patch removal.
- Minimizing interruptions during medication support activities.

Follow-up interviews with site managers and case managers revealed that e-mail is the preferred method of communication for both groups but presentations provide a welcome opportunity to learn more about the initiative. The incentive payment was not a driver of site participation but was appreciated as an acknowledgement of the time required to participate. Many sites who did not register for the initiative completed the checklist process independently.

The checklist was well-received – the background information on checklist items was very useful and the format was user friendly. Both site managers and case managers described the team process as effective and valuable – multiple perspectives were shared, what really happens with medications was discussed, and there was brainstorming of possible solutions. Team meetings resulted in a greater knowledge of the roles of and respect for different team members, and the pharmacist was identified as an essential participant in the self-assessment process. Most teams integrated development of a quality improvement plan with the checklist review and site managers felt they came away with concrete ideas for improvement that would enhance care of their clients. Sites who participated strongly recommend the checklist to others.

Conclusion

Overall the initiative achieved its goal of raising awareness about the checklist within the supportive living sector in Alberta and encouraging early adoption of this useful tool. The checklist aggregate results will be useful to help AHS-SH identify where challenges with medication management appear to exist and where additional supports to the supportive living sector to improve medication safety will be welcomed.

Background

The Medication Management Checklist for Supportive Living was developed in a two year collaborative project with Alberta Health Services (AHS) and Alberta Health to help supportive living sites:

- Learn about the features of a safe medication system and leading practices that help ensure safe and effective medication therapy for clients.
- Identify potential vulnerabilities in a site's medication system that could put clients at risk of medication adverse events, and that could be addressed through quality and safety improvement activities.

Following distribution of the checklist in the summer of 2012, an early adopter initiative was undertaken with AHS Senior's Health (AHS-SH). The purpose of the initiative was:

- To encourage supportive living sites and their corporate organizations (where applicable) to use the checklist as part of a team self-assessment process to identify opportunities to improve medication safety within the site.
- To establish a baseline for medication management practices in supportive living in Alberta.

Method

The method is described in Appendix 1. In summary, supportive living (SL) sites and personal care home (PCH) operators with spaces contracted to AHS were invited to voluntarily complete the checklist and submit their results to the Health Quality Council of Alberta (HQCA). Those who submitted their results by the project deadline received a \$500 incentive payment to defray the costs of their participation, and were sent a comparative feedback report at the end of the project. Follow-up interviews with site managers and case managers were completed to gather feedback on their experience with the checklist and self-assessment process and resulting quality improvement activities. Reports summarizing the findings of the follow-up interviews are available from the HQCA upon request.

Results

1. Participating sites

Of the 147 eligible SL sites in the province, 56 (38%) submitted data to the project; 10 of 30 eligible PCH operators submitted checklist results for at least one of their homes (Table 1). Participation rates varied between zones, from 25% of sites in the Central Zone to 52% of sites in the South Zone. Follow-up with site managers after the project revealed that one-third of sites who did not register for the project actually completed the checklist process but chose not to submit their results, usually because they were unable to schedule their team meeting within the timeframe of the project. Enough sites participated from each zone to enable aggregate data analysis at the zone level (Appendix 2).

Table 1. Participation Rate by Zone

AHS Zone	Supportive Living Sites			Personal Care Home Operators			Total
	# Sites	# Registered (%)	# Completed (%)	# Sites	# Registered (%)	# Completed (%)	
South	31	17 (55%)	16 (52%)				16
Calgary	20	10 (50%)	10 (50%)	18	9 (50%)	9 (50%)	19
Central	32	12 (38%)	8 (25%)				8
Edmonton	48	20 (42%)	16 (33%)	12	1 (8%)	1 (8%)	17
North	16	6 (38%)	6 (38%)				6
Total	147	65 (44%)	56 (38%)	30	10 (33%)	10 (33%)	66

Characteristics of participating sites are described in Tables 2 and 3. Many of the sites had a mixed client population requiring different levels of care. Just over half (55%) of the SL sites worked with a single community pharmacy provider; it was common for sites to receive their pharmacy services from two or more pharmacies. Most sites had a healthcare aide (HCA) on site 24-hours a day and 60% of sites had a licensed practical nurse (LPN) on-site 24 hours a day. Almost half had a registered nurse available during the day.

Table 2. Characteristics of Participating Sites

Site Characteristic		# SL + PCH Sites
Location	Urban (population >60,000)	35
	Rural (population <60,000)	31
Level of Care Provided	Level 2 (Lodge)	10
	Level 3 (Supportive Living)	45
	Level 4 (Enhanced SL)	33
	Level 4D (Dementia Care)	29
	Long term care	2
Number of clients	<10	9
	10 – 25	8
	26 – 50	13

	51 – 100	17
	>100	19
Number of Pharmacies	One	37
	Two	10
	Three or more	19

Table 3. Care Provider Staffing of Participating Sites

Type	Days	Evenings	Nights	On-Call
Health care aide	66	66	62	0
Licensed practical nurse	47	42	40	6
Registered nurse	32	4	3	49

2. Checklist Item Results

The checklist item results represent the consensus opinion of each site team about whether the item was fully, partially or not in place, or not applicable. In the following section, provincial aggregate results for each item on the checklist are summarized by key element. Commentary on the provincial aggregate highlights overall areas of strength (usually items rated as fully in place by 90% or more of sites – highlighted in green) and areas of challenge (usually items rated as fully in place by 50% or fewer sites or for which more than 15% of sites indicate the practice is not in place – highlighted in orange) in the province. Zone results compared to the provincial aggregate for each checklist item are presented in Appendix 1.

Table 4. Provincial Aggregate Results: Key Element 1

Key Element 1	Item Number	Fully in place # (%)	Partly in place # (%)	Not in place # (%)	Not applicable # (%)
Client assessment and medication support needs	1.1	56 (84.9)	9 (13.6)	1 (1.5)	0
	1.2	53 (80.3)	11(16.7)	2 (3.0)	0
	1.3	36 (54.6)	17 (25.8)	2 (3.0)	11 (16.7)
	1.4	48 (72.7)	13 (19.7)	5 (7.6)	0
	1.5	60 (90.9)	4 (6.1)	2 (3.0)	1 (1.5)
	1.6	29 (43.9)	28 (42.4)	5 (7.6)	3 (4.6)
	1.7	60 (90.9)	5 (7.6)	0	1 (1.5)

Key Element 1: Client Assessment and Medication Support Needs

Sites rated themselves most highly on their policies related to types of medication support provided to clients and documentation of client medication support needs in an easily accessible location for staff.

An item that relates to a project underway by AHS-SH is assessment and documentation of a client’s ability to self-administer medications. Of sites which rated this practice as applicable, 64.3% indicated the item was fully in place and a further 30.4% indicated the item was partially in place. Seventy-three per cent of sites indicated that they have a standardized tool and process in place to support this process.

The area of greatest challenge appears to be managing as needed (PRN) medications – only 45% of sites rated this item to be fully in place. During the site manager interviews, this issue was often mentioned as one that the team planned to address through a quality improvement process.

