Context

Fall-related injuries are a significant burden to society. The National Trauma Registry: 2007 Injury Hospitalizations Highlights Report indicates that the leading cause of hospitalizations due to injury in Canada between April 1, 2005 and March 31, 2006 was unintentional falls. This represented 57% (n = 111,577) of all injury-related hospitalizations.\(^1\) According to the 2009 report The Economic Burden of Injury in Canada, the leading cause of overall injury costs in Canada (2004) were falls, accounting for 31% ($6.2 billion) of total costs.\(^2\)

A fall, for the purposes of falls prevention strategies, has been defined as “an event that results in a person coming to rest inadvertently on the ground or floor or other lower level, with or without injury.”\(^3\) Falls can result in unintentional injuries, and in many cases can be predicted and prevented.\(^2\)

Falls prevention involves identifying risk factors for falling and subsequently instituting targeted strategies to help reduce or eliminate the identified factors.\(^4\) Falls prevention has been targeted by Accreditation Canada, through its Qmentum accreditation program, which helps to ensure that Canadians receive safe and high-quality health care with ongoing quality improvement. The program utilizes Required Organizational Practices (ROPs) that are defined as “essential practice[s] that organizations must have in place to enhance patient/client safety and minimize risk.”\(^5\) These risk-mitigating, evidence-based practices are reviewed annually and updated as necessary. Six patient safety goal areas — namely Safety Culture, Communication, Medication Use, Worklife/Workforce, Infection Control, and Risk Assessment — are used to categorize the ROPs. The ROP for a falls prevention strategy is included under the “Risk Assessment” patient safety area. It has a requirement of implementing and evaluating a strategy to minimize fall-related client injuries.\(^5\)

The falls prevention strategy ROP is deliberately written in broad terms so that it can be customized to different service environments and unique patient populations served by a specific health care facility.\(^6\) It is also one of eight ROPs that is included and evaluated in multiple Accreditation Canada standard sets,\(^7\) including the standard set for mental health services.

The Accreditation Canada tests for compliance for the falls prevention strategy ROP are:

- The team implements a falls prevention strategy.
- The strategy identifies the populations at risk for falls.
- The strategy addresses the specific needs of the populations at risk for falls.
- The team establishes measures to evaluate the falls prevention strategy on an ongoing basis.
- The team uses the evaluation information to make improvements to its falls prevention strategy.\(^{(p50)}\)

Over 1,000 organizations providing health care in all sectors and regions of Canada participate in Accreditation Canada’s Qmentum accreditation program. On-site surveys are an important component of the program, with approximately one-third of the client organizations undergoing such surveys each year.\(^7\) Originally introduced in 2007, compliance rates for the falls
prevention strategy ROP have increased since 2008. According to the Accreditation Canada report *How Safe Are Canadian Health Organizations? 2011 Report on Required Organizational Practices*, the compliance rate for implementation of falls prevention strategies was 42% in 2008, 70% in 2009, and 69% in 2010. (Please refer to the original report for an explanation of the expected variation in national year-to-year compliance rates.)

A recent limited literature search conducted by the Canadian Agency for Drugs and Technologies in Health (CADTH) identified no evidence on falls prevention strategies for adult outpatients participating in mental health and substance use programs.

**Objectives**

The purpose of this report is to provide an overview of existing falls prevention strategies targeting adults (18 years and older) in outpatient or community-based mental health and/or addiction programs in Canada.

The following questions were addressed, based on the Accreditation Canada tests for compliance for the falls prevention strategy ROP:

1. What are the screening criteria used to identify patients/clients at high risk for falls in this population?
2. What are the various strategies used to prevent falls in the patients/clients identified to be at high risk?
3. What measures are used on an ongoing basis to evaluate the effectiveness of the falls prevention strategies?
4. How is the information arising from this evaluation used to improve the falls prevention program on an ongoing basis?

**Findings**

It is not intended that the findings of this Environmental Scan provide a comprehensive review of the topic. Results are based on communication with key informants. This report is based on information gathered as of April 18, 2012.

Ten of 20 surveyed providers of outpatient or community-based adult mental health and addiction services indicated that they have implemented a falls prevention strategy targeting this client population. The following provides a summary of the survey results. The complete responses to each survey question, provided by respondent, can be found in Appendix 1 of this document.

**Question 1: Screening Criteria to Identify Mental Health and/or Addiction Clients at High Risk for Falls**

A falls prevention strategy for outpatient or community-based adult mental health and/or addiction clients requires identifying the risk factors specific to this client population, and the health care delivery environment that may increase the propensity for falls. Development of a validated falls risk assessment tool specific to this client population, that can identify those clients who are at high risk for falls and fall-related injuries, may help to effectively direct health care resources for falls prevention activities. However, a recent search of the literature did not identify any falls risk assessment tools for this population.

In addition to falls risk factors that apply generally to all adult populations, such as environmental (e.g., loose floor mats, slippery floors, loose electrical cords) and social or economic factors (e.g., unable to buy proper footwear, inability to pay for assistive devices or home modifications, poor nutrition), this population has specific medical and behavioural risk factors related to clients’ mental health or...
addiction-related diagnoses, prescribed medications, and/or substance abuse that should be taken into consideration when assessing falls risk.

The first survey question asked what screening criteria are used to identify patients/clients at high risk for falls in the outpatient or community-based adult mental health and addiction programs.

One responding centre indicated that it is currently working on validating a falls risk tool for mental health and addiction patients; however, this was specific to mental health and addiction acute care inpatients rather than outpatient or community-based clients.

