# Fall Prevention Toolkit

## Module 3 ToolsPicture of puzzle with Tools piece highlighted

Tool 3A: Inpatient Falls Clinical Pathway

Tool 3B: Scheduled Rounding Protocol

Tool 3C: Environmental Safety at the Bedside

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Customized Tool 3P: Checklist of Best Practices

### 3A: Master Clinical Pathway for Inpatient Falls

**Background:** The purpose of this tool is to provide an overview of how fall prevention care processes could occur at your hospital or hospital unit.

**Reference:** Developed by Falls Toolkit Research Team.

**How to use this tool:** Compare the master clinical pathway to your current activities and adapt your activities or the master clinical pathway as needed to suit your specific circumstances.

This tool can be used by the quality improvement manager, staff nurses, and nursing assistants as an aid in designing a new system, as a training tool, or as an ongoing clinical reference tool. This tool can be modified or a new one created to meet the needs of your particular setting. If you prepared a process map describing your current practices, you can compare that with desired practices outlined on the clinical pathway.

#### Inpatient Falls Clinical Pathway flow chart.Inpatient Falls Clinical Pathway

### 3B: Scheduled Rounding Protocol

**Background:** Hourly rounds are an opportunity to ensure that universal fall precautions are implemented and that patients’ needs are being met. These rounds integrate fall prevention activities with the rest of a patient’s care.

**Reference:** Adapted from Meade CM, Bursell AL, Ketelsen L. Effects of nursing rounds: on patients’ call light use, satisfaction, and safety. Am J Nurs 2006;106(9):58-70 with permission. Items that have been modified or added are marked with an asterisk.

**How to use this tool:** Review the hourly rounding protocol and adapt it to your specific circumstances. For example, components of the fall risk factor assessment can be added, such as a brief mental status screen.

This protocol can be used by staff nurses, nursing assistants, and the unit manager to ensure that universal fall precautions are in place.

The following items should be checked and performed for each patient. Upon entering the room, tell the patient you are there to do your rounds.

|  |  |
| --- | --- |
| 1 | Assess patient pain levels using a pain-assessment scale (if staff other than RNs are doing the rounding and the patient is in pain, contact an RN immediately so the patient does not have to use the call light for pain medication). |
| 2 | Put medication as needed on RN’s scheduled list of things to do for patients and offer the dose when due. |
| 3 | Offer toileting assistance. |
| 4 | Check that patient is using correct footwear (e.g., specific shoes/slippers, nonskid socks).\* |
| 5 | Check that the bed is in locked position.\* |
| 6 | Place hospital bed in low position when patient is resting; ask if patient needs to be repositioned and is comfortable.\* |
| 7 | Make sure the call light/call bell button is within the patient’s reach and patient can demonstrate use.\* |
| 8 | Put the telephone within the patient’s reach. |
| 9 | Put the TV remote control and bed light switch within the patient’s reach. |
| 10 | Put the bedside table next to the bed or across bed.\* |
| 11 | Put the tissue box and water within the patient’s reach. |
| 12 | Put the garbage can next to the bed. |
| 13 | Prior to leaving the room, ask, “Is there anything I can do for you before I leave? I have time while I am here in the room.” |
| 14 | Tell the patient that a member of the nursing staff (use names on white board) will be back in the room in an hour to round again. |

### 3C: Tool Covering Environmental Safety at the Bedside

**Background:** Facility safety is key to preventing falls in the hospital.

**Reference:** Adapted from AHRQ publication on the Falls Management Program for nursing homes. Available at: [www.ahrq.gov/research/ltc/fallspx/fallspxmanual.htm](http://www.ahrq.gov/research/ltc/fallspx/fallspxmanual.htm).

**How to use this tool:** This tool contains an inspection checklist to be completed jointly by the unit manager and facility engineer to identify and resolve environmental safety issues in hospital rooms. The inspection is designed to be performed room by room and bed by bed within each room (if rooms are not private).

Use the results from the inspection process to determine which items require attention by the nursing staff or maintenance or replacement by the facility engineers. Additional guidance for engineers about maintenance and repairs may be found at: [www.ahrq.gov/research/ltc/fallspx/fallspxmanapd.htm](http://www.ahrq.gov/research/ltc/fallspx/fallspxmanapd.htm).

#### Inspection List

Write the unit name, date, and room numbers across the top line. Put the bed number or letter across the second line and sign it. Put an “X” under the room number and bed beside all the tasks that need to be done (leave blank if no safety issue is identified or problem can be fixed immediately). Indicate whether this task should be completed by the nursing staff or facilities staff in the Assigned column. Tasks that are typically completed by the facility engineers are denoted with an “(f).” Write notes about special problems or add details in the Notes column.

| Unit | Date: | Room Number: |  |  |  |  |  |  |  | Assigned to | Notes |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Signature:  | Bed: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Paths | Remove unused equipment (canes/walkers). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Remove bedside commode, if unused. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| With patient’s permission, rearrange room to clear paths. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Put the bedside table next to the bed or across bed. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Remove unused items from bathroom and store elsewhere. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Make tiebacks for divider curtains. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Tie electrical cords out of path (TV, phone). |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| 2. Furniture | Adjust bed into locked position.  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Replace unstable bed with a stable one. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Push bed to wall (check local and state fire codes). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Remove all lightweight or unstable furniture. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clean, repair, or replace broken bed wheel locks. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Fix unstable furniture. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Secure loose bathroom handrails. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Replace missing rubber tips on bedside commode. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Replace missing rubber tips on handrails that rest on floor. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Secure raised toilet seat to commode. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| 3. Easy Access | Arrange room so that items are within patient’s reach (e.g., walking aids are within safe reach). |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| 4. Floor | Repair or replace floor covering. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Replace high, broken, or missing thresholds. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Add grading to thresholds between room and bathroom. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| 5. Lighting  | Replace burned out or flickering bulbs. Use max wattage. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Repair broken room lights or call lights. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Replace broken call light cords or lengthen cords. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| 6. Equipment  | Inspect wheelchair (for all wheelchairs found). |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Repair cane. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |
| Repair walker. |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (f) |  |

### 3D: Hazard Report Form

**Background:** This tool contains a form for reporting environmental hazards when they are detected. Whereas the inspection checklist ([Tool 3C, “Tool Covering Environmental Safety at the Bedside”) i](#_3C:_Tool_cCovering)s for regular, systematic review for fall hazards, this form is for hazards detected incidentally during usual care.