Table 5. Provincial Aggregate Results: Key Element 2

Key Element 2	Item Number	Fully in place # (%)	Partly in place # (%)	Not in place # (%)	Not applicable # (%)
Client medication information	2.1	43 (65.2)	15 (22.7)	8 (12.1)	0
	2.2	47 (71.2)	14 (21.2)	5 (7.6)	0
	2.3	55 (83.3)	11 (16.7)	0	0
	2.4	52 (78.8)	7 (10.6)	7 (10.6)	0
	2.5	60 (90.0)	5 (7.6)	1 (1.5)	0
	2.6	27 (40.9)	20 (30.3)	16 (24.2)	3 (4.6)
	2.7	52 (78.8)	12 (18.2)	1 (1.5)	1 (1.5)
	2.8	43 (65.2)	22 (33.3)	1 (1.5)	0
	2.9	34 (51.5)	25 (37.9)	4 (6.1)	3 (4.6)
	2.10	49 (74.2)	6 (9.1)	11 (16.7)	0

Key Element 2: Client Medication Information

Ninety per cent of sites rated themselves as having fully in place processes for documenting and sharing information about medication adverse reactions.

An initiative to support implementation of best practices related to medication reconciliation and best possible medication history (BPMH) is underway in AHS-SH. The checklist results for these practices are encouraging: 65% of sites indicated that a BPMH process on admission and at transitions in care is fully in place; 12% of sites indicate this is not done. Medication reconciliation, which relies on a BPMH, was rated as fully in place by 71% of sites but not in place in 8% of sites. Both of these processes rely on collaboration with community partners.

There were a number of items in this key element which sites self-assessed as being either partially or not in place. Only 41% of sites review care and medication-related issued with clients within eight weeks of

admission; 24% of sites indicate this process is not in place. Documentation of client response to a PRN medication was rated fully in place by 52% of sites and partially in place by a further 38%. While a single client record is maintained by 75% of sites, 17% of sites indicated that this was not in place.

Table 6. Provincial Aggregate Results: Key Element 3

Key Element 3	Item Number	Fully in place # (%)	Partly in place # (%)	Not in place # (%)	Not applicable # (%)
Communication of medication orders	3.1	51 (77.3)	13 (19.7)	2 (3.0)	0
	3.2	23 (34.9)	15 (22.7)	21 (31.8)	7 (10.6)
	3.3	44 (66.7)	10 (15.2)	7 (10.6)	5 (7.6)
	3.4	23 (34.9)	40 (60.6)	3 (4.6)	0
	3.5	46 (69.7)	18 (27.3)	2 (3.0)	0
	3.6	25 (37.9)	34 (51.5)	7 (10.6)	0

Key Element 3: Communication of Medication Orders

Meeting the recommendations for this key element appears to be a challenge for most sites, probably because these processes require considerable coordination and communication with community partners, especially the pharmacist. None of the items in this key element were rated as fully in place by 90% or more of sites.

Sites appear to be facing significant challenges related to faxing medication orders, receiving medication orders that include explicit instructions for use, and communication of changes in medication therapy to clients and their families. Approximately one-third of sites rated themselves as having these items fully in place. In particular, faxing prescriptions between the site and the pharmacy appears to be a common practice that is not confined to urgent situations as recommended.

Table 7. Provincial Aggregate Results: Key Element 4

Key Element 4	Item Number	Fully in place # (%)	Partly in place # (%)	Not in place # (%)	Not applicable # (%)
Pharmacy services	4.1	49 (74.2)	4 (6.1)	8 (12.1)	5 (7.6)
	4.2	45 (68.2)	7 (10.6)	11 (16.7)	3 (4.6)
	4.3	55 (83.3)	3 (4.6)	3 (4.6)	5 (7.6)
	4.4	50 (75.8)	11 (16.7)	5 (7.6)	0
	4.5	45 (68.2)	10 (15.2)	11 (16.7)	0
	4.6	61 (92.4)	3 (4.6)	2 (3.0)	0
	4.7	53 (80.3)	12 (18.2)	1 (1.5)	0

	4.8	55 (83.3)	9 (13.6)	2 (3.0)	0
	4.9	64 (97.0)	1 (1.5)	1 (1.5)	0
	4.10	44 (66.7)	16 (24.2)	5 (7.6)	1 (1.5)
	4.11	53 (80.3)	4 (6.1)	9 (13.6)	0
	4.12	28 (42.4)	10 (15.2)	24 (36.4)	4 (6.1)
	4.13	58 (87.9)	7 (10.6)	1 (1.5)	0
	4.14	59 (89.4)	6 (9.1)	1 (1.5)	0
	4.15	62 (93.9)	3 (4.6)	1 (1.5)	0

Key Element 4: Pharmacy Services

The site's relationship with their pharmacy service provider(s) are reflected in the ratings for the items in this key element. Ninety per cent or more sites felt they had fully in place items related to adjustment of medications in pre-packaged client supplies, a method of recording medication support activities for a client, and collection of expired or discarded medications by the pharmacy service provider.

Areas of challenge where more than 15% of sites rated the item as not in place include a service agreement with the pharmacy service provider(s), after-hours service from the pharmacy(s), and a delayed-start policy for non-critical medications.

Table 8. Provincial Aggregate Results: Key Element 5

Key Element 5	Item Number	Fully in place # (%)	Partly in place # (%)	Not in place # (%)	Not applicable # (%)
Medication storage	5.1	64 (97.0)	2 (3.0)	0	0
	5.2	28 (42.4)	7 (10.6)	20 (30.3)	11 (16.7)
	5.3	58 (87.9)	5 (7.6)	0	3 (4.6)
	5.4	62 (93.9)	3 (4.6)	1 (1.5)	0
	5.5	59 (89.4)	3 (4.6)	2 (3.0)	2 (3.0)
	5.6	44 (66.7)	14 (21.2)	4 (6.1)	4 (6.1)
	5.7	55 (83.3)	9 (13.6)	2 (3.0)	0
	5.8	36 (54.6)	21 (31.8)	6 (9.1)	3 (4.6)
	5.9	41 (62.1)	14 (21.2)	5 (7.6)	6 (9.1)

Key Element 5: Medication Storage

In contrast to key elements 3 and 4, medication storage at the site is a process that is mainly under control of the site. Areas of strength are those related to secure medication storage and adequate lighting during medication support activities.

Regular checks of medication expiry dates for medications not regularly replaced by pharmacy and checks of the temperature of refrigerators used to store medications in a central location are areas of challenge for more than 40% of sites who rated these items as partly or not in place.

Table 9. Provincial Aggregate Results: Key Element 6

Key Element 6	Item Number	Fully in place # (%)	Partly in place # (%)	Not in place # (%)	Not applicable # (%)
Medication support activities	6.1	54 (81.8)	7 (10.6)	1 (1.5)	4 (6.1)
	6.2	38 (57.6)	18 (27.3)	10 (15.2)	0
	6.3	56 (84.9)	8 (12.1)	2 (3.0)	0
	6.4	41 (62.1)	17 (25.8)	8 (12.1)	0
	6.5	52 (78.8)	9 (13.6)	4 (6.1)	1 (1.5)
	6.6	61 (92.4)	5 (7.6)	0	0
	6.7	49 (74.2)	11 (16.7)	5 (7.6)	1 (1.5)
	6.8	50 (75.8)	13 (19.7)	1 (1.5)	2 (3.0)
	6.9	57 (86.4)	9 (13.6)	0	0
	6.10	66 (100)	0	0	0
	6.11	56 (84.9)	10 (15.2)	0	0
	6.12	59 (89.4)	7 (10.6)	0	0
	6.13	35 (53.0)	19 (28.8)	6 (9.1)	6 (9.1)
	6.14	49 (74.2)	13 (19.7)	2 (3.0)	2 (3.0)
	6.15	64 (97.0)	2 (3.0)	0	0
	6.16	55 (83.3)	5 (7.6)	6 (9.1)	0

Key Element 6: Medication Support Activities

This is another key element where the items relate to processes that are largely controlled by the site. All sites have fully in place a record on which to document medication support. Other areas of strength are how missing medications are handled and disposal of materials that have confidential client information on them.