There was a high level of variability in the screening criteria utilized by the survey respondents to help identify clients at high risk for falls. The majority of respondents routinely screened clients for falls risk using a predetermined set of questions or criteria that varied from simple client observation for mobility issues to the use of multiple criteria. The reported falls screening criteria included:

- Age and gender
- Falls history (including a slip, trip, near fall, or fall), or fear of falling
- Medical history and concurrent conditions
- Current medications, including consideration of recent changes, dosing, and side effects
- Substance abuse
- Gait, mobility, and balance (including factors such as dizziness, vertigo, or tinnitus, and need for assistive devices)
- Sensory deficits
- Sleep disturbances
- Mental status
- Altered elimination patterns (urgency, frequency, or incontinence)
- Living situation (alone, with spouse/family, with caregiver, home care services)
- Environmental hazards (in the community-based centre and/or home)
- Information provided as part of a referral or transfer note for a particular client may also contribute to falls risk information at client intake.

Question 2: Falls Prevention Strategies Utilized

Based on the patient-specific falls risk factors identified in the screening process, multidisciplinary falls prevention strategies or interventions customized to the individual can be incorporated into a client’s care plan.

The next survey question asked what strategies have been implemented to prevent falls for the patients/clients identified to be at high risk.

Specific falls prevention interventions implemented by the responding programs varied. The majority of respondents indicated use of a multidisciplinary approach to interventions, as appropriate. Consultations on-site or referrals to community-based occupational therapists, physiotherapists, recreations therapists, and/or exercise therapists were frequent for mobility, balance, and gait-related concerns. Falls prevention interventions for these risks included mobility aids and home modification recommendations. Strengthening exercises and balance skill improvement activities were incorporated into fitness programs. Medications were reviewed and modifications made as necessary.

Falls prevention education was provided by the majority of responding programs, through brochures and educational materials that are either readily available for client self-selection or reviewed directly with clients, and sometimes with family members. Educational topics included:
Home environment adjustments to prevent falls
- Medications
- What to do when you fall
- Nutrition for promotion of healthy bones
- Managing lifestyle choices and activity levels to reduce fall risk or injury.

Question 3: Effectiveness Measures

The third question posed to respondents was “What measures are used on an ongoing basis to evaluate the effectiveness of the falls prevention strategies?”

Falls prevention effectiveness measures should be based on what the falls prevention program is hoping to achieve through implementation of the various falls prevention strategies.\(^9\) The Canadian Patient Safety Institute’s *Safer Healthcare Now! Reducing Falls and Injuries from Falls Getting Started Kit*\(^9\) identifies three categories of measures for monitoring quality improvement activities, and provides examples for measuring a reduction in falls and injuries from falls.

These three categories are:

1. **Outcome Measures:** “How is the system performing? What is the result?”

   Examples:
   - Incidence of falls
   - Severity of injury from falls.

2. **Process Measures:** This is described as “the workings of the system.” “Are the parts/steps in the system performing as planned?”

   Examples:
   - Risk assessment completion
   - Risk assessment completion after a fall or change in status
   - Documentation of a prevention and/or protection plan.

3. **Balancing Measures:** This is described as “looking at a system from different directions or dimensions.” “Are changes designed to improve one part of the system causing new problems in other parts of the system?”

   Example:
   - Restraint utilization.

Specific outcome and process measures reported by respondents included:

- The number of reported falls or near miss falls (increasing or decreasing over time)
- Severity of client injury
- Decreased frequency of falls for an individual, as compared to fall frequency prior to implementation of the care plan
- Assessment of whether an individual’s falls risk assessment had been completed for the client prior to a fall
- Whether falls prevention education information was given or readily available for clients
- Provision of a safe environment with no falls hazards
- Whether falls incident reports were responded to in a timely manner and identified causes addressed.

Half of the responding programs (five out of 10) indicated that they documented and submitted falls reports to a collective reporting system; near miss falls (falls which are intercepted) were sometimes also included. These reports were regularly reviewed to identify falls trends and contributing factors.

Question 4: Falls Prevention Improvement

The last question of the survey asked how the effectiveness information is used to continuously improve the falls prevention program.

Respondents to the survey indicated using the effectiveness information in the following ways:
Environmental Scan

- All falls reports were followed up and appropriate changes, based on identified contributing factors, were made to prevent reoccurrence.
- Ongoing care plan reviews were performed and lessons learned used to revise and improve falls assessments and prevention strategies on a regular basis.
- Collaboration with other service area or physical sites’ falls prevention programs was used to share experiences and falls prevention best practices information; changes that arose from tracking falls in one service area or site were applied to all service areas or sites, as appropriate.
- Feedback from clinical staff administering the screening and providing interventions was used to inform necessary improvements.
- Validated screening and assessment tools
- Education materials targeted to a wider age range of clients and their families
- Specialized intervention resources related to identified falls risk factors that are unique to this population (e.g., concomitant substance use disorders, symptom management strategies related to perceptual distortions, hallucinations, and/or excessive collection behaviours)
- How to capture client self-reported falls and fall-related injuries in order to facilitate evaluation of falls prevention strategy outcomes.

Further Considerations

A number of respondents indicated that they have not yet developed a specific falls prevention strategy for their outpatient or community-based mental health and/or addictions clients. It was generally perceived that these clients are at increased risk for falls due to the symptoms of their illnesses and/or effects of their medications. Medications are often essential components of clients’ treatments and discontinuation may not be an option; however, adjustments may be possible. Furthermore, the population of patients participating in mental health and/or substance abuse programs is diverse, with multiple complex and interrelated factors that contribute to their risk of falling.

Elements of falls prevention strategies that need to be specifically addressed for this client population include:
Conclusions

Programs for preventing falls and fall-related injuries, where instituted, varied significantly across the outpatient and community-based adult mental health and/or addiction programs surveyed in this environmental scan. Customization of falls prevention strategies is necessary to meet the specific needs of this client population.

References


Appendix 1

The following tables provide the survey respondents’ complete responses to the survey questions.

