

# Quality Improvement Clinical Decision Support Tool Specifications

## Purpose:

The QI-CDS tool was designed to:

- Gather standardized care planning and fall and fall-related injury event metrics into a single report (to replace manual data extraction)
- Provide unit-based nursing leaders with aggregated metrics to support near-real time evaluation, feedback to staff, and data trending for quality improvement and benchmarking.

## Audience:

The tool was designed to be used by unit-based leaders (managers, clinical specialists, shared governance leaders, and superusers) as well as the operational leads for clinical and health information technology implementation.

## Tool Specifications

The QI CDS Tool was created using SAP BusinessObjects software and was made available to users using a secure intranet site. The data mart exists on an Oracle 10g Release 2 database and utilized primarily Oracle scripts and procedures for data extraction/transformation and loading. Most reporting tools and database options, however, could be used to replicate this report. The technical descriptions contained within this document are purposefully left generic in most cases.

The report was sourced from a data mart and refreshed daily from the EHR currently in place to support the healthcare system. The data mart and report contain data through the end of the previous day. When running the report, the user was asked to complete four prompts: Facility, Nursing Unit, Quarter (1-4), and Year to run the report for a single unit and single quarter.

The Fall Prevention QI CDS tool is a single report with two tabs or pages that allows the user to change between a summary view (Figure 11) and patient fall detail view (Figure 12). The Summary view contains unit-specific information on the total number of patients, the number of patient days, counts of the number of falls and fall-related injuries, and the status of fall prevention care planning on the selected unit for the time frame selected. The Patient Fall Details view provides details for each fall event, including time and date of the fall, circumstances surrounding the event and injury assessment information.

## The QI CDS Tool / Report

Sample screenshots of the Fall Prevention Quarterly Summary report is shown below with mock data. The first tab (Figure 11) is a summary of one unit's performance over a quarter. The second tab (Figure 12) displays details on each of the documented falls for the unit including any progress notes that are attached in the initial documentation. A key to the abbreviations on page 2 is provided at the bottom of the page for easy access. Definitions for each data element were provided.. The report can be downloaded into an Adobe Acrobat (pdf) format for distribution. It can also be downloaded into excel, but the format decisions (to wrap the progress note for ease of report viewing) makes the enduser have to make some adjustments to layout before the data can be analyzed using standard excel tools.

## Data Model and Data Definition

This section will show the general data model used to directly source the report, along with definitions of data columns. These tables will correspond with the logic listed in the report definition section of this document. All of the data is extracted and transformed from the EHR, with the exception of the DATE\_D table, which is preloaded with a fixed set of data. The PK column marks the set of columns that contain the primary key for the table. Many additional tables are used in the loading and transformation process. However, the number and structure of these tables will largely vary depending on the structure of data in your source system. Therefore, only the tables used for direct reporting are shown.

| PK | FALL_METRICS_F       |   |
|----|----------------------|---|
| X  | ENCNTR_ID            | A unique key used to define the patient visit   |
|    | PERSON_ID            | A unique key used to define a single patient  |
| X  | MONTH                | The month, stored numerically.  |
| X  | YEAR                 | The year, stored numerically.   |
|    | PATIENT_DAYS         | The amount of time the patient spent on the unit, during the record month and year, expressed as a decimal equivalent of days.  |
|    | FIRST_DAY_IN_MONTH   | An indicator of 1 or 0 that signifies whether the patient spent their first day of the visit on the unit during this month.   |
|    | FIRST_DAY_START      | The starting date and time of the patients visit.   |
|    | FIRST_DAY_END        | The ending date and time of the patients first 24 hour period of the visit. This will either be 24 hours after the FIRST_DAY_START or will be the discharge date and time for the visit if the visit is less than 24 hours.   |
|    | DAYS_IN_MONTH        | The number of 24 hour periods, starting from the admission date and time that intersect with the patients stay on the unit. Patient days are calculated from the admission date and time. Each day is a 24 hour period starting from the end date of the previous period. Patient days are grouped into months by the starting date and time of the period. |
|    | FALLS                | The number of falls that occurred for the patient on the unit during the month.   |
|    | INJURIES             | The number of falls resulting in an injury that occurred for the patient on the unit during the month.  |
|    | FIRST_DAY_ASSESSMENT | An indicator of 1 or 0, indicating whether the patient's first day of the visit intersects with the unit and month and whether they had an assessment performed during that day.  |
|    | DAILY_ASSESSMENTS    | The number of patient days (24 hour periods) for the month and unit, where the patient had at least one assessment performed.   |
|    | AT_RISK_FALLS        | An indicator of 1 or 0, indicating whether the patient was at risk for falls during the month while on the unit.  |
|    | AT_RISK_INJURY       | An indicator of 1 or 0, indicating whether the patient was at risk for injury during the month while on the unit.   |
|    | ON_PLAN              | An indicator of 1 or 0, indicating whether the patient was on a fall prevention plan during the month while on the unit.  |

| <b>PK</b> | <b>FALL_METRICS_F</b> |  |
|-----------|-----------------------|--|
|           | EDUCATION             | An indicator of 1 or 0, indicating whether the patient had education documented during or prior to the stay on the unit. |
|           | MINOR_INJURIES        | The number of falls resulting in a minor injury that occurred for the patient on the unit during the month.              |
|           | MODERATE_INJURIES     | The number of falls resulting in a moderate or major injury that occurred for the patient on the unit during the month.  |
| X         | UNIT                  | The nursing unit name.   |
| X         | FACILITY              | The facility or hospital name.   |
|           | DATE_ID               | A unique numeric key linked representing a unique date on the DATE_D table   |