Areas of challenge include minimizing interruptions to staff during medication support activities, and documentation related to transdermal patches and injections. Almost 10% of sites do not have a process in place to record injection or patch placement site or time of patch removal.

Table 10. Provincial Aggregate Results: Key Element 7

Key Element 7	Item Number	Fully in place # (%)	Partly in place # (%)	Not in place # (%)	Not applicable # (%)
Healthcare provider competence	7.1	52 (78.8)	12 (18.2)	2 (3.0)	0
	7.2	55 (83.3)	6 (9.1)	4 (6.1)	1 (1.5)
	7.3	58 (87.9)	5 (7.6)	3 (4.6)	0
	7.4	60 (90.9)	6 (9.1)	0	0
	7.5	50 (75.8)	14 (21.2)	2 (3.0)	0
	7.6	25 (37.9)	7 (10.6)	3 (4.6)	31 (47.0)
	7.7	41 (62.1)	14 (21.2)	8 (12.1)	3 (4.6)

Key Element 7: Healthcare Provider Competence

Sites were very confident in their established communication channels and lines of authority related to medications, with 91% of sites rating themselves as fully implemented for this item.

Ongoing competency assessment of healthcare aides appears to be a challenge for many sites, with one-third indicating that a process is either partially or not in place to ensure this is completed at least annually and under the supervision of a regulated healthcare provider.

Table 11. Provincial Aggregate Results: Key Element 8

Key Element 8	Item Number	Fully in place # (%)	Partly in place # (%)	Not in place # (%)	Not applicable # (%)
Medication system quality and safety	8.1	42 (63.6)	16 (24.2)	8 (12.1)	0
	8.2	55 (83.3)	11 (16.7)	0	0
	8.3	58 (87.9)	4 (6.1)	4 (6.1)	0
	8.4	56 (84.9)	7 (10.6)	3 (4.6)	0

Key Element 8: Medication System Quality and Safety

Results for this key element were encouraging with over 80% of sites indicating that three of the four items were fully in place. A planned, systematic program through which continual improvement in medication safety is undertaken was partially or not in place in 36% of sites. In the follow-up interviews, site managers acknowledged that quality and safety improvement is a new activity for them and that most do not have a program in place to continually improve the quality of their services in a structured way.

3. Site Manager and Case Manager Interviews

Major findings from the site manager and case manager interviews are summarized in this section. Reports summarizing the findings of the follow-up interviews are available from the HQCA upon request.

3.1 Effectiveness of Communication Strategies

E-mail is the preferred communication medium for both site managers and case managers. Sites recommended that both the site manager and the Director of Care (larger sites or multi-site organizations) be informed about future initiatives. Presentations by the project manager were a useful forum through which questions about the checklist and initiative could be answered. The incentive payment was not a driver of site participation but was appreciated as an acknowledgement of the time required to participate. Site managers noted that the timing of the initiative was challenging (November through January) and recommended a spring or fall timeframe for future initiatives.

Of the 21 non-registered sites whose manager was interviewed, seven had completed the checklist process without registering, seven had not heard of the initiative, and five found that lack of time or competing priorities precluded their participation; two sites noted that they already had good medication policies in place so the checklist would not be a productive use of time. About one-third of case managers interviewed worked with a site which completed the self-assessment but did not invite the case manager to participate.

3.2 Experience with the Checklist and the Self-Assessment process

Site managers experienced difficulty in finding a time for a meeting which all team members could attend. The case manager was particularly difficult to schedule because of the case workload. Many sites ended up having to gather pharmacist input after the meeting.

Both site managers and case managers described the team process as effective and valuable – multiple perspectives were shared, what really happens with medications was discussed, and there was brainstorming of possible solutions. Case managers said they came away with a greater knowledge of the roles of and respect for different team members, especially the healthcare aide. Both site managers and case managers agreed that a pharmacist is essential to the process and meetings without a pharmacist would have been stronger with one present. Site managers strongly recommend use of the checklist to others.

Site managers felt the checklist instructions were clear and the background information was very useful. The format was user-friendly, with background information on the page facing the related checklist items. The facilitator guide was appreciated but the quality improvement planning tools were rarely used. Case managers noted that they didn't have a clear sense of their role in the process prior to the meeting and few received a copy of the checklist in advance of the meeting.

3.3 Experience with Follow-Up Quality Improvement Activities

Most teams integrated development of a quality improvement plan with the checklist review; few used the planning tools in the checklist to support a formal quality improvement process. Typically, checklist items identified as partially or not in place triggered a team discussion about ways to address that item. Site managers felt they came away with concrete ideas for improvement. They commented that self-

assessment was a new concept to them, but they found it useful and want to repeat the process. They welcome self-assessment tools for other aspects of practice. The case manager view of improvement activities resulting from the meeting was different – many commented that at the end of the meeting they did not have a clear sense of what needed to be improved or how to implement those improvements, and most did not expect to be involved in improvement activities. The evaluators who conducted the case manager interviews noted that “relationships are important”: case managers who were part of a team truly engaged in the self-assessment process found it worthwhile; those who did not perceive themselves as part of a cohesive team rated the experience less positively and were less likely to perceive that a plan for change resulted.

Conclusion

The aims of the checklist early adopter initiative were to encourage use of the checklist by SL sites and PCH, and to establish a baseline of medication management practices in supportive living in Alberta. Although less than 40% of eligible SL sites and PCH in Alberta completed the initiative, follow-up interviews suggest that more completed the checklist process independently. This is encouraging participation from a sector that is facing many challenges and demands on staff time. Follow-up interviews suggest that sites found the self-assessment process and checklist tool to be a worthwhile investment of time and that it should be repeated in the future. Some site managers commented that similar checklist self-assessment processes might be helpful to review other aspects of their practice.

The baseline for medication management practices in supportive living in Alberta established by this initiative is based on results from 37% of sites with spaces contracted to AHS-SH. It is difficult to know if this accurately represents typical practice throughout the sector in Alberta. Often early adopters are those with an interest in the topic and conscientious about implementation of best practices. However two follow-up interviews discovered that some sites chose not to use the checklist because they felt their medication systems were already good so there was no value in spending time going through the checklist. The aggregate results show a similar pattern of strengths and challenges in the medication system in supportive living across all AHS zones which suggests that participation during the initiative was adequate to help identify some areas where SL sites and PCH may need support to improve client medication safety. These results also send a strong message to the pharmacy community about their important role in helping SL sites and PCH create medication systems that optimize client safety.

Overall the initiative achieved its goal of raising awareness about the checklist within the supportive living sector in Alberta and encouraging early uptake of this useful tool. The checklist aggregate results will be useful to help AHS-SH identify where challenges with medication management appear to exist and where additional supports to the supportive living sector to improve medication safety will be welcomed.