<table>
<thead>
<tr>
<th>Respondent #1</th>
<th>Community-Based Mental Health Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Screening Criteria to Identify Patients at High Risk for Falls</strong></td>
<td>The centre’s clients are usually physically higher-functioning. Case managers, outreach workers, or any other staff working with clients observe clients to identify any concerns for mobility in the home.</td>
</tr>
<tr>
<td><strong>Falls Prevention Strategies Utilized</strong></td>
<td>Clients are connected to the appropriate resources when mobility issues are identified at the centre, and education is provided to try and decrease the risk of falls in their homes. If a concern for mobility in the home is observed, a request for an assessment by occupational therapy or physiotherapy is requested for the client. Clients are encouraged to keep their walkways free of clutter, ensure there are no tripping hazards, and ensure there is adequate lighting. The centre's maintenance personnel are asked to address any identified environmental falls hazards in the client areas on-site.</td>
</tr>
<tr>
<td><strong>Effectiveness Measures</strong></td>
<td>Falls are reported via the centre's reporting system (used for any occurrences that are safety, injury, or error related); as well, employee incident reports are monitored.</td>
</tr>
<tr>
<td><strong>Evaluation and Improvement of Falls Prevention Strategies</strong></td>
<td>Environmental falls risks in the centre are reviewed on an ongoing basis to promote client safety. Falls reports are followed up and appropriate changes are made to prevent recurrence.</td>
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</table>
### Respondent #2

**Community-Based Mental Health Program for Older Adults (Primarily 65 Years and Older)**

<table>
<thead>
<tr>
<th>Screening Criteria to Identify Patients at High Risk for Falls</th>
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<tbody>
<tr>
<td>All clients receive a comprehensive psychogeriatric assessment by a case manager (nurse, occupational therapist, or social worker) and usually a team geriatric psychiatrist. This assessment includes evaluating all of the risk factors for falls (e.g., multiple medications, medical history, cognitive status, mental status, “Timed Up and Go” [TUG] screening test, history of falls, etc.); based on the results, a clinical judgment is made as to whether the client is at risk for falls.</td>
</tr>
</tbody>
</table>

A TUG screen involves measuring the time required for a client (using the client’s regular walking aid, if applicable) to stand up from being seated, walk a distance of 3 metres, turn around and walk back to the chair, and sit down. In addition, the client is observed by the screener for assessment of gait and stability during the test.

<table>
<thead>
<tr>
<th>Falls Prevention Strategies Utilized</th>
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<tbody>
<tr>
<td>The team follows a case management model for all client care. Based on best practices, a multidisciplinary team approach is used, although most clients see only two or three disciplines. The team consists of geri-psychiatrists, a geriatrician, nurses, social workers, an occupational therapist, an addiction specialist consultant, a recreational therapist, a mental health program worker, and peer support workers.</td>
</tr>
</tbody>
</table>

Each case manager prepares an individualized client care plan that may incorporate the following strategies, based on identified needs:

- Refer the client directly to home and community care physiotherapist and/or occupational therapist for assessment (and request transfer of function so that community health workers can do a home exercise program with client), or refer the client to the team occupational therapist, who can do a more in-depth assessment of mobility (e.g., Berg balance scale, transfers, etc.) and make mobility aid recommendations and/or implement home adaptations
- Refer the client to one of the many community centre programs focusing on exercises for falls prevention, exercises specific to patients with osteoporosis or osteopenia, or to a walking group
- Refer the client to outpatient rehabilitation or to a private rehabilitation clinic
- Provide falls prevention education (for e.g., falls prevention brochures providing information for client home environment adjustments to prevent falls by wearing non-slip shoes, using secured bath mats, etc.).

<table>
<thead>
<tr>
<th>Effectiveness Measures</th>
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<tbody>
<tr>
<td>Strategy effectiveness is measured via reviewing the care plans for decreased frequency of falls, as compared to falls frequency prior to implementation of the care plan.</td>
</tr>
</tbody>
</table>
### Respondent #2
**Community-Based Mental Health Program for Older Adults (Primarily 65 Years and Older)**

| Evaluation and Improvement of Falls Prevention Strategies | Ongoing care plan reviews are performed. Any lessons learned are used to revise and improve falls assessments and prevention strategies on a regular basis. Our team also collaborates with other programs to share falls prevention best practices information, and attends regular educational in-services and conferences. |
### Screening Criteria to Identify Patients at High Risk for Falls

A risk assessment questionnaire is to be completed for each client by case managers or physicians. The questionnaire addresses the following:

- Has the client had a slip, trip, near fall, or fall in the last 6 months?
- Is the client taking a medication that can cause:
  - Drowsiness
  - Dizziness
  - Hypotension
  - Parkinsonian effects
  - Ataxia
  - Vision disturbance.
- Is the client displaying any of the aforementioned adverse effects?
- Is the client taking a high dose of the medication?
- Is the client taking more than one medication that can increase the falls risk?
- Is the client at high risk of falling for other, non-drug reasons (i.e., age, gait, balance)?
- Is the client unsteady while walking or having difficulty standing up from a chair?

Some resistance has been encountered in completing the falls risk assessment questionnaire in the younger adult mental health clients.

An automatic computer screensaver prompts program staff to screen clients for falls.

### Falls Prevention Strategies Utilized

For clients assessed to be at risk for falls due to medication, as identified in the abovementioned screening questionnaire, the following interventions are suggested for consideration:

- Does the benefit of the medication outweigh the possible risk of falling?
- Is there a safer medication or a non-drug alternative?
- Is it possible to minimize the dose without losing the benefit of the medication?

Falls prevention education is reinforced via a client-friendly brochure encouraging younger adult clients to take an active role in preventing falls and fall-related injuries such as head injuries, fractures, and reduced mobility.