**Reference:** Falls prevention strategies in health care settings. Plymouth Meeting, PA:ECRI Institute; 2006. Hazard Report Form 13: 248. Reprinted with permission.

**How to use this tool:** Use this form whenever an environmental hazard is detected. You may need to change the people to whom the hazard is reported based on your local organizational setup. Any hospital employee who enters patient rooms can use this form.

#### Hazard Report Form

To: Nurse Manager

Equipment or Condition Presenting Hazard:

Location of Hazard:

Date Hazard Reported:

Hazard Reported by (your name):

Corrective Action Taken (describe what you did to eliminate the hazard):

Work Order Initiated (describe what still needs to be done to eliminate the hazard):

Work Order Completed on:

Work Order Completed by:

Action Taken to Eliminate Future Occurrences:

Hazard Reported at:

Staff Meeting (date):

Shift Reports (date):

Posting on Bulletin Boards (date):

Copies of this form must be forwarded to the Risk Manager.

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### 3G: STRATIFY Scale for Identifying Fall Risk Factors

**Background:** This tool can be used to identify risk factors for falls in hospitalized patients. The total score may be used to predict future falls, but it is more important to identify risk factors using the scale and then plan care to address those risk factors.

**Reference:** Adapted from Oliver D, Britton M, Seed P, et al. Development and evaluation of evidence based risk assessment tool (STRATIFY) to predict which elderly inpatients will fall: case-control and cohort studies. BMJ 1997;315(7115):1049-53. Reprinted with permission from BMJ Group.

**How to use this tool:** Please fill out the scale as instructed below. This tool can be used by staff nurses.

Use this tool in conjunction with clinical assessment and a review of medications (see [Tool 3I](#_3IH:_Medication_fFall)) to determine if a patient is at risk for falls and plan care accordingly. Note that this scale may not capture the risk factors that are most important on your hospital ward, so consider your local circumstances.

If your hospital uses an electronic health record, consult your hospital’s information systems staff about integrating this tool into the electronic health record.

#### STRATIFY Risk Assessment Tool

Answer all five questions below and count the number of “Yes” answers.

| 1 | Did the patient present to hospital with a fall or has he or she fallen on the ward since admission (**recent history of fall**)? | Yes = 1 | No = 0 |
| --- | --- | --- | --- |
| 2 | Is the patient **agitated**? | Yes = 1 | No = 0 |
| 3 | Is the patient **visually impaired** to the extent that everyday function is affected? | Yes = 1 | No = 0 |
| 4 | Is the patient in need of especially **frequent toileting**? | Yes = 1 | No = 0 |
| 5 | Does the patient have a combined **transfer and mobility** score of 3 or 4? (calculate below) | Yes = 1 | No = 0 |
| *Transfer score*: Choose **one** of the following options which best describes the patient’s level of capability when transferring from a bed to a chair:0 = Unable1 = Needs major help2 = Needs minor help3 = Independent |
| *Mobility score*: Choose **one** of the following options which best describes the patient’s level of mobility:0 = Immobile1 = Independent with the aid of a wheelchair2 = Uses walking aid or help of one person3 = Independent |
| *Combined score* (**transfer + mobility**): \_\_\_\_\_\_\_\_\_\_\_\_  |
| Total score from questions 1-5: \_\_\_\_\_\_\_\_\_\_\_0 = Low risk 1 = Moderate risk2 or above = High risk |

### 3H: Morse Fall Scale for Identifying Fall Risk Factors

**Background:** This tool can be used to identify risk factors for falls in hospitalized patients. The total score may be used to predict future falls, but it is more important to identify risk factors using the scale and then plan care to address those risk factors.

**Reference:** Adapted from Morse JM, Morse RM, Tylko SJ. Development of a scale to identify the fall-prone patient. Can J Aging 1989;8:366-7. Reprinted with the permission of Cambridge University Press.

**How to use this tool:** A training module on proper use of the Morse Fall Scale developed by the Partners HealthCare Fall Prevention Task Force may be found at [www.brighamandwomens.org/Patients\_Visitors/pcs/nursing/nursinged/Medical/FALLS/Fall\_TIPS\_Toolkit\_MFS%20Training%20Module.pdf](http://www.brighamandwomens.org/Patients_Visitors/pcs/nursing/nursinged/Medical/FALLS/Fall_TIPS_Toolkit_MFS%20Training%20Module.pdf). In addition to completion of the module, training should include real cases where the provider conducts an assessment. Mental status and gait parameters require actual assessment of a real patient (as opposed to solely a chart review).

This tool can be used by staff nurses. Use this tool in conjunction with clinical assessment and a review of medications (see [Tool 3I](#_3IH:_Medication_fFall)) to determine if a patient is at risk for falls and plan care accordingly. Note that this scale may not capture the risk factors that are most important on your hospital ward, so consider your local circumstances.

Register through Partners HealthCare at [www.brighamandwomens.org/Patients\_Visitors/pcs/nursing/nursinged/Medical/FALLS/Permissions/PHS%20MFS%20Competency.pdf](http://www.brighamandwomens.org/Patients_Visitors/pcs/nursing/nursinged/Medical/FALLS/Permissions/PHS%20MFS%20Competency.pdf) prior to use.