Appendix 1: Early Adopter Initiative Method

1. SL sites and PCH with spaces contracted to AHS were invited to participate in the initiative. Participation was voluntary.
2. Information about the initiative was communicated to eligible site managers, their corporate organizations (where applicable) and AHS case managers who provide services to clients in supportive living through a variety of means:
 - E-mail communication.
 - Presentations at stakeholder meetings – either in-person, teleconference or teleconference supported by local or internet slide presentation.
 - Letter sent by mail.
3. An incentive payment of \$500 was offered by AHS-SH to sites which completed the team self-assessment process and submitted their checklist results to the HQCA between November 1, 2012 and January 31, 2013. The incentive was offered to defray the costs to the site of having site staff (manager, regulated nursing staff, healthcare aides) participate in the team self-assessment process.
4. To participate, sites registered with the HQCA and were sent a facilitator kit that included:
 - An information sheet explaining the purpose of the project, how the data from the project would be analyzed and used, and how protection of privacy of participating sites would be maintained.
 - Sufficient copies of the checklist for all team members participating in the meeting.
 - A data collection form and instructions for completing the data collection and submission process.
 - A stamped, pre-addressed envelope in which to return the data collection form to the HQCA.
 - Instructions on how to prepare an invoice for AHS-SH in order to expedite payment of the incentive.
 - HQCA project manager contact information for questions or concerns.
5. Each site was given a code by the HQCA project manager, and the data collection form was pre-coded before it was sent to the site. Sites were asked not to put any other identifying information on the data collection form. Site codes were maintained in a locked document on a server in the HQCA office. Sites were identified only by their code in the data file (below).
6. For each checklist item, sites were asked to record a single response that best represents actual practice at the site, not simply whether there was a policy, procedure or process in place. The following response options were available:
 - Yes – all components of the checklist item are in place
 - Partly – some of the components of the checklist item are in place
 - No – checklist item is applicable but is not in place
 - Not applicable – Checklist item is not applicable to clients at the site
7. Data collection forms were returned to the HQCA project manager who ensured that no information identifying the site had been added to the form. In February 2013, all data collection forms that had been received were sent to Data Integration Management and Reporting (DIMR) in AHS for creation of the data set. The final data set was then sent back to the HQCA for analysis and creation of reports.
8. Reports were created for different stakeholder groups:
 - Aggregate results at the provincial and zone levels. These reports were provided to AHS-SH and Zone executives.

- Individual site results compared to the zone and provincial results. These reports were provided to each participating site.
 - Corporate results showing site results for those organizations compared to the provincial results. These reports were provided to selected corporate organizations which encouraged most or all of their sites to participate.
9. Interviews with site administrators and AHS case managers were conducted after the initiative was complete. The purpose of the interviews was to gather information about the effectiveness of the communication strategies used to inform stakeholders about the initiative, their experience with the checklist and team self-assessment process, and their experience with following through with a quality improvement process. A purposive sampling strategy was used to ensure representation from sites who had completed the initiative, registered but not completed, and not registered. The sample included sites from each zone, type of site (SL and PCH), and different site size. Reports from the site manager and case manager interviews are available from the HQCA upon request.

Appendix 2. Provincial and Zone Aggregate Results

Note: Questions from the checklist are paraphrased for brevity.

Key Element 1: Client Assessment and Medication Support Needs

Question 1.1: Collection and use of client assessment information.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	56 (84.9)	12 (75.0)	17 (89.5)	8 (100.0)	14 (82.4)	5 (83.3)
Partly in place	9 (13.6)	4 (25.0)	1 (5.3)	0	3 (17.7)	1 (16.7)
Not in place	1 (1.5)	0	1 (5.3)	0	0	0
Not applicable	0	0	0	0	0	0

Question 1.2: Medication support activities for a client are documented.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	53 (80.3)	9 (56.3)	18 (94.7)	7 (87.5)	15 (88.2)	4 (66.7)
Partly in place	11 (16.7)	7 (43.8)	1 (5.3)	1 (12.5)	0	2 (33.3)
Not in place	2 (3.0)	0	0	0	2 (11.8)	0
Not applicable	0	0	0	0	0	0

Question 1.3: Assessment and documentation of clients' ability to self-administer medications.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	36 (54.6)	11 (68.8)	6 (31.6)	6 (75.0)	7 (41.2)	6 (100.0)
Partly in place	17 (25.8)	4 (25.0)	6 (31.6)	1 (12.5)	6 (35.3)	0
Not in place	2 (3.0)	0	1 (5.3)	0	1 (5.9)	0
Not applicable	11 (16.7)	1 (6.3)	6 (31.6)	1 (12.5)	3 (17.7)	0

Question 1.4: Standardized process and decision support/documentation tool used to assess client's ability to self-administer medications.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	48 (72.7)	12 (75.0)	16 (84.2)	4 (50.0)	11 (64.7)	5 (83.3)
Partly in place	13 (19.7)	3 (18.8)	3 (15.8)	4 (50.0)	3 (17.7)	0
Not in place	5 (7.6)	1 (6.3)	0	0	3 (17.7)	1 (16.7)
Not applicable	0	0	0	0	0	0

Question 1.5: Site policies describe medication support activities.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	60 (90.9)	14 (87.5)	19 (100.0)	6 (75.0)	15 (88.2)	6 (100.0)
Partly in place	4 (6.1)	1 (6.3)	0	2 (25.0)	1 (5.9)	0
Not in place	2 (3.0)	1 (6.3)	0	0	1 (5.9)	0
Not applicable	0	0	0	0	0	0

Question 1.6: Care plan related to medication support for PRN medications.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	29 (43.9)	5 (31.3)	12 (63.2)	4 (50.0)	6 (35.3)	2 (33.3)
Partly in place	28 (42.4)	10 (62.5)	5 (26.3)	2 (25.0)	9 (52.9)	2 (33.3)
Not in place	5 (7.6)	1 (6.3)	2 (10.5)	1 (12.5)	1 (5.9)	0
Not applicable	3 (4.6)	0	0	1 (12.5)	1 (5.9)	1 (16.7)

Question 1.7: Documentation of a daily reminder of the client's medication support needs.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	60 (90.9)	15 (93.8)	17 (89.5)	7 (87.5)	15 (88.2)	6 (100.0)
Partly in place	5 (7.6)	1 (6.3)	1 (5.3)	1 (12.5)	2 (11.8)	0
Not in place	0	0	0	0	0	0
Not applicable	0	0	1 (5.3)	0	0	0

Key Element 2: Client Medication Information

Question 2.1: Best possible medication history completed on admission and at transitions in care.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	43 (65.2)	6 (37.5)	15 (79.0)	5 (62.5)	12 (70.6)	5 (83.3)
Partly in place	15 (22.7)	8 (50.0)	1 (5.3)	3 (37.5)	2 (11.8)	1 (16.7)
Not in place	8 (12.1)	2 (12.5)	3 (15.8)	0	3 (17.7)	0
Not applicable	0	0	0	0	0	0

Question 2.2: Medication reconciliation completed on admission and at transitions in care.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	47 (71.2)	10 (62.5)	17 (89.5)	5 (62.5)	10 (58.8)	5 (83.3)
Partly in place	14 (21.2)	5 (31.3)	2 (10.5)	2 (25.0)	4 (23.5)	1 (16.7)
Not in place	5 (7.6)	1 (6.3)	0	1 (12.5)	3 (17.7)	0
Not applicable	0	0	0	0	0	0