The brochure outlines how medications, lifestyle choices, and activity levels can be managed to reduce the risk of a fall or injury. It also encourages health care professional consultation for medication review and, where necessary, the potential for referral to other appropriate community-based supports. A simple “yes” or “no” response, 14-point, self-assessment questionnaire is included. It is designed to help clients assess their risks of having a fall, which increases with the number of “yes” responses. To assess their potential for falls, clients are asked to indicate whether they:
Respondent #3
Community-Based Adult Mental Health and Addictions Program

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<tr>
<td>Ever feel dizzy</td>
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<tr>
<td>Take 4 or more medications</td>
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<tr>
<td>Have weakness in their legs</td>
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<tr>
<td>Have frequent slips, trips, or falls</td>
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<tr>
<td>Have difficulty keeping their balance</td>
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<tr>
<td>Drink alcohol frequently</td>
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<tr>
<td>Have pain, numbness, poor feeling in their legs or feet</td>
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<tr>
<td>Need help getting around, use a cane or walking aid</td>
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<td>Have visions and/or hearing difficulties</td>
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<td>Have trouble sleeping</td>
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<tr>
<td>Feel confused or have difficulty concentrating</td>
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<tr>
<td>Have shortness of breath</td>
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<tr>
<td>Use drugs</td>
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<td>Feel anxious or depressed.</td>
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</table>

A client-oriented educational poster promoting a “fall free future” has been developed and is posted for the region’s various community mental health and addiction teams and units. The message focuses on how medications can affect one’s balance and potentially cause dizziness. Clients are therefore encouraged to take their medications as directed, know the side effects, and avoid mixing medications with alcohol.

<table>
<thead>
<tr>
<th>Effectiveness Measures</th>
<th>The current program has not yet been audited.</th>
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<tbody>
<tr>
<td>Evaluation and Improvement of Falls Prevention Strategies</td>
<td>Not yet in place.</td>
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<tr>
<td>Respondent #4</td>
<td>Health Region-Wide Outpatient Mental Health and Addictions Program</td>
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<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Screening Criteria to Identify Patients at High Risk for Falls</strong></td>
<td>Addictions and mental health outpatients are currently not screened for risk of falls; only in-patient detoxification and in-patient psychiatry programs have falls screening tools.</td>
</tr>
<tr>
<td><strong>Falls Prevention Strategies Utilized</strong></td>
<td>An environmental audit tool has been adapted to fit the outpatient areas. The purpose of the tool is to ensure that environmental falls risks within the clinic are proactively identified and corrective action is taken. The audit tool includes the assessment of various environmental falls risks such as poor lighting, wet floors, unnecessary clutter, icy/snowy entrance ways, insecure floor grates and mats, unavailability of handrails where necessary, and staffing awareness of how to report identified falls risks. A staff person for each area receives the environmental audit tool monthly; completes the audit; identifies the need for corrective action to be taken, which is reported to the manager or charge person; and reports back that the audit has been completed. Bilingual falls prevention posters obtained from Health Canada have been posted in all outpatient service areas. The region’s Falls Prevention Committee developed a bilingual falls prevention guide for patients and their families. This booklet is available in client reception and waiting areas. The Falls Prevention Committee has delegated a working group to develop a falls prevention staff e-learning program, which is underway. A representative from the health region’s Addictions and Mental Health Program is a member of this working group and has been an advocate to ensure that the program meets the educational needs of staff who work in community settings. (Previous educational programs were acute care-based.) A “generic staff meeting template” for managers and program coordinators was developed and circulated to support discussion and review of falls prevention activities as a standing agenda item. The consistent dialoguing about prevention of falls assists in keeping staff diligent and proactive.</td>
</tr>
<tr>
<td><strong>Effectiveness Measures</strong></td>
<td>All falls (falls and “falls with harm”) are reported utilizing an incident form which is submitted and reviewed by the Quality Improvement Department. Each incident requires the charge person to identify contributing factors and the strategies needed to be put in place to prevent further occurrences.</td>
</tr>
<tr>
<td>Evaluation and Improvement of Falls Prevention Strategies</td>
<td>The region's Addictions and Mental Health programs serve both in-patient (detoxification, rehabilitation, and psychiatry units) and outpatient populations. Currently, only in-patient falls are tracked. Each quarter, falls rates are reviewed at the Addictions and Mental Health Quality and Safety Committee level. Areas indicating an increase or decrease are identified and reviewed for further action. Representation on this committee is from all in-patient and outpatient services. Changes or improvements that come from tracking in-patient falls are applied to all services, where appropriate, including outpatients.</td>
</tr>
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</table>
### Respondent #5

Community-Based Mental Health Program Associated With An Acute Care Mental Health Facility

| Screening Criteria to Identify Patients at High Risk for Falls | All clients over the age of 65 years of age, and clients over the age of 55 years having complex health needs, are screened for falls risk. Clients under the age of 55 years are not routinely screened, but those who present with identified risks and obvious limitations are referred to occupational therapy. A three-question screening tool is used to initially identify if client’s have:
| &bull; had a fall in the last 12 months  
| &bull; had a near fall in the last three months, or  
| &bull; a fear of falling.  

If the client answers “yes” to any of these questions, the “Timed Up and Go” (TUG) assessment is administered. A TUG screen involves measuring the time required for a client (using the client’s regular walking aid, if applicable) to stand up from being seated, walk a distance of 3 metres, turn around and walk back to the chair, and sit down. In addition, the client is observed by the screener for assessment of gait and stability during the test. If the client’s time for this assessment is greater than 14 seconds, then a more comprehensive assessment is required, and our acute care centre’s Falls Screening Tool is administered. This tool is currently undergoing refinement and testing for reliability and validity, and therefore is not available to be shared at this point in time. Following screening, if a client 55 years of age or older is found to have a moderate-to-high risk of falls, she or he is referred to the Regional Integrated Falls Program for further assessment and interventions. |

| Falls Prevention Strategies Utilized | 1. Identified individuals under 55 years of age are referred to occupational therapy for assessment, which includes a physical capabilities activities of daily living (ADL) assessment, home safety assessment, and mobility assessment.  

Recommendations for falls prevention include:
| &bull; Home adaptations and changes to improve safety in the bathroom (grab bars, bath seats etc.)  
| &bull; Stair safety (e.g., handrailings, slip resistant treads)  
| &bull; Mobility aids for general mobility  
| &bull; Home environmental changes to reduce risk (e.g., scatter rug removal, improved lighting, no loose cords, changes in furniture arrangement).  