If your hospital uses an electronic health record, consult your hospital’s information systems staff about integrating this tool into the electronic health record.

#### Morse Fall Scale

| **Item** | **Item Score** | **Patient Score** |
| --- | --- | --- |
| 1. History of falling (immediate or previous) | No 0Yes 25 | \_\_\_\_\_\_ |
| 2. Secondary diagnosis (≥ 2 medical diagnoses in chart) | No 0Yes 15 | \_\_\_\_\_\_ |
| 3. Ambulatory aidNone/bedrest/nurse assist Crutches/cane/walker Furniture | 01530 | \_\_\_\_\_\_ |
| 4. Intravenous therapy/heparin lock | No 0Yes 20 | \_\_\_\_\_\_ |
| 5. GaitNormal/bedrest/wheelchairWeak\*Impaired† | 01020 | \_\_\_\_\_\_ |
| 6. Mental statusOriented to own abilityOverestimates/forgets limitations | 015 | \_\_\_\_\_\_ |
| Total Score‡: Tally the patient score and record.<25: Low risk25-45: Moderate risk>45: High risk | \_\_\_\_\_\_ |

\* Weak gait: Short steps (may shuffle), stooped but able to lift head while walking, may seek support from furniture while walking, but with light touch (for reassurance).

† Impaired gait: Short steps with shuffle; may have difficulty arising from chair; head down; significantly impaired balance, requiring furniture, support person, or walking aid to walk.

‡ Suggested scoring based on Morse JM, Black C, Oberle K, et al. A prospective study to identify the fall-prone patient. Soc Sci Med 1989; 28(1):81-6. However, note that Morse herself said that the appropriate cut-points to distinguish risk should be determined by each institution based on the risk profile of its patients. For details, see Morse JM, , Morse RM, Tylko SJ. Development of a scale to identify the fall-prone patient. Can J Aging 1989;8;366-7.

### 3I: Medication Fall Risk Score and Evaluation Tools

**Background:** This tool can be used to identify medication-related risk factors for falls in hospitalized patients. A pharmacist would perform this assessment.

**Reference:** Used with permission: Beasley B, Patatanian E. Development and implementation of a pharmacy fall prevention program. Hosp Pharm 2009;44(12):1095-1102. © 2009, Thomas Land Publishers, [www.hosp-pharmacy.com](http://www.hosp-pharmacy.com).

**How to use this tool:** Evaluate medication-related fall risk on admission and at regular intervals thereafter. Add up the point value (risk level) for every medication the patient is taking. If the patient is taking more than one medication in a particular risk category, the score should be calculated by (risk level score) x (number of medications in that risk level category). For a patient at risk, a pharmacist should use the evaluation tools to determine if medications may be tapered, discontinued, or changed to a safer alternative.

Use this tool in conjunction with clinical assessment and a nursing risk scale (e.g., [Tool 3H, “Morse Fall Scale for Identifying Fall Risk Factors,”](#_3HF:_The_Morse) or [3G, “STRATIFY Scale for Identifying Fall Risk Factors”](#_3G:_STRATIFY_Scale)) to determine if a patient is at risk for falls and plan care accordingly. Note that this scale may not capture the medication risk factors that are most important on your hospital ward, so consider your local circumstances.\* A hybrid approach is to have the nurse use a scale such as the one below and alert the pharmacist if the total score is 6 or greater.

If your hospital uses an electronic health record, consult your hospital’s information systems staff about integrating this tool into the electronic health record.

\* Formularies may differ. Consult the hospital pharmacy and therapeutics committee or pharmacy department for formulary drugs within the American Hospital Formulary Service drug class identified in the table. The hospital can decide how to specify the drugs that fall within these risk classes. Also consider the dose and timing of medications (e.g., avoiding diuretic use close to bedtime).

#### Medication Fall Risk Score

| Point Value (Risk Level) | American Hospital Formulary Service Class | Comments |
| --- | --- | --- |
| 3 (High) | Analgesics,\* antipsychotics, anticonvulsants, benzodiazepines† | Sedation, dizziness, postural disturbances, altered gait and balance, impaired cognition |
| 2 (Medium) | Antihypertensives, cardiac drugs, antiarrhythmics, antidepressants | Induced orthostasis, impaired cerebral perfusion, poor health status |
| 1 (Low) | Diuretics | Increased ambulation, induced orthostasis |
| Score ≥ 6 |  | Higher risk for fall; evaluate patient |

\* Includes opiates.

† Although not included in the original scoring system, the falls toolkit team recommends that you include non-benzodiazepine sedative-hypnotic drugs (e.g., zolpidem) in this category.

#### Medication Fall Risk Evaluation Tools

Use the tools below when evaluating patients found to have high medication-related risk for falls. The comments section provides information on how to evaluate the indicators.

| Indicator | Comments |
| --- | --- |
| Medications  | Beers criteria,\* dose adjustment for renal function or disease state, overuse of medications, IV access |
| Laboratory  | Therapeutic drug levels (digoxin, phenytoin), international normalized ratio, electrolytes, hemoglobin/hematocrit |
| Disease states  | Comorbidities, hypertension, congestive heart failure, diabetes, orthopedic surgery, prior fall, dementia, other† |
| Education  | Patient’s ability/willingness to learn, patient’s mental status |

\* Beers criteria are available at: American Geriatrics Society updated Beers criteria for potentially inappropriate medication use in older adults. J Am Geriatr Soc 2012;60(4):616-31.

† Age 65 years or older.