Question 2.3: Documentation of information about medication allergies and adverse reactions.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	55 (83.3)	10 (62.5)	18 (94.7)	5 (62.5)	16 (94.1)	6 (100.0)
Partly in place	11 (16.7)	6 (37.5)	1 (5.3)	3 (37.5)	1 (5.9)	0
Not in place	0	0	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 2.4: Documentation of medications that a client should not receive is visible at the time of medication support.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	52 (78.8)	12 (75.0)	16 (84.2)	5 (62.5)	15 (88.2)	4 (66.7)
Partly in place	7 (10.6)	2 (12.5)	3 (15.8)	1 (12.5)	1 (5.9)	0
Not in place	7 (10.6)	2 (12.5)	0	2 (25.0)	1 (5.9)	2 (33.3)
Not applicable	0	0	0	0	0	0

Question 2.5: Assessment and documentation of suspected medication adverse reaction.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	60 (90.9)	12 (75.0)	17 (89.5)	8 (100.0)	17 (100.0)	6 (100.0)
Partly in place	5 (7.6)	3 (18.8)	2 (10.5)	0	0	0
Not in place	1 (1.5)	1 (6.3)	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 2.6: Care and medication issues reviewed with client within 8 weeks of admission.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	27 (40.9)	8 (50.0)	4 (21.1)	1 (12.5)	11 (64.7)	3 (50.0)
Partly in place	20 (30.3)	4 (25.0)	9 (47.4)	3 (37.5)	4 (23.5)	0
Not in place	16 (24.2)	3 (18.8)	6 (31.6)	2 (25.0)	2 (11.8)	3 (50.0)
Not applicable	3 (4.6)	1 (6.3)	0	2 (25.0)	0	0

Question 2.7: Medication review with interRAI assessments or significant change in client health status.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	52 (78.8)	7 (43.8)	17 (89.5)	7 (87.5)	15 (88.2)	6 (100.0)
Partly in place	12 (18.2)	7 (43.8)	2 (10.5)	1 (12.5)	2 (11.8)	0
Not in place	1 (1.5)	1 (6.3)	0	0	0	0
Not applicable	1 (1.5)	1 (6.3)	0	0	0	0

Question 2.8: Documentation of issues identified during medication review, and medications administered by emergency medical services personnel on site.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	43 (65.2)	8 (50.0)	15 (79.0)	4 (50.0)	12 (70.6)	4 (66.7)
Partly in place	22 (33.3)	8 (50.0)	4 (21.1)	3 (37.5)	5 (29.4)	2 (33.3)
Not in place	1 (1.5)	0	0	1 (12.5)	0	0
Not applicable	0	0	0	0	0	0

Question 2.9: Client response to a PRN medication is recorded.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	34 (51.5)	5 (31.3)	15 (79.0)	1 (12.5)	9 (52.9)	4 (66.7)
Partly in place	25 (37.9)	7 (43.8)	4 (21.1)	5 (62.5)	8 (47.1)	1 (16.7)
Not in place	4 (6.1)	2 (12.5)	0	1 (12.5)	0	1 (16.7)
Not applicable	3 (4.6)	2 (12.5)	0	1 (12.5)	0	0

Question 2.10: Single client record maintained at the site.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	49 (74.2)	13 (81.3)	13 (68.4)	7 (87.5)	10 (58.8)	6 (100.0)
Partly in place	6 (9.1)	1 (6.3)	2 (10.5)	1 (12.5)	2 (11.8)	0
Not in place	11 (16.7)	2 (12.5)	4 (21.1)	0	5 (29.4)	0
Not applicable	0	0	0	0	0	0

Key Element 3: Communication of Medication Orders

Question 3.1: Pharmacists receive a client medication order by acceptable means.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	51 (77.3)	13 (81.3)	18 (94.7)	8 (100.0)	8 (47.1)	4 (66.7)
Partly in place	13 (19.7)	2 (12.5)	1 (5.3)	0	9 (52.9)	1 (16.7)
Not in place	2 (3.0)	1 (6.3)	0	0	0	1 (16.7)
Not applicable	0	0	0	0	0	0

Question 3.2: Faxing of medication orders restricted to urgent situations.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	23 (34.9)	5 (31.3)	7 (36.8)	3 (37.5)	4 (23.5)	4 (66.7)
Partly in place	15 (22.7)	3 (18.8)	5 (26.3)	2 (25.0)	4 (23.5)	1 (16.7)
Not in place	21 (31.8)	7 (43.8)	5 (26.3)	1 (12.5)	7 (41.2)	1 (16.7)
Not applicable	7 (10.6)	1 (6.3)	2 (10.5)	2 (25.0)	2 (10.6)	0

Question 3.3: Verbal prescriptions are restricted to urgent situations and verified with the prescriber.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	44 (66.7)	6 (37.5)	14 (73.7)	6 (75.0)	13 (76.5)	5 (83.3)
Partly in place	10 (15.2)	4 (25.0)	3 (15.8)	1 (12.5)	1 (5.9)	1 (16.7)
Not in place	7 (10.6)	4 (25.0)	0	0	3 (17.7)	0
Not applicable	5 (7.6)	2 (12.5)	2 (10.5)	1 (12.5)	0	0

Question 3.4: Medication orders include explicit instructions for use.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	23 (34.9)	1 (6.3)	11 (57.9)	4 (50.0)	6 (35.3)	1 (16.7)
Partly in place	40 (60.6)	15 (93.8)	7 (36.8)	4 (50.0)	11 (64.7)	3 (50.0)
Not in place	3 (4.6)	0	1 (5.3)	0	0	2 (33.3)
Not applicable	0	0	0	0	0	0

Question 3.5: Changes in medication orders are communicated among all care providers.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	46 (69.7)	6 (37.5)	16 (84.2)	6 (75.0)	12 (70.6)	6 (100.0)
Partly in place	18 (27.3)	8 (50.0)	3 (15.8)	2 (25.0)	5 (29.4)	0
Not in place	2 (3.0)	2 (12.5)	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 3.6: Changes in medication therapy are communicated to clients and their families.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	25 (37.9)	3 (18.8)	9 (47.4)	4 (50.0)	7 (41.2)	2 (33.3)
Partly in place	34 (51.5)	10 (62.5)	7 (36.8)	4 (50.0)	9 (52.9)	4 (66.7)
Not in place	7 (10.6)	3 (18.8)	3 (15.8)	0	1 (5.9)	0
Not applicable	0	0	0	0	0	0

Key Element 4: Pharmacy Services

Question 4.1: Site has a process in place to select a preferred pharmacy provider(s).

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	49 (74.2)	13 (81.3)	17 (89.5)	4 (50.0)	13 (76.5)	2 (33.3)
Partly in place	4 (6.1)	1 (6.3)	1 (5.3)	1 (12.5)	0	1 (16.7)
Not in place	8 (12.1)	1 (6.3)	0	2 (50.0)	4 (23.5)	1 (16.7)
Not applicable	5 (7.6)	1 (6.3)	1 (5.3)	1 (12.5)	0	2 (33.3)

Question 4.2: Site has a service agreement with its pharmacy provider(s).