Recommendations regarding ADL performance may involve:
| &bull; Adaptive aids  
| &bull; Teaching energy conservation, and work simplification principles and practical assistance for implementing these strategies, is provided  
| &bull; Education regarding falls prevention and proper body mechanics is offered, as well. |
| Respondent #5  
Community-Based Mental Health Program Associated With An Acute Care Mental Health Facility |
<table>
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<tr>
<td>Mobility aids are recommended, as needed, and training is offered to clients regarding their use. Clients are assisted in obtaining funding from various provincial programs to purchase needed home adaptations, and adaptive and mobility aids. At-risk clients are reassessed following any reported fall, upon clinical review, with changes in health status, when there is a significant change in medications, and prior to discharge from the community-based program.</td>
</tr>
</tbody>
</table>

2. **Identified clients over the age of 55 years of age with complex health needs and those over 65 years of age are referred to the Regional Integrated Falls Program for further assessment and intervention.** The primary goal of this program, in operation for clients across this specific health region, is to keep all seniors in the community safe by reducing the risk of falls and falls-related injuries. It provides falls risk assessment, as well as community resource information and specific recommendations to clients and their family physicians, as required.

For clients with a more complicated medical history, the regional program also runs a specialized assessment clinic where referrals to geriatricians, physiotherapists, and occupational therapists are possible. Those eligible for the clinic are clients over 65 years of age and those 55 years and older with complex health issues, along with one of the following: a fall within the last 12 months; a near fall in the last three months; or a fear of falling.

The regional program also offers community falls risk screening clinics where clients are individually seen by a registered nurse and/or physiotherapist.

In addition, clients who have been seen for a fall in an emergency department in the region are contacted by a support nurse following discharge to provide falls risk evaluation and support, which may include a home assessment. Medication consultation is also provided by a clinical pharmacist, as needed.

<table>
<thead>
<tr>
<th>Effectiveness Measures</th>
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<tr>
<td>A Regional Falls Prevention Committee for our local health region has been established from which we are currently awaiting direction regarding the falls prevention effectiveness indicators to be collected. Presently, a review of clients identified to be at risk of falling, as previously described, occurs twice a week, and changes in status and needs as related to fall risk are addressed. During clinical supervision, risk factors for clients are reviewed and needed changes to clinical interventions identified. These reviews are reported in the client's clinical supervision notes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluation and Improvement of Falls Prevention Strategies</th>
</tr>
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<tbody>
<tr>
<td>The Community Falls Risk Screening and Interventions for Community Clients Policy has been revamped and changed based on the feedback provided by the clinical staff administering the screening and providing interventions. Much discussion and time</td>
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<tr>
<td>Respondent #5</td>
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<tr>
<td>Community-Based Mental Health Program Associated With An Acute Care Mental Health Facility</td>
</tr>
<tr>
<td>was previously spent developing effectiveness indicators, but these were not implemented, as it was learned that indicators would be developed centrally by the local health region's Regional Falls Prevention Committee; we are awaiting completion of the committee's work. This program continues to monitor client change and the implementation of the program through a Risk Monitoring Report and client clinical supervision notes for clinicians.</td>
</tr>
</tbody>
</table>
Respondent #6  
Community-Based Mental Health Centre

| Screening Criteria to Identify Patients at High Risk for Falls | Although the vast majority of the program’s clients are in the low-risk category for falls, the population at risk in the mental health client base may include:  
- Elderly  
- Mobility impaired (includes clients with dizziness, vertigo, or tinnitus)  
- On medications  
- Mentally impaired — psychotic  
- Chemically impaired.  
  Clients are visually screened when in the facility. During the intake process, questions are asked regarding medications and other problems that may contribute to falls. The clients' referral documents may also mention fall risk factors, if present. |
| Falls Prevention Strategies Utilized | The falls prevention program goals are:  
- To have a safe environment in the Mental Health Department  
- To have no falls in the department  
- To report any incidents or near misses in a timely manner  
- To monitor and evaluate incidents/near misses on an ongoing basis  
- To provide falls prevention information to our clients  
- To identify clients at risk and to give information or assistance and refer these clients to appropriate services, as necessary.  
  The falls prevention program objectives are:  
- To keep the Mental Health area environmentally safe from fall risks  
- To act in a proactive manner to prevent falls by identifying clients at risk and responding to clients at risk  
- To monitor falls or near misses on an ongoing basis.  
  A safe environment is created for clients within the facility using the following strategies:  
- Grab bars in public washrooms  
- Hallways and offices well-lit  
- Non-slip level flooring  
- Hallways and offices free of clutter and tripping hazards  
- Chairs periodically available for rest stops  
- No thresholds at doorways  
- Floors kept dry or clearly identified as a hazard if wet  
- Sturdy furniture, chairs easy to get in and out of  
- Elderly and mobility impaired clients may need to be met at the facility door and given a wheelchair to assist them while in the facility  
- Worker will visually evaluate for postural instability, gait irregularity  
- Worker will assist clients, as needed  
- Worker may request that a family member or friend accompany a client with mobility issues  
- Worker may decide to see a client in the client’s home. |
<table>
<thead>
<tr>
<th>Respondent #6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community-Based Mental Health Centre</td>
</tr>
</tbody>
</table>

- Falls prevention information is given or readily available
- Worker will ask clients about medication usage
- Psychiatric nurse on staff in Mental Health can advise other workers on medication issues with clients
- If a worker feels a client is at risk for falls, the worker can refer to Occupational Therapy, Home Care, or a physician for evaluation
- If a worker feels there are home safety issues, the worker will give the clients safety information, refer to Home Care for evaluation, or will make appropriate community referrals. Any information given to clients will be documented in their files.
- Psychotic clients are referred immediately as in-patients and are dealt with by hospital staff
- Chemically impaired clients are dealt with by calling the local police for assistance, if necessary.