### 3J: Delirium Evaluation Bundle: Digit Span, Short Portable Mental Status Questionnaire, and Confusion Assessment Method

Background:Patients found to have impaired mental activity as a risk factor for falls require further evaluation. The Delirium Evaluation Bundle is designed to help determine if the patient has delirium.

Reference:

Digit Span: Scoring guidelines from Montreal Cognitive Assessment are available at the Veterans Affairs (VA) Web page for the National Parkinson’s Disease Research, Education, and Clinical Center & VA PD Consortium, [www.parkinsons.va.gov/consortium/moca.asp](http://www.parkinsons.va.gov/consortium/moca.asp).

Short Portable Mental Status Questionnaire: Adapted from (1) Hospital Elder Life Program and (2) Pfeiffer E. A short portable mental status questionnaire for the assessment of organic brain deficit in elderly patients. J Am Geriatr Soc 1975;23:433-41.

Confusion Assessment Method: Adapted from Inouye SK, van Dyck CH, Alessi CA, et al. Clarifying confusion. Ann Intern Med 1990;113(12):941-8.

How to use this tool:A proper evaluation for delirium requires both standardized testing and direct observation of the patient’s behavior. Performing the Digit Span Test and the Short Portable Mental Status Questionnaire will provide information that can be used in the Confusion Assessment Method (CAM). Instructions for each test are explained below. Use the provided link to access the CAM training manual.

This tool should be used in any patient whose mental status is unclear on admission or transfer to a unit, or whose mental status has acutely declined. The tool will allow you to determine if a patient is delirious and therefore requires further medical evaluation for delirium. Physicians, nurse practitioners, and physician assistants can carry out this assessment, but training is required (use links provided below to access material). The training is particularly important to distinguish delirium from behavioral symptoms of dementia.

Consider having clinical champions for delirium assessment who can be called in to evaluate a patient if needed. If your hospital uses an electronic health record, consult your hospital’s information systems staff about integrating this tool into the electronic health record.

#### Digit Span

Now I am going to say some numbers. Please repeat them back to me.

[SAY DIGITS AT RATE OF ONE PER SECOND]

| DIGITS FORWARD (DF) | Response |
| --- | --- |
| 2 - 9 - 1 | \_\_\_\_ - \_\_\_\_ - \_\_\_\_ |
| 3 - 5 - 7 - 4 | \_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_ |
| 6 - 1 - 9 - 2 - 7 | \_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_ |

Now I am going to read some more numbers, but I want you to repeat them in backward order from the way I read them to you. So, for example, if I said 6-4, you would say 4-6.

[SAY DIGITS AT RATE OF ONE PER SECOND]

| DIGITS BACKWARD (DB) | Response |
| --- | --- |
| 7 - 4 – 2 | \_\_\_\_ - \_\_\_\_ - \_\_\_\_ |
| 5 - 3 - 8 - 4 | \_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_ |

SCORING: Patients should be able to repeat 5 digits forward and 3 digits backward under normal conditions. Inability to do so represents an abnormal test result.

#### Short Portable Mental Status Questionnaire

| **Question** | **Response** | **Error?** |
| --- | --- | --- |
| What are the date, month, and year?\* | Date | Month | Year |  |
| What is the day of the week? |  |  |
| What is the name of this place? |  |  |
| What is your phone number? |  |  |
| How old are you? |  |  |
| When were you born? |  |  |
| Who is the current president? |  |  |
| Who was the president before him? |  |  |
| What was your mother’s maiden name? |  |  |
| Can you count backward from 20 by 3s? |  |  |

\*A mistake on ANY part of this question should be scored as an error.

Total Errors: \_\_\_\_\_\_\_

SCORING\*:

0-2 errors: normal mental functioning

3-4 errors: mild cognitive impairment

5-7 errors: moderate cognitive impairment

8 or more errors: severe cognitive impairment

\*One more error is allowed in the scoring if a patient has had a grade school education or less. One less error is allowed if the patient has had education beyond the high school level.

The Short Portable Mental Status Questionnaire was originally published as Pfeiffer E. A short portable mental status questionnaire for the assessment of organic brain deficit in elderly patients. J Am Geriatr Soc 1975;23:433-41. The version shown here is adapted from the Hospital Elder Life Program ([www.hospitalelderlifeprogram.org](http://www.hospitalelderlifeprogram.org/) ). Used with permission. © E. Pfeiffer, 1994.

#### Confusion Assessment Method

After checking the patient’s orientation and performing the Digit Span Test and Short Portable Mental Status Questionnaire, rate the patient using the Confusion Assessment Method. This is best done after going through a training process, available at [www.hospitalelderlifeprogram.org](http://www.hospitalelderlifeprogram.org/). After agreement to conditions of use, download the Confusion Assessment Method Training Manual at [www.hospitalelderlifeprogram.org/pdf/TheConfusionAssessmentMethodTrainingManual.pdf](http://www.hospitalelderlifeprogram.org/pdf/TheConfusionAssessmentMethodTrainingManual.pdf).

A brief summary of the Confusion Assessment Method for nurses is also available through the Hartford Institute for Geriatric Nursing at: <http://consultgerirn.org/uploads/File/trythis/try_this_13.pdf>.

A 50-minute training video for nurses is available through the Hartford Institute for Geriatric Nursing at: <http://consultgerirn.org/resources/media/?vid_id=4361983#player_container>.

To rate the patient with the Confusion Assessment Method, use the worksheet on the next page.