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	45 (68.2)	13 (81.3)	16 (84.2)	4 (50.0)	8 (47.1)	4 (66.7)
Partly in place	7 (10.6)	0	3 (15.8)	0	3 (17.7)	1 (16.7)
Not in place	11 (16.7)	2 (12.5)	0	3 (37.5)	6 (35.3)	0
Not applicable	3 (4.6)	1 (6.3)	0	1 (12.5)	0	1 (16.7)

Question 4.3: Site informs clients about why a preferred pharmacy provider(s) is recommended.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	55 (83.3)	13 (81.3)	18 (94.7)	4 (50.0)	16 (94.1)	4 (66.7)
Partly in place	3 (4.6)	1 (6.3)	1 (5.3)	0	1 (5.9)	0
Not in place	3 (4.6)	2 (12.5)	0	1 (12.5)	0	0
Not applicable	5 (7.6)	0	0	3 (37.5)	0	2 (33.3)

Question 4.4: All pharmacies providing services to a site standardize their medication systems.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	50 (75.8)	11 (68.8)	18 (94.7)	6 (75.0)	11 (64.7)	4 (66.7)
Partly in place	11 (16.7)	4 (25.0)	1 (5.3)	1 (12.5)	4 (23.5)	1 (16.7)
Not in place	5 (7.6)	1 (6.3)	0	1 (12.5)	2 (11.8)	1 (16.7)
Not applicable	0	0	0	0	0	0

Question 4.5: After hours pharmacy services is available from all pharmacy service providers.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	45 (68.2)	12 (75.0)	15 (79.0)	4 (50.0)	11 (64.7)	3 (50.0)
Partly in place	10 (15.2)	3 (18.8)	1 (5.3)	2 (25.0)	3 (17.7)	1 (16.7)
Not in place	11 (16.7)	1 (6.3)	3 (15.8)	2 (25.0)	3 (17.7)	2 (33.3)
Not applicable	0	0	0	0	0	0

Question 4.6: Adjustments to pre-packaged client supplies are done by a pharmacy professional.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	61 (92.4)	15 (93.8)	18 (94.7)	7 (87.5)	15 (88.2)	6 (100.0)
Partly in place	3 (4.6)	0	0	1 (12.5)	2 (11.8)	0
Not in place	2 (3.0)	1 (6.3)	1 (5.3)	0	0	0
Not applicable	0	0	0	0	0	0

Question 4.7: Pharmacy provides special instructions for use of a medication that are noticeable at the time of medication support.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	53 (80.3)	13 (81.3)	15 (79.0)	8 (100.0)	15 (88.2)	2 (33.3)
Partly in place	12 (18.2)	3 (18.8)	4 (21.1)	0	1 (5.9)	4 (66.7)
Not in place	1 (1.5)	0	0	0	1 (5.9)	0
Not applicable	0	0	0	0	0	0

Question 4.8: Pharmacy provides a current list of client medications on admission and with order changes.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	55 (83.3)	13 (81.3)	16 (84.2)	7 (87.5)	13 (76.5)	6 (100.0)
Partly in place	9 (13.6)	2 (12.5)	3 (15.8)	0	4 (23.5)	0
Not in place	2 (3.0)	1 (6.3)	0	1 (12.5)	0	0
Not applicable	0	0	0	0	0	0

Question 4.9: Method of recording medication support activities maintained at the site.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	64 (97.0)	15 (93.8)	19 (100.0)	8 (100.0)	16 (94.1)	6 (100.0)
Partly in place	1 (1.5)	0	0	0	1 (5.9)	0
Not in place	1 (1.5)	1 (6.3)	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 4.10: Medication information on the MA/AR is standardized between all pharmacy providers and is consistent with medication labeling.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	44 (66.7)	9 (56.3)	16 (84.2)	5 (62.5)	11 (64.7)	3 (50.0)
Partly in place	16 (24.2)	5 (31.3)	3 (15.8)	2 (25.0)	4 (23.5)	2 (33.3)
Not in place	5 (7.6)	1 (6.3)	0	1 (12.5)	2 (11.8)	1 (16.7)
Not applicable	1 (1.5)	1 (6.3)	0	0	0	0

Question 4.11: Standardized day and time for medication delivery for all pharmacy service providers.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	53 (80.3)	13 (81.3)	18 (94.7)	6 (75.0)	12 (70.6)	4 (66.7)
Partly in place	4 (6.1)	2 (12.5)	0	0	2 (11.8)	0
Not in place	1 (6.3)	1 (6.3)	1 (5.3)	2 (25.0)	3 (17.7)	2 (33.3)
Not applicable	0	0	0	0	0	0

Question 4.12: Delayed start policy for non-critical medications is in place.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	28 (42.4)	4 (25.0)	8 (42.1)	2 (25.0)	10 (58.8)	4 (66.7)
Partly in place	10 (15.2)	1 (6.3)	2 (10.5)	1 (12.5)	5 (29.4)	1 (16.7)
Not in place	24 (36.4)	10 (62.5)	7 (36.8)	4 (50.0)	2 (11.8)	1 (16.7)
Not applicable	4 (6.1)	1 (6.3)	2 (10.5)	1 (12.5)	0	0

Question 4.13: Medications delivered to a secure area.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	58 (87.9)	14 (87.5)	15 (78.9)	8 (100.0)	16 (94.1)	5 (83.3)
Partly in place	7 (10.6)	2 (12.5)	4 (21.1)	0	0	1 (16.7)
Not in place	1 (1.5)	0	0	0	1 (5.9)	0
Not applicable	0	0	0	0	0	0

Question 4.14: Method to check that expected items in a pharmacy delivery are received.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	59 (89.4)	14 (87.5)	18 (94.7)	7 (87.5)	14 (82.4)	6 (100.0)
Partly in place	6 (9.1)	2 (12.5)	1 (5.3)	0	3 (17.7)	0
Not in place	1 (1.5)	0	0	1 (12.5)	0	0
Not applicable	0	0	0	0	0	0

Question 4.15: Pharmacy disposes of discontinued, out-dated & contaminated medications.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	62 (93.9)	15 (93.8)	19 (100.0)	8 (100.0)	15 (88.2)	5 (83.3)
Partly in place	3 (4.6)	1 (6.2)	0	0	2 (11.8)	0
Not in place	1 (1.5)	0	0	0	0	1 (16.7)
Not applicable	0	0	0	0	0	0

Key Element 5: Medication Storage

Question 5.1: Medications stored in a secure space at the site.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	64 (97.0)	16 (100.0)	19 (100.0)	6 (75.0)	17 (100.0)	6 (100.0)
Partly in place	2 (3.0)	0	0	2 (25.0)	0	0
Not in place	0	0	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 5.2: Regular temperature check of a centrally located refrigerator used to store medications.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	28 (42.4)	5 (31.3)	14 (73.7)	2 (25.0)	5 (29.4)	2 (33.3)
Partly in place	7 (10.6)	1 (6.3)	2 (10.5)	0	3 (17.7)	1 (16.7)
Not in place	20 (30.3)	5 (31.3)	1 (5.3)	5 (62.5)	8 (47.1)	1 (16.7)
Not applicable	11 (16.7)	5 (31.3)	2 (10.5)	1 (12.5)	1 (5.9)	2 (33.3)

Question 5.3: PRN medications are easy to distinguish from regularly scheduled medications.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	58 (87.9)	14 (87.5)	19 (100.0)	6 (75.0)	15 (88.2)	4 (66.7)
Partly in place	5 (7.6)	2 (12.5)	0	0	2 (11.8)	1 (16.7)
Not in place	0	0	0	0	0	0
Not applicable	3 (4.6)	0	0	2 (25.0)	0	1 (16.7)