**Effectiveness Measures**

The falls prevention strategy is evaluated on an ongoing basis to identify trends, causes, and degrees of injury, as follows:

- Falls will be tracked by the facility as a whole through incident reports.
- Falls will be reported and recorded at weekly mental health team meetings.
- The Regional Falls Prevention team, which has members from the different health service-related departments co-located in the health centre, will meet regularly to review falls data.
- Any additional fall risk factors and trends identified will be addressed by the Regional Falls Prevention team.

Key performance indicators for the three identified objectives are:

1. A safe environment with no hazards; “Caution — Wet Floors” signs used as appropriate; no falls.
2. Falls information given or readily available for clients and family; home visits when required; mobility assistance when required; no falls.
3. Falls statistics collected; incidence forms completed and reviewed; incidents responded to in a timely manner and causes addressed; trend and risk factors identified and addressed by the Falls Prevention team.

**Evaluation and Improvement of Falls Prevention Strategies**

Evaluation information generated, as indicated previously, is used to make ongoing improvements to the facility's falls prevention strategy.
### Environmental Scan

#### Respondent #7

Health Region-Wide Community-Based Mental Health and Addictions Program

<table>
<thead>
<tr>
<th>Screening Criteria to Identify Patients at High Risk for Falls</th>
<th>The region’s Mental Health &amp; Addictions community-based adult programs screen for falls-related risks within a specific physical activity group using the following screening methods:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- A standardized client self-reporting questionnaire called “Par-Q &amp; You” (available at <a href="http://www.csep.ca/cmfiles/publications/parq/par-q.pdf">http://www.csep.ca/cmfiles/publications/parq/par-q.pdf</a>). Particular attention is paid to a self-reported “yes” answer to the following question: “Do you lose your balance because of dizziness or do you ever lose consciousness?”</td>
<td></td>
</tr>
<tr>
<td>- An in-person interview before admission to the physical activity group. Clients are asked what medications they are currently taking, following which program staff assess whether a client is currently taking four or more medications known to cause dizziness, hypotension, and/or visual disturbances as potential side effects.</td>
<td></td>
</tr>
<tr>
<td>- Clients are asked whether they have had a fall within the past six months.</td>
<td></td>
</tr>
</tbody>
</table>

Positive findings for any or all of the abovementioned three screening criteria place the client at high risk for falls.

<table>
<thead>
<tr>
<th>Falls Prevention Strategies Utilized</th>
<th>The program utilizes the following falls prevention strategies for its mental health and addictions clients:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Education and awareness programs are provided by the program’s multidisciplinary staff (e.g., recreation therapists, nurses, physiotherapists, exercise therapists) who have successfully completed the standardized Canadian Falls Prevention Curriculum (CFPC) training. The training is available as a four-week on-line course offered by the University of Victoria (see <a href="http://www.uvcs.uvic.ca/aspnet/Course/Detail/?code=hpcf215">http://www.uvcs.uvic.ca/aspnet/Course/Detail/?code=hpcf215</a>), or via a two-day, “in person” workshop offered locally by CFPC certified trainers.</td>
<td></td>
</tr>
<tr>
<td>- Regular demonstration and practice of various appropriate balance skills improvement activities (Able Bodies Balance Training from Human Kinetics; see <a href="http://www.humankinetics.com/products/all-products/able-bodies-balance-training">http://www.humankinetics.com/products/all-products/able-bodies-balance-training</a>) are taught to the identified high-risk clients by recreation therapists, physiotherapists, or exercise therapists from Mental Health, Public Health, and Chronic Disease Management care areas. All staff teaching balance skills activities have also successfully completed the CFPC training, and are leaders of falls or balance skills education offered to clients during weekly fitness and global conditioning programs.</td>
<td></td>
</tr>
</tbody>
</table>
### Environmental Scan

**Respondent #7**

**Health Region-Wide Community-Based Mental Health and Addictions Program**

| Effectiveness Measures | The falls prevention program is incorporated within two larger global fitness and conditioning programs that, in addition to balance impairment, also address other physical issues. The following measures specifically address balance:
| | - Self-reported falls by clients (with the expectation of a fewer number of self-reported falls) at client completion of the program.
| | - Comparative results of a pre- and post-program survey administered to participants of the group fitness and global conditioning program, assessing quality of life measures specific to the mental health population (abbreviated version of the Quality of Life Enjoyment and Satisfaction Questionnaire by Ritsner et al., Q-LES-Q-18).
| | - For a smaller, more active group of mental health patients, the program also includes assessment via a pre- and post-program measurement of indirect cardio-respiratory function using the “1-Mile Walking Test” from the Cooper Institute as the standardized assessment tool. This test demonstrates the client’s ability to sustain upright balance and mobility using walking endurance and leg muscle stamina. Cardio-respiratory endurance is the final and most challenging of the balance program components used in addressing the client’s balance deficits in lower body strength.
| Evaluation and Improvement of Falls Prevention Strategies | Information obtained to date has helped to identify gaps in the mental health community treatment programs by showing what areas of the Recovery Model Falls Prevention Strategies can be targeted for those clients identified at a high risk for falls. |
### Respondent #8  
**Community-Based Mental Health and Addictions Program**