Confusion Assessment Method Shortened Version Worksheet

| EVALUATOR: | DATE: |
| --- | --- |
| I. ACUTE ONSET AND FLUCTUATING COURSE  |  | BOX 1 |
| a. Is there evidence of an acute change in mental status from the patient’s baseline? | No  | Yes  |
| b. Did the (abnormal) behavior fluctuate during the day, that is, tend to come and go or increase and decrease in severity? | No  | Yes  |
| II. INATTENTION |  |  |
| Did the patient have difficulty focusing attention, for example, being easily distractible or having difficulty keeping track of what was being said? | No  | Yes  |
| III. DISORGANIZED THINKING |  |  |
| Was the patient’s thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject? |  | BOX 2 |
| No  | Yes  |
| IV. ALTERED LEVEL OF CONSCIOUSNESS |  |  |
| Overall, how would you rate the patient’s level of consciousness? |  |  |
|  Alert (normal) |  |  |
|  |  Vigilant (hyperalert) Lethargic (drowsy, easily aroused) Stupor (difficult to arouse) Coma (unarousable) |  |  |  |
| Do any checks appear in this box? | No  | Yes  |

If all items in Box 1 are checked and at least one item in Box 2 is checked, a diagnosis of delirium is suggested.

© 2003, Hospital Elder Life Program. Adapted from Inouye SK, van Dyck CH, Alessi CA, et al, Clarifying confusion: the confusion assessment method. A new method for detection of delirium. Ann Intern Med 1990;113(12):941-8.

### 3M: Sample Care Plan

**Background:** Developing a care plan specific to the needs of each individual patient is critical. This tool is a sample care plan that gives specific examples of actions that should be performed to address a patient’s needs.

**Reference:** Adapted from National Health Service document Slips, trips, and falls in the hospital, available at [www.nrls.npsa.nhs.uk/resources/?EntryId45=59821](http://www.nrls.npsa.nhs.uk/resources/?EntryId45=59821). This report is based on Healey F, Monro A, Cockram A, et al. [Using targeted risk factor reduction to prevent falls in older in-patients: a randomised controlled trial.](http://www.ncbi.nlm.nih.gov/pubmed/15151914) Age Ageing 2004;33(4):390-5.

**How to use this tool:** This tool includes examples of interventions that may be considered for specific fall risk factors. These should be tailored to meet the needs of your patient. The original care plan was completed for patients with any of the following:

* Fall since admission.
* Attempt to walk alone unsteady/unsafe.
* Patient or relatives anxious about falls.

Your hospital unit may use these factors alone or in combination with additional factors to trigger use of the care plan. This tool should be used collaboratively by staff nurses with input from other disciplines (e.g., physician, pharmacist, physical or occupational therapists). If your hospital uses an electronic health record, consult your hospital’s information systems staff about integrating this tool into the electronic health record.

Individualize the care plan to address the needs of at-risk patients.

#### Care Plan

| GOAL: To reduce likelihood of falls while maintaining dignity and independence | State action taken below (sample provided): |
| --- | --- |
| **Call.** Ensure call bell explained and in reach. Consider alternatives for patients unable to recall use of call bell, e.g., use brass bell, move bed in sight of nurses’ station. | Call bell in reach but may forget, will probably call her daughter’s name instead; moved within earshot of nurses’ station. |
| **Eyesight.** Ensure eyesight is checked and patient is wearing glasses if needed. Can the patient identify pen/key from bed length away? If eyesight is too poor to identify objects, ask the treating medical provider to review. Ensure glasses/hearing aid are worn or within reach. | Glasses broken in fall at home; family has ordered replacement and hopes to provide it tomorrow. Has fair distance vision without them. Have suggested that the family order a spare pair too. |
| **Bed and bedrails.** Assess the need for bedrails (refer to policy). If patient is likely to fall from bed, ensure bed is at the lowest possible height unless this would reduce mobility or independence. Consider use of special low bed. | Bedrails not appropriate as this patient can mobilize on her own, even though unsteady, and might be confused enough to climb over. Bed set at right height for safe move from sitting to standing. |
| **Medication.** Check for medication associated with fall risk, such as antidepressants, sleeping tablets, sedatives, and antipsychotics. Ask the pharmacist to review and make recommendations to treating medical provider (do not stop abruptly). | On temazepam 15 mg qhs for some years; will discuss with pharmacist. |
| **Mobility.** Determine the patient’s level of mobility and whether actions should be taken to improve or maintain mobility. | Participating in supervised mobility protocol with nursing assistant. Currently able to ambulate 50 feet with front wheeled walker daily. |
| **Interdisciplinary team.** Ensure medical staff, physical therapist, occupational therapist, social worker, and others on the team are aware of the patient’s risk, frequency, nature, and seriousness of falls (local protocol or pathway would cover expected actions by team members, e.g., cognitive evaluation, osteoporosis check, mobility aid review). | Treating physician aware of patient’s fall risk. Physical and occupational therapy referral sent on 11/14/11. Fall risk noted on discharge plan. |
| **Footwear.** Check footwear for secure fit, nonslip sole, no trailing laces. Ask relatives to supply safer replacement or supply new slippers from ward stock. Consider slipper socks in bed for patients at risk of falling at night. | Patient does not have footwear. Provided with new slippers from ward stock. |
| **Place.** Place patient in most appropriate place on the ward for his or her needs, e.g., close to nurses’ station, close to toilet, in quietest area (considering other patients’ needs as well). | Located nearest toilet and within earshot of nurses’ station. |
| **Lighting.** Consider lighting best for patient, e.g., bedside lamp left on overnight, night light in bathroom. | Will have overhead lamp on low overnight. |
| **Toilet.** Does the risk of falls appear to be associated with patient’s need to use toilet? If so, a routine of frequent toilet visits may help prevent falls. | Currently the patient has frequency/urgency; being treated for urinary tract infection. Will offer toilet every hour while patient is awake. |
| **Inform.** Provide falls education brochure to patient/family, engage them in care plan, find out contact wishes in event of fall. | Patient and daughter have falls education brochure, and care plan has been explained. Contact wishes entered into chart. |