Question 5.4: Lighting levels are adequate for reading small lettering on medication labels.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	62 (93.9)	14 (87.4)	19 (100.0)	8 (100.0)	15 (88.2)	6 (100.0)
Partly in place	3 (4.6)	1 (6.3)	0	0	2 (11.8)	0
Not in place	1 (1.5)	1 (6.3)	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 5.5: Correct delivery of medications to their storage location is verified.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	59 (89.4)	14 (87.5)	17 (89.5)	7 (87.5)	15 (88.2)	6 (100.0)
Partly in place	3 (4.6)	1 (6.3)	1 (5.3)	0	1 (5.9)	0
Not in place	2 (3.0)	1 (6.3)	0	0	1 (5.9)	0
Not applicable	2 (3.0)	0	1 (5.3)	1 (12.5)	0	0

Question 5.6: Individually packaged narcotics/controlled medications are accounted for on receipt and return to the pharmacy.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	44 (66.7)	13 (81.3)	15 (79.0)	2 (25.0)	10 (58.8)	4 (66.7)
Partly in place	14 (21.2)	3 (18.7)	1 (5.3)	1 (12.5)	7 (41.2)	2 (33.3)
Not in place	4 (6.1)	0	0	4 (50.0)	0	0
Not applicable	4 (6.1)	0	3 (15.8)	1 (12.5)	0	0

Question 5.7: Discontinued, contaminated or out-dated medications are removed from areas where current client medications are stored.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	55 (83.3)	11 (68.8)	15 (79.0)	7 (87.5)	16 (94.1)	6 (100.0)
Partly in place	9 (13.6)	4 (25.0)	4 (21.1)	1 (12.5)	0	0
Not in place	2 (3.0)	1 (6.2)	0	0	1 (5.9)	0
Not applicable	0	0	0	0	0	0

Question 5.8: Expiry dates of PRN medications not regularly replaced by the pharmacy are checked.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	36 (54.6)	9 (56.3)	14 (73.7)	3 (37.5)	8 (47.1)	2 (33.3)
Partly in place	21 (31.8)	6 (37.5)	3 (15.8)	3 (37.5)	6 (35.3)	3 (50.0)
Not in place	6 (9.1)	1 (6.3)	2 (10.5)	0	3 (17.1)	0
Not applicable	3 (4.6)	0	0	2 (25.0)	0	1 (16.7)

Question 5.9: Used transdermal patches are discarded securely.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	41 (62.1)	10 (62.5)	10 (52.6)	6 (75.0)	12 (70.6)	3 (50.0)
Partly in place	14 (21.2)	6 (37.5)	3 (15.8)	1 (12.5)	2 (11.8)	2 (33.3)
Not in place	5 (7.6)	0	1 (5.3)	0	3 (17.7)	1 (16.7)
Not applicable	6 (9.1)	0	5 (26.3)	1 (12.5)	0	0

Key Element 6: Medication Support Activities

Question 6.1: Medication support activities are included on the daily task list for each client.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	54 (81.8)	13 (81.3)	16 (84.2)	8 (100.0)	11 (64.7)	6 (100.0)
Partly in place	7 (10.6)	3 (18.8)	1 (5.3)	0	3 (17.7)	0
Not in place	1 (1.5)	0	0	0	1 (1.5)	0
Not applicable	4 (6.1)	0	2 (10.5)	0	4 (6.1)	0

Question 6.2: Interruptions during medication support activities are minimized.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	38 (57.6)	5 (31.3)	14 (73.7)	5 (62.5)	10 (58.8)	4 (66.7)
Partly in place	18 (27.3)	5 (31.3)	5 (26.3)	2 (25.0)	5 (29.4)	1 (16.7)
Not in place	10 (15.2)	6 (37.5)	0	1 (12.5)	2 (11.8)	1 (16.7)
Not applicable	0	0	0	0	0	0

Question 6.3: All medications remain in their package until provided to the client for use (no pre-pouring).

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	56 (84.9)	12 (75.0)	18 (94.7)	6 (75.0)	15 (88.2)	5 (83.3)
Partly in place	8 (12.1)	3 (18.8)	1 (5.3)	2 (25.0)	1 (5.9)	1 (16.7)
Not in place	2 (3.0)	1 (6.3)	0	0	1 (5.9)	0
Not applicable	0	0	0	0	0	0

Question 6.4: Healthcare providers can identify medications that require personal protection during medication support activities.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	41 (62.1)	6 (37.5)	16 (84.2)	7 (87.5)	11 (64.7)	1 (16.7)
Partly in place	17 (25.8)	6 (37.5)	2 (10.5)	1 (12.5)	4 (23.5)	4 (66.7)
Not in place	8 (12.1)	4 (25.0)	1 (5.3)	0	2 (11.8)	1 (16.7)
Not applicable	0	0	0	0	0	0

Question 6.5: Healthcare providers can readily recognize high-alert medications and special actions that are needed for client safety.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	52 (78.8)	12 (75.0)	17 (89.5)	4 (50.0)	15 (88.2)	4 (66.7)
Partly in place	9 (13.6)	2 (12.5)	2 (10.5)	2 (25.0)	2 (11.8)	1 (16.7)
Not in place	4 (6.1)	2 (12.5)	0	2 (25.0)	0	0
Not applicable	1 (1.5)	0	0	0	0	1 (16.7)

Question 6.6: When a medication is not applicable or not usable, care providers contact a healthcare professional for guidance.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	61 (92.4)	12 (75.0)	19 (100.0)	7 (87.5)	17 (100.0)	6 (100.0)
Partly in place	5 (7.6)	4 (25.0)	0	1 (12.5)	0	0
Not in place	0	0	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 6.7: Two unique client identifiers are used to verify identity during medication support.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	49 (74.2)	10 (62.5)	16 (84.2)	4 (50.0)	14 (82.4)	5 (83.3)
Partly in place	11 (16.7)	5 (31.3)	3 (15.8)	1 (12.5)	2 (11.8)	0
Not in place	5 (7.6)	1 (6.3)	0	2 (50.0)	1 (5.9)	1 (16.7)
Not applicable	1 (1.5)	0	0	1 (12.5)	0	0

Question 6.8: Photographs used as a client identifier are updated regularly and included next to the MA/AR or in the medication storage area for the client.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	50 (75.8)	10 (62.5)	18 (94.7)	6 (75.0)	11 (64.7)	5 (83.3)
Partly in place	13 (19.7)	5 (31.3)	1 (5.3)	0	6 (35.3)	0
Not in place	1 (1.5)	1 (6.3)	0	0	0	1 (16.7)
Not applicable	2 (3.0)	0	0	2 (25.0)	0	0

Question 6.9: MA/AR, medication label and client identifiers are available at the time of medication support for a client.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	57 (86.4)	11 (68.8)	18 (94.7)	7 (87.5)	16 (94.1)	5 (83.3)
Partly in place	9 (13.6)	5 (31.3)	1 (5.3)	1 (12.5)	1 (5.9)	1 (16.7)
Not in place	0	0	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 6.10: A MA/AR is maintained for each client and kept in an accessible location.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	66 (100.0)	16 (100.0)	19 (100.0)	8 (100.0)	17 (100.0)	6 (100.0)
Partly in place	0	0	0	0	0	0
Not in place	0	0	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 6.11: Medication support activities are documented at the time they occur.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	56 (84.9)	12 (75.0)	16 (84.2)	8 (100.0)	15 (88.2)	5 (83.3)
Partly in place	10 (15.2)	4 (25.0)	3 (15.8)	0	2 (11.8)	1 (16.7)
Not in place	0	0	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 6.12: Documentation includes medication taken and not taken, time if different than ordered.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	59 (89.4)	12 (75.0)	17 (89.5)	8 (100.0)	16 (94.1)	6 (100.0)
Partly in place	7 (10.6)	4 (25.0)	2 (10.5)	0	1 (5.9)	0
Not in place	0	0	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 6.13: Documentation of transdermal patches and injections – time, site, patch removal.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	35 (53.0)	6 (37.5)	8 (42.1)	6 (75.0)	9 (52.9)	6 (100.0)
Partly in place	19 (28.8)	9 (56.3)	4 (21.1)	1 (12.5)	5 (29.4)	0
Not in place	6 (9.1)	1 (6.3)	2 (10.5)	0	3 (17.7)	0
Not applicable	6 (9.1)	0	5 (26.3)	1 (12.5)	0	0