<table>
<thead>
<tr>
<th>Screening Criteria to Identify Patients at High Risk for Falls</th>
<th>Falls screening is performed more consistently for the older adult mental health clients. To date, few falls have been documented in the regular adult versus older adult mental health program clientele. The older adult mental health program is trialling the use of a Falls Screen that is available in the electronic health record. Each variable within a screening criterion is assigned a specific score, which is then tallied at the end. Falls risk increases as the score value rises. The specific screening criteria include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (male/female)</td>
<td>• Gender (male/female)</td>
</tr>
<tr>
<td>Age (&lt; 60, 60 to 70, 71 to 80, &gt; 80)</td>
<td>• Age (&lt; 60, 60 to 70, 71 to 80, &gt; 80)</td>
</tr>
<tr>
<td>Falls history (none, indoor falls, outdoor falls, both)</td>
<td>• Falls history (none, indoor falls, outdoor falls, both)</td>
</tr>
<tr>
<td>Medical history (choice of all that apply: diabetes, cognitive impairment, seizures, transient ischemic attacks, cerebral vascular accident, urinary tract infection or incontinence, Parkinson and neurological disease, none of the aforementioned)</td>
<td>• Medical history (choice of all that apply: diabetes, cognitive impairment, seizures, transient ischemic attacks, cerebral vascular accident, urinary tract infection or incontinence, Parkinson and neurological disease, none of the aforementioned)</td>
</tr>
<tr>
<td>Living situation (choice of one only: lives alone or is caregiver, lives with caregiver/spouse/other, home support services, residential care or hospital)</td>
<td>• Living situation (choice of one only: lives alone or is caregiver, lives with caregiver/spouse/other, home support services, residential care or hospital)</td>
</tr>
<tr>
<td>Sensory deficit (choice of all that apply: wears bi- or trifocals, wears hearing aid, not applicable)</td>
<td>• Sensory deficit (choice of all that apply: wears bi- or trifocals, wears hearing aid, not applicable)</td>
</tr>
<tr>
<td>Gait (choice of all that apply: steady, hesitant, poor transferring, unsteady, balance or dizziness issue)</td>
<td>• Gait (choice of all that apply: steady, hesitant, poor transferring, unsteady, balance or dizziness issue)</td>
</tr>
<tr>
<td>Mobility (choice of all that apply: full, uses walking aid, restricted, bed bound).</td>
<td>• Mobility (choice of all that apply: full, uses walking aid, restricted, bed bound).</td>
</tr>
<tr>
<td>Assessment of regular adult clients for falls risk is done less regularly than for the older adult clients, as previously noted. The following falls risk factors, which are not scored per se, may be screened for:</td>
<td>Assessment of regular adult clients for falls risk is done less regularly than for the older adult clients, as previously noted. The following falls risk factors, which are not scored per se, may be screened for:</td>
</tr>
<tr>
<td>Current medications — taking more than four drugs; has there been a recent change in medication(s); is the client on psychotropics</td>
<td>• Current medications — taking more than four drugs; has there been a recent change in medication(s); is the client on psychotropics</td>
</tr>
<tr>
<td>Postural hypotension, dizziness, syncope</td>
<td>• Postural hypotension, dizziness, syncope</td>
</tr>
<tr>
<td>Agitation, confusion, impaired mental status, psychosis, depression, dementia</td>
<td>• Agitation, confusion, impaired mental status, psychosis, depression, dementia</td>
</tr>
<tr>
<td>Falls history in last six months, or fear of falling</td>
<td>• Falls history in last six months, or fear of falling</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>• Substance abuse</td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td>• Sleep disturbance</td>
</tr>
<tr>
<td>Acute illness and comorbidities</td>
<td>• Acute illness and comorbidities</td>
</tr>
<tr>
<td>Impaired mobility, gait instability</td>
<td>• Impaired mobility, gait instability</td>
</tr>
<tr>
<td>Vision or hearing problems</td>
<td>• Vision or hearing problems</td>
</tr>
<tr>
<td>Urinary incontinence or frequency, need for assisted toileting.</td>
<td>• Urinary incontinence or frequency, need for assisted toileting.</td>
</tr>
</tbody>
</table>
### Environmental Scan

**Falls Prevention Strategies in Adult Outpatient or Community-Based Mental Health and/or Addiction Programs**

<table>
<thead>
<tr>
<th><strong>Respondent #8</strong></th>
<th><strong>Community-Based Mental Health and Addictions Program</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Falls Prevention Strategies Utilized</strong></td>
<td>As with screening, strategies to prevent falls are primarily implemented with the older adult mental health program clients. Strategies for identifying higher risk clients, as applicable, are:</td>
</tr>
<tr>
<td></td>
<td>• Review of medications</td>
</tr>
<tr>
<td></td>
<td>• Review of substance abuse – refer to substance use treatment program</td>
</tr>
<tr>
<td></td>
<td>• Communications with client, their family, or other members of client’s care team including the family physician, regarding client being at risk for falls</td>
</tr>
<tr>
<td></td>
<td>• Education for clients and families through brochures and educational materials (e.g., what to do when you fall, nutrition for healthy bones, strategies around home to reduce potential for falls)</td>
</tr>
<tr>
<td></td>
<td>• Suggest hip protectors for older clients</td>
</tr>
<tr>
<td></td>
<td>• Referral to Home Care, physiotherapy, and/or occupational therapy assessments</td>
</tr>
<tr>
<td></td>
<td>• Exercise and/or strengthening programs.</td>
</tr>
<tr>
<td><strong>Effectiveness Measures</strong></td>
<td>All falls incidents, as well as near misses, are documented and reviewed. Effectiveness measures currently include:</td>
</tr>
<tr>
<td></td>
<td>• The number of falls (increasing/decreasing over time)</td>
</tr>
<tr>
<td></td>
<td>• Whether or not a falls risk assessment was completed prior to the fall</td>
</tr>
<tr>
<td></td>
<td>• The degree of client injury.</td>
</tr>
<tr>
<td><strong>Evaluation and Improvement of Falls Prevention Strategies</strong></td>
<td>Each incident is looked at and reviewed with local program staff to determine if any improvement to the patient’s care plan could be made. Overall indicator results are reviewed as part of the district’s Mental Health Quality Council, the idea being that any recommendations that could apply to other sites may also have relevance to the community mental health and addictions sites. More broadly, the indicators are looked at as part of a district Integrated Falls Prevention Program committee. This committee looks at indicators across the continuum of care (e.g., mental health, medical/surgical, residential, home, and community care sites) within the health district. In addition, falls indicators are reviewed as part of the Patient Safety Quality Council comprised of the health district’s senior leadership team. The Integrated Falls Prevention Committee is still evaluating how best to accomplish its role of providing oversight for the functioning of the Falls Strategy for the district.</td>
</tr>
</tbody>
</table>
**Screening Criteria to Identify Patients at High Risk for Falls**

The health authority’s mental health program operates under the perspective that individuals with mental health issues may be at risk of falls and fall-related injuries. The strategy aims to minimize the risk of harm, while supporting the well-being and optimum function of each client. This risk of falling is balanced with the fundamental values of mental health care: autonomy of choice and dignity of person. Clients and, where possible, families are engaged in the process of timely identification and management of biological, environmental, functional, and psychosocial falls risk factors.