### 3N: Postfall Assessment, Clinical Review

**Background:** This protocol explains how to assess and follow injury risk in a patient who has fallen.

**Reference:** Adapted from the South Australia Health Fall Prevention Toolkit. Available at: [www.sahealth.sa.gov.au/wps/wcm/connect/5a7adb80464f6640a604fe2e504170d4/Post+fall+management+protocol-SaQ-20110330.pdf?MOD=AJPERES&CACHEID=5a7adb80464f6640a604fe2e504170d4](http://www.sahealth.sa.gov.au/wps/wcm/connect/5a7adb80464f6640a604fe2e504170d4/Post%2Bfall%2Bmanagement%2Bprotocol-SaQ-20110330.pdf?MOD=AJPERES&CACHEID=5a7adb80464f6640a604fe2e504170d4)

**How to use this tool:** Staff nurses and physicians should follow this protocol, in combination with clinical judgment, with patients who have just fallen. Training on the Glasgow Coma Scale is available at: [www.nursingtimes.net/Binaries/0-4-1/4-1735373.pdf](http://www.nursingtimes.net/Binaries/0-4-1/4-1735373.pdf). (Full citation: Jevon P. Neurological assessment part 4 - Glasgow Coma Scale 2. Nurs Times 2008;104(30):24-5.) This training includes graphics demonstrating various aspects of the scale.

#### Postfall Assessment, Clinical Review

**Note:** There is increased risk of intracranial hemorrhage in patients with advanced age; on anticoagulant and/or antiplatelet therapy; and known coagulopathy, including those with alcoholism.In addition, there may be late manifestations of head injury after 24 hours.

|  |  |  |
| --- | --- | --- |
| **Does not hit head*** Assess immediate danger to all involved. Assess circulation, airway, and breathing according to your hospital’s protocol.
* Call for assistance. Activate appropriate emergency response team if required.
* Do not move the patient until he/she has been assessed for safety to be moved. Examine cervical spine and if there is any indication of injury do not move the patient; instead, immobilize cervical spine, and call treating medical provider.
* Identify all visible injuries and initiate first aid; for example, cover wounds.
* Assist patient to move using safe handling practices.

**Proceed to:*** Check vital signs (blood pressure, heart rate, respiratory rate, oxygen saturation, and hydration).
* Clean and dress any wounds.
* Inform treating medical provider.
* Provide analgesia if required and not contraindicated.
* Arrange further tests as indicated, such as blood sugar levels and x rays.
* Review current care plan and implement additional fall prevention strategies.
* Provide fall prevention information (Tool 3J).

**Observations:*** Continue observations at least every 4 hours for 24 hours or as required.
 |  | **Hits head or has unwitnessed fall*** Assess immediate danger to all involved. Assess circulation, airway, and breathing according to your hospital’s protocol.
* Call for assistance. Activate appropriate emergency response team if required.
* Do not move the patient until he/she has been assessed for safety to be moved. Examine cervical spine and if there is any indication of injury do not move the patient; instead, immobilize cervical spine, and call treating medical provider.
* Assess Glasgow Coma Scale (next page).
* Identify all visible injuries and initiate first aid; for example, cover wounds.
* Assist patient to move using safe handling practices.

**Proceed to:*** Record neurologic observations, including Glasgow Coma Scale. Observe for signs indicating stroke, change in consciousness, headache, amnesia, or vomiting.
* Get baseline vital signs (blood pressure, heart rate, respiratory rate, oxygen saturation, temperature, and hydration).
* Clean and dress any wounds.
* Arrange medical review.
* Provide analgesia if required and not contraindicated.
* Arrange further tests as indicated, such as blood sugar levels, x rays, ECG, and CT scan.
* Review current care plan and implement additional fall prevention strategies.
* Provide fall prevention information (Tool 3J).

**Observations:*** Record vital signs and neurologic observations at least hourly for 4 hours and then review.
* Continue observations at least every 4 hours for 24 hours, then as required.
* Notify treating medical provider immediately if any change in observations.
 |

#### Important Communications

* In the medical record, document the incident, outcome, and initial and ongoing observations, and update fall risk assessment and care plan.
* Notify the treating medical provider at the time of the incident, and schedule an interdisciplinary review of the patient’s care.
* At handover, inform all clinical team members about the incident, any changes to the care plan, and possible investigation process.
* Notify family in accordance with your hospital’s policy.

#### Glasgow Coma Scale

The Glasgow Coma Scale provides a score in the range 3-15; patients with scores of 3-8 are usually said to be in a coma. The total score is the sum of the scores in three categories. For adults, the scores follow:

**Activity Score**

| **Eye opening** |
| --- |
| None | 1 = Even to supraorbital pressure  |
| To pain | 2 = Pain from sternum/limb/supraorbital pressure  |
| To speech | 3 = Nonspecific response, not necessarily to command  |
| Spontaneous | 4 = Eyes open, not necessarily aware  |
| **Motor response** |
| None | 1 = To any pain; limbs remain flaccid  |
| Extension | 2 = Shoulder adducted and shoulder and forearm rotated internally  |
| Flexor response | 3 = Withdrawal response or assumption of hemiplegic posture |
| Withdrawal | 4 = Arm withdraws to pain, shoulder abducts  |
| Localizes pain | 5 = Arm attempts to remove supraorbital/chest pressure  |
| Obeys commands | 6 = Follows simple commands  |
| **Verbal response**  |
| None | 1 = No verbalization of any type  |
| Incomprehensible | 2 = Moans/groans, no speech  |
| Inappropriate | 3 = Intelligible, no sustained sentences  |
| Confused | 4 = Converses but confused, disoriented  |
| Oriented | 5 = Converses and oriented  |

**TOTAL (3–15): \_\_\_\_\_\_\_**

**Reference**

Teasdale G, Jennett B. Assessment of coma and impaired consciousness. A practical scale. Lancet 1974;2(7872):81-4.