The FALL\_METRICS\_F table contains a record for each combination of nursing unit, patient visit and month that occurs for inpatient, observation and bedded outpatients. The following patient assessments are considered for assessment counts:

ADL Bathing  
 ADL Continence  
 ADL Dressing  
 ADL Feeding  
 ADL Num Assist  
 ADL Toileting  
 ADL's Prior to Admission  
 Affect/Behavior  
 Alteration in Voiding Parameter  
 Behavior Parameter  
 Cardiovascular – Health History  
 Cast Assessment  
 Changes in Voiding Habits Details  
 Cognitive Barrier  
 Cognitive Parameter  
 Devices Equipment  
 Dizziness Parameter  
 Fall Incident Date/Time  
 Gait Parameter  
 Hematologic – Health History  
 Home Devices/Equipment  
 LOC – Neurological Shift Assessment  
 LOC Parameter  
 Memory Parameter  
 Morse Fall Scale Total Score  
 Musculoskeletal – Health History  
 Mobility Assistive Devices  
 Neurological – Health History  
 Orient Parameter  
 Orientation – Neuro Assessment  
 Participative in Fall Prevention  
 Stool Characteristics – GI

Stools Parameter  
 Seizure Parameter  
 Vision – Social HX

| PK | DATE_D    |  |
|----|-----------|--|
| X  | DATE_ID   | A unique numeric key for each date                                       |
|    | DATE_DT   | The date, stored without a time element                                  |
|    | YEARNUM   | The year, stored as a number   |
|    | YEARSTR   | The year, stored as a text string  |
|    | QTR       | The quarter, stored as a number (1, 2, 3 or 4)                           |
|    | QTRSTR    | The quarter stored as a text string (Q1, Q2, Q3, Q4)                     |
|    | MONTHNUM  | The month, stored as a number  |
|    | MONTHSTR  | The month full name  |
|    | MONTHABR  | The month abbreviation   |
|    | DAYNUM    | The day number of the month (for example 12 for April 12 <sup>th</sup> ) |
|    | DAYOFWEEK | The day of the week (1-7)  |
|    | DAYOFYEAR | The day of the year (1-366)  |

The DATE\_D table stores all possible dates with a numeric key of 1 to n. It's purpose is primarily for convenience.

| PK | FALL_DETAILS_D        |  |
|----|-----------------------|--|
|    | ENCNTR_ID             | A unique key used to define the patient visit  |
|    | FALL_DT_TM            | The date and time of the fall event  |
| X  | ACTIVITY_ID           | A unique key identifying a single documentation of a fall                                  |
|    | DATE_ID               | The unique numeric key corresponding to the DATE_D table and the date of the fall          |
|    | PERSON_ID             | A unique key used to identify the patient  |
|    | DOCUMENTED_DT_TM      | The date and time the fall was documented  |
|    | ACTIVITY_AT_FALL      | The activity at the time of the fall   |
|    | INITIAL_INJURY        | The initial injury assessment  |
|    | INITIAL_INJURY_ABBREV | An abbreviated version of the initial injury assessment                                    |
|    | AFTER_INJURY          | The 24 hour injury assessment  |
|    | AFTER_INJURY_ABBREV   | An abbreviated version of the 24 hour injury assessment                                    |
|    | AFTER_INJURY_DATE     | The date and time of the 24 hour injury assessment   |
|    | FALL_WITNESS          | A Y/N indicator of whether the fall was witnessed  |
|    | BED_ALARM             | A Y/N indicator of whether the patient had a bed alarm implemented at the time of the fall |
|    | RESTRAINTS            | A Y/N indicator of whether the patient was in restraints at the time of the fall           |
|    | MORSE_SCORE           | The most recent Morse Fall Score documented prior to the fall                              |
|    | MORSE_DT_TM           | The date and time of the most recent Morse Fall Score prior to the fall                    |
|    | FALL_ASSIST           | A Y/N indicator of whether the fall was assisted   |
|    | LOCATION_OF_FALL      | The location of the fall   |

| PK | FALL_DETAILS_D |  |
|----|----------------|--|
|    | PROGRESS_NOTE  | The nursing or physician progress note documented at the time of fall documentation          |
|    | POWER_PLAN     | A Y/N indicator of whether the patient was on a fall prevention plan at the time of the fall |
|    | AT_RISK        | A Y/N indicator of whether the patient had been found to be at risk for falls prior the fall |
|    | UNIT           | The unit the fall occurred on  |
|    | FACILITY       | The facility (hospital) the fall occurred on   |

The FALL\_DETAIL\_D table stores information about individual falls documented. If a fall is documented twice, it will have two separate records with unique ACTIVITY\_ID's. However, it will only be counted once in summary data, as long as the patient and time of fall are the same.

| PK | PERSON_D      |  |
|----|---------------|--|
| X  | PERSON_ID     | A unique key identifying an individual patient |
|    | DATE_OF_BIRTH | The patient's date of birth                    |
|    | GENDER        | The patient's gender                           |

The PERSON\_D table will commonly contain many more fields identifying the patient's demographic information. However, for the purpose of this report, only the above fields are needed.

| PK | ENCOUNTER_D     |  |
|----|-----------------|--|
| X  | ENCNTR_ID       | A unique key identifying an individual patient visit |
|    | ENCNTR_TYPE     | The visit or encounter type                          |
|    | FIN             | The patients financial number                        |
|    | PERSON_