The client-specific falls prevention strategy attends to falls risk factors that are experienced by people of all ages who live with mental health and/or substance abuse issues, including but not limited to:

- Biological factors such as the impact of mood and psychotropic medication on cognitive function
- Functional factors such as the impact of psychotropic drugs on the mobility and cognitive abilities required to function and live with self-determination
- Environmental factors such as accessibility of community mental health care facilities for clients who experience both mental health and falls risk issues
- Psychosocial factors such as client/caregiver readiness to acknowledge the impact of substance abuse.

All clients accessing community-based mental health and/or addiction services are screened as part of the admission process, and the screening information is documented in the client’s clinical profile.

Screening criteria include evaluating the following risk factors:

- Previous history of falls (two or more falls in the last six months)
- Poly-pharmacy (especially narcotics, benzodiazepine, or psychotropic medications)
- A diagnosis of stroke or Parkinson disease
- Impaired mobility, balance, or gait
- Generalized weakness
- Substance use
- Altered mental state (delirium, brain injury, dementia, depression, uncontrolled diabetes)
- Altered elimination patterns (urgency, frequency, incontinence)
- Difficulty performing activities of daily living
- Frailty in the elderly
- Immobility
- Impaired vision
- Degenerative disease
- Assistance with aids/devices
- Environmental hazards.

As well, the client’s environment is assessed for risk of falls. Regular environmental safety checks are conducted at any site where clients access treatment, including those receiving home-based programs.
Respondent #9  
Health Authority-Wide Mental Health and/or Addiction Services Falls Prevention Strategy to be Customized By Each Service Area for the Population Served

| Falls Prevention Strategies Utilized | The Mental Health Falls Prevention Guidelines for this health region support interdisciplinary teams in the understanding that falls prevention practice attends to risks that have multi-factoral causes best delivered through a collaborative approach that emphasizes client and caregiver engagement in falls prevention activities.  

A client’s *clinical profile* will indicate if he or she is found to be at risk for falls, what risk factors for falls have been identified, and what the role of the mental health and addiction service provider is regarding falls prevention. The *treatment plan* will also include identified risk factors for falls and patient-specific strategies to address each risk factor.  

Falls prevention information and education is provided, as appropriate, to clients and their families. This includes the use of a specific safety brochure developed specifically for clients of community-based mental health and addiction service programs. In addition, the Lifeline Fall Prevention Checklist (available at: [http://www.familycaregiversonline.com/docs/Fall_Prevention_Checklist.pdf](http://www.familycaregiversonline.com/docs/Fall_Prevention_Checklist.pdf)) is used when appropriate.  

When clients are discharged, information on risk of falls, treatment plans, and strategies to prevent falls, plus any information on documented falls, is included in the discharge information. |
| Effectiveness Measures | All falls are documented and reported via the health authority’s paper incident reporting form or electronic safety event system if it has gone live at a particular site. |
| Evaluation and Improvement of Falls Prevention Strategies | Through regular Quality Council meetings for each of Seniors’ Mental Health, Adult Mental Health and Addiction, and Child Youth and Family Mental Health service areas, falls data is reviewed, trends identified, and actions formulated based on the findings, with the falls prevention strategy amended as required. The health authority has engaged across all clinical programs to establish a regional approach to falls prevention for its Mental Health Program that supports programs in identifying clients/patients at risk, evaluating the impact of the strategy, and using evaluative data to make improvements. |
**Environmental Scan**

**Respondent #10**
Regional Outpatient Clinics Associated With An Acute Care Forensic Hospital

<table>
<thead>
<tr>
<th>Screening Criteria to Identify Patients at High Risk for Falls</th>
<th>The forensic regional clinics’ approach to the Forensic Psychiatric Services Falls Prevention Strategy focuses on the primary prevention of falls. If concerns about falls for a specific client are highlighted during the intake assessment process (no formalized falls screening criteria are used), a referral is made to the client’s community-based general practitioner for a comprehensive assessment and potential involvement of other community-based health care professionals (e.g., occupational therapist, physiotherapist, dietitian, pharmacist), as necessary.</th>
</tr>
</thead>
</table>
| Falls Prevention Strategies Utilized | The clinics focus their falls prevention efforts on sharing information on both the intrinsic and environmental factors contributing to falls with clients to help them understand what might put them at risk for falls, and what steps they can take to prevent the risk of falling. Information sharing is in the form of handouts and staff-to-client education, where deemed necessary. Two handouts have been developed:  
  - The first focuses on medications that might place clients at risk of falling.  
  - The second handout makes use of the acronym SAFE to assist in reminding clients what they can do to keep safe by raising awareness of potential risks:  
    - **Speak up** if things do not seem right or if you have concerns.  
    - **Ask** questions. Make sure your health provider explains your care in a way you understand.  
    - **Families** and/or friends, with your permission, can attend appointments with you for support or to ask questions on your behalf if you are not feeling well.  
    - **Educate** yourself. Find out about your condition, what your treatment options are, and what you can do to improve your health and safety.  
  The regional clinics also scan their physical environments to ensure that all facilities are accessible to those who may potentially have mobility problems, and that contracts are in place to deal with adverse, inclement weather conditions (e.g., snow, icy conditions). |
| Effectiveness Measures | None at this time. |
| Evaluation and Improvement of Falls Prevention Strategies | None at this time. |
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