### 3O: Postfall Assessment for Root Cause Analysis

**Background:** A standardized approach to postfall evaluation is key to maintaining the patient’s safety and for organizational learning about how to prevent future falls.

**Reference:** This tool is adapted from a tool developed by Ronald I. Shorr, M.D., M.S. See Shorr RI, Mion LC, Chandler AM, et al. [Improving the capture of fall events in hospitals: combining a service for evaluating inpatient falls with an incident report system.](http://www.ncbi.nlm.nih.gov/pubmed/18205761) J Am Geriatr Soc 2008;56(4):701-4.) The Confusion Assessment Method within this tool is adapted from a tool by Sharon K. Inouye, M.D., M.P.H. (See Inouye SK, van Dyck CH, Alessi CA, et al. Clarifying confusion. Ann Intern Med 1990;113(12):941-8.)

**How to use this tool:** The information below can be customized for use within your hospital. Note that the tool was originally used as part of a dedicated fall evaluation service that was called to investigate each fall. For details, see the Shorr reference. This tool can be used by staff nurses and information systems staff.

The tool may be used for the purpose of root cause analysis to prevent future falls in this patient and in future patients. This assessment should be performed in conjunction with a medical provider’s or pharmacist’s assessment of medications contributing to fall risk (see [Tool 3I, “Medication Fall Risk Scale and Evaluation Tools”](#_3IH:_Medication_fFall)) and a medical provider’s assessment of laboratory test results, if appropriate. [The Orthostatic Vital Sign Measurement tool (Tool 3F)](#_3F:_Orthostatic_Vital) and the [Delirium Evaluation Bundle (Tool 3J)](#_3JL:_Delirium_eEvaluation) may be helpful in completing this tool. A separate tool ([Tool 3N, ‘Postfall Assessment, Clinical Review](#_3N:_Post-fall_aAssessment,)) covers how to assess and follow injury risk immediately after a patient has fallen.

#### Postfall Assessment

1. **PATIENT/WITNESS DESCRIPTION OF FALL:**

#### 1.1. Can you remember anything about your fall?

\_\_Yes \_\_No The patient can’t answer reliably

#### 1.2. Did anyone witness the fall?

\_\_Yes, by:

\_\_No or don’t know (if no good quality patient or witness description, go to part 2)

#### 1.3. Where did you fall?

\_\_Bathroom \_\_Hall \_\_Room \_\_Other, describe:

#### 1.4. What were you doing at the time of the fall?

\_\_Don’t remember

\_\_ “Rolled out of bed”

\_\_Trying to reach/pick-up something

\_\_Trying to get in/out of bed to go to toilet/commode

\_\_Trying to get in/out of bed for other reason

\_\_Trying to get in/out of chair

\_\_Trying to get on/off bedside commode/toilet

\_\_Trying to use sink, shower, chair, or toilet/commode

\_\_Trying to dress/undress

\_\_Other, describe:

#### 1.5. Why do you think you fell?

\_\_Don’t know, remember

\_\_I had a recent lower extremity amputation

\_\_Slipped, tripped

\_\_Got lightheaded, dizzy, or “blacked out”

\_\_Arms or legs got weak

\_\_Tried to sit, but missed

\_\_I lost my balance

\_\_“Got tangled up” with IV, tubing, clothes, etc.

\_\_Bed or chair not locked

\_\_Other, describe:

**BRIEF MENTAL AND PHYSICAL ASSESSMENT**

**2.1. Short Portable Mental Status Questionnaire**

| Question | Response | Error? |
| --- | --- | --- |
| What are the date, month, and year?\* | Date | Month | Year |  |
| What is the day of the week? |  |  |
| What is the name of this place? |  |  |
| What is your phone number? |  |  |
| How old are you? |  |  |
| When were you born? |  |  |
| Who is the current president? |  |  |
| Who was the president before him? |  |  |
| What was your mother’s maiden name? |  |  |
| Can you count backward from 20 by 3s? |  |  |

\* A mistake on ANY part of this question should be scored as an error.

Total Errors: \_\_\_\_\_\_\_

#### SCORING\*:

0-2 errors: normal mental functioning

3-4 errors: mild cognitive impairment

5-7 errors: moderate cognitive impairment

8 or more errors: severe cognitive impairment

\* One more error is allowed in the scoring if a patient has had a grade school education or less. One less error is allowed if the patient has had education beyond the high school level.

Section 2.1 adapted with permission from Pfeiffer E. A short portable mental status questionnaire for the assessment of organic brain deficit in elderly patients. J Am Geriatr. Soc 1975;23(10):433-41. © E. Pfeiffer, 1994.

#### 2.2. Confusion Assessment Method

| In the 24 hours prior to the fall did this patient: | Yes | No |
| --- | --- | --- |
| CAM 1a. Have an acute change of mental status from baseline? |  |  |
| CAM 1b. Exhibit behavioral fluctuations (come and go)? |  |  |
| CAM 2. Have difficulty focusing attention or appear easily distractible (for example, have difficulty keeping track of what was said)? |  |  |
| CAM 3. Exhibit disorganized or incoherent thinking such as irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject? |  |  |
| CAM 4. Are any of the following abnormal levels of consciousness observed (or reported) in the 24 hours prior to the fall?* Vigilant (hyperalert)
* Lethargic (drowsy, easily aroused)
* Stupor (difficult to arouse)
* Coma (unarousable)
 |  |  |
| If yes to CAM 1a and 1b and CAM 2 AND either CAM 3 or CAM 4, then delirium is likely to be present in this patient.  |

Section 2.2 adapted from Inouye SK, van Dyck CH, Alessi CA, et al. Clarifying confusion. Ann Intern Med 1990;113(12):941-8. Used with permission, Sharon K. Inouye, M.D., M.P.H. ©2000, Hospital Elder Life Program. All rights reserved.