Question 6.14: Staff reinforce with clients policies related to use of medications for personal use.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	49 (74.2)	11 (68.8)	16 (84.2)	4 (50.0)	13 (76.5)	5 (83.3)
Partly in place	13 (19.7)	4 (25.0)	3 (15.8)	2 (25.0)	4 (23.5)	0
Not in place	2 (3.0)	1 (6.3)	0	1 (12.5)	0	0
Not applicable	2 (3.0)	0	0	1 (12.5)	0	1 (16.7)

Question 6.15: Medication labels and packaging with client information on them are disposed of in a secure manner.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	64 (97.0)	14 (87.5)	19 (100.0)	8 (100.0)	17 (100.0)	6 (100.0)
Partly in place	2 (3.0)	2 (12.5)	0	0	0	0
Not in place	0	0	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 6.16: Clients and families receive information about safe medication processes at the site.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	55 (83.3)	14 (87.5)	17 (89.5)	6 (75.0)	13 (76.5)	5 (83.3)
Partly in place	5 (7.6)	1 (6.3)	1 (5.3)	1 (12.5)	2 (11.8)	0
Not in place	6 (9.1)	1 (6.3)	1 (5.3)	1 (12.5)	2 (11.8)	1 (16.7)
Not applicable	0	0	0	0	0	0

Key Element 7: Healthcare Provider Competence

Question 7.1: Job descriptions are current, reflect scope of practice, & include medication system activities.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	52 (78.8)	15 (93.8)	19 (100.0)	6 (75.0)	9 (52.9)	3 (50.0)
Partly in place	12 (18.2)	0	0	2 (25.0)	7 (41.2)	3 (50.0)
Not in place	2 (3.0)	1 (6.3)	0	0	1 (5.9)	0
Not applicable	0	0	0	0	0	0

Question 7.2: Standards are met related to assignment of unregulated healthcare providers to restricted medication activities.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	55 (83.3)	11 (68.8)	17 (89.5)	8 (100.0)	13 (76.5)	6 (100.0)
Partly in place	6 (9.1)	3 (18.8)	1 (5.3)	0	2 (11.8)	0
Not in place	4 (6.1)	1 (6.3)	1 (5.3)	0	2 (11.8)	0
Not applicable	1 (1.5)	1 (6.3)	0	0	0	0

Question 7.3: Supervision of medication-related activities is clearly defined.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	58 (87.9)	15 (93.8)	17 (89.5)	7 (87.5)	13 (76.5)	6 (100.0)
Partly in place	5 (7.6)	0	2 (10.5)	1 (12.5)	2 (11.8)	0
Not in place	3 (4.6)	1 (6.3)	0	0	2 (11.8)	0
Not applicable	0	0	0	0	0	0

Question 7.4: Clear communication channels and lines of authority for medication-related issues.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	60 (90.9)	13 (81.3)	18 (94.7)	8 (100.0)	15 (88.2)	6 (100.0)
Partly in place	6 (9.1)	3 (18.8)	1 (5.3)	0	2 (11.8)	0
Not in place	0	0	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 7.5: Orientation for new healthcare providers includes a review of medication system.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	50 (75.8)	11 (68.8)	18 (94.7)	7 (87.5)	9 (52.9)	5 (83.3)
Partly in place	14 (21.2)	4 (25.0)	1 (5.3)	1 (12.5)	7 (41.2)	1 (16.7)
Not in place	2 (3.0)	1 (6.3)	0	0	1 (5.9)	0
Not applicable	0	0	0	0	0	0

Question 7.6: Temporary healthcare providers receive an orientation to the medication system.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	25 (37.9)	4 (25.0)	9 (47.4)	4 (50.0)	4 (23.5)	4 (66.7)
Partly in place	7 (10.6)	2 (12.5)	4 (21.1)	0	0	1 (16.7)
Not in place	3 (4.6)	1 (6.3)	0	0	2 (11.8)	0
Not applicable	31 (47.0)	9 (56.3)	6 (31.6)	4 (50.0)	11 (64.7)	1 (16.7)

Question 7.7: Competency assessment of healthcare aides is done yearly and supervised by a healthcare professional.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	41 (62.1)	6 (37.5)	16 (84.2)	4 (50.0)	11 (64.7)	4 (66.7)
Partly in place	14 (21.2)	5 (31.3)	1 (5.3)	3 (37.5)	3 (17.7)	2 (33.3)
Not in place	8 (12.1)	4 (25.0)	0	1 (12.5)	3 (17.7)	0
Not applicable	3 (4.6)	1 (6.3)	2 (10.5)	0	0	0

Key Element 8: Medication System Quality and Safety Improvement

Question 8.1: Medication system quality & safety improvement program is in place.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	42 (63.6)	13 (81.3)	13 (68.4)	4 (50.0)	9 (52.9)	3 (50.0)
Partly in place	16 (24.2)	1 (6.3)	5 (26.3)	4 (50.0)	4 (23.5)	2 (33.3)
Not in place	8 (12.1)	12 (12.5)	1 (5.3)	0	4 (23.5)	1 (16.7)
Not applicable	0	0	0	0	0	0

Question 8.2: Reporting and learning system for medication incidents and close calls is in place.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	55 (83.3)	12 (75.0)	16 (84.2)	8 (100.0)	14 (82.4)	5 (83.3)
Partly in place	11 (16.7)	4 (25.0)	3 (15.8)	0	3 (17.7)	1 (16.7)
Not in place	0	0	0	0	0	0
Not applicable	0	0	0	0	0	0

Question 8.3: Reporting process for critical event is readily available for staff reference.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	58 (87.9)	13 (81.3)	19 (100.0)	8 (100.0)	14 (82.4)	4 (66.7)
Partly in place	4 (6.1)	2 (12.5)	0	0	0	2 (33.3)
Not in place	4 (6.1)	1 (6.3)	0	0	3 (17.7)	0
Not applicable	0	0	0	0	0	0

Question 8.4: Reports of medication incidents are used to identify medication system issues.

	Provincial # sites (%)	South # sites (%)	Calgary # sites (%)	Central # sites (%)	Edmonton # sites (%)	North # sites (%)
Fully in place	56 (84.9)	13 (81.3)	17 (89.5)	8 (100.0)	14 (82.4)	4 (66.7)
Partly in place	7 (10.6)	3 (18.8)	2 (10.5)	0	1 (5.9)	1 (16.7)
Not in place	3 (4.6)	0	0	0	2 (11.8)	1 (16.7)
Not applicable	0	0	0	0	0	0



210, 811 – 14 Street NW
Calgary, Alberta, Canada T2N 2A4
T: 403.297.8162 F: 403.297.8258
E: info@hqca.ca www.hqca.ca