#### 2.3. Severity of injury (check the most severe)

\_\_None (skip to question 2.5)

\_\_Minor (complaint of pain; requires ice, dressing, cleaning of wound, elevating of limb, or medication)

\_\_Moderate (requires suturing, steri-strips, or splinting)

\_\_Major (requires surgery, casting, traction, neurologic consultation for change in level of consciousness)

\_\_*Possible,* at time of this evaluation major injury is suspected but not yet confirmed by tests

\_\_*Definite,* at time of this evaluation major injury has been confirmed

\_\_Death

#### 2.4. Describe injuries; check all that apply

|  |  |  |  |
| --- | --- | --- | --- |
| Injury | Yes | No | Site of Injury |
| Abrasion/bruise/laceration/hematoma |  |  |  |
| Bleeding |  |  |  |
| Pain/difficulty moving extremity |  |  |  |
| Other:  |  |  |  |

#### 2.5. Orthostatic blood pressure

|  |  |
| --- | --- |
| Blood Pressure (mm Hg) | Heart Rate (beats per minute) |
| Systolic blood pressure (supine) |  | Heart rate (supine) | Can’t obtain Refused |
| Diastolic blood pressure (supine) |  |
| Systolic blood pressure (standing) | Need for orthostatic | Heart rate (standing) | Can’t obtain Refused |
| Diastolic blood pressure (standing) | Need for orthostatic |
| Systolic blood pressure (sitting)\* |  | Heart rate (sitting)\* | Can’t obtain Refused |
| Diastolic blood pressure (sitting)\* |  |

\* Sitting measurements are only necessary if standing cannot be obtained.

**NURSE INTERVIEW (NURSE ASSIGNED TO PATIENT)**

#### 3.1. How did you find out that this patient fell?

\_\_I saw the patient fall

\_\_Alarm went off

\_\_Patient/witness called

\_\_Heard noise**/**found patient on floor

#### 3.2. What was the patient doing at time of fall?

\_\_Don’t know

\_\_“Rolled out of bed”

\_\_Trying to get in/out of chair

\_\_Trying to get in/out of bed to go to the bathroom/commode

\_\_Trying to reach/pick up something

\_\_Trying to get in/out of bed for another reason

\_\_Trying to get on/off toilet/bedside commode (BSC)

\_\_Trying to use the bedside sink, shower, toilet/BSC chair

\_\_Trying to dress/undress

\_\_Other, describe:

#### 3.3. Why do you think the patient fell/lost their balance?

\_\_Don’t know

\_\_Catastrophic event (e.g., stroke, arrhythmia NOT orthostatic hypotension)

\_\_Arms or legs got weak

\_\_Got lightheaded, dizzy, or “blacked out”

\_\_Tried to sit, but missed

\_\_Secondary gain (e.g., seeking attention)

\_\_Related to recent amputation

\_\_“Got tangled up” in equipment

\_\_Low blood sugar

\_\_Slipped or tripped

\_\_Lost balance

\_\_Medications

\_\_Bed, chair not locked

\_\_Other, describe:

#### 3.4. Prior to the patient’s fall, what was his/her activity level (ask nurse this question)?

\_\_Up ad lib

\_\_Ambulate with assistance

\_\_Bedrest

\_\_Up in chair with assistance

\_\_Other, describe:

#### 3.5. Prior to fall, identify the ancillary walking aids patient had available in room (check all that apply):

\_\_None

\_\_Cane

\_\_Walker

\_\_Wheelchair

\_\_Leg prosthesis

\_\_Other

#### 3.6. Prior to fall, were fall prevention measures in place?

|  |  |  |
| --- | --- | --- |
|  | Yes | No |
| Falls precautions  |  |  |
| Fall alert identifier (door sticker) |  |  |
| Bed alarm: if yes, check those that apply:Alarm sounded properlyAlarm did not sound properlyAlarm was disconnected |  |  |
| Call light/bell in reach |  | no n/a |
| Other: |  |  |

#### 3.7. What CONNECTED IVs/tubes were present at the time of the fall?

|  |  |  |
| --- | --- | --- |
|  | Yes | No |
| IV (central line, peripheral) |  |  |
| Bladder catheter |  |  |
| Gastrostomy or other feeding tube |  |  |
| Pneumatic compression stockings |  |  |
| Other: |  |  |

**OTHER IMPORTANT INFORMATION NOT COVERED ON THIS FORM**

Please record orthostatic blood pressure readings in the patient’s chart and return this form to the designated place in the staffing office.

**Customized Tool 3P - Best Practices**

Purpose: To be used to monitor progress on identifying best practices in fall prevention

| **Practice** | **Who is Responsible?** | **Where are we now?** | **Completion Date** |
| --- | --- | --- | --- |
| Identify a set of best practices |  |  |  |
| Create a clinical pathway |  |  |  |
| Identify key elements of a fall risk factor assessment |  |  |  |
| Choose a tool for assessing risk factors |  |  |  |
| Explore approaches to documenting and reporting results of fall risk factor assessment |  |  |  |
| Develop fall prevention care plan based on identified risk factors |  |  |  |
| Identify approaches to documenting and communicating care plan |  |  |  |
| Develop system linking changes in fall risk factors to changes in care plan |  |  |  |
| Ensure all levels of staff are aware of care plan |  |  |  |
| Develop system linking care planning to actual interventions |  |  |  |
| Choose or develop postfall assessment protocol |  |  |  |
| Customize the set of practices for specific work units |  |  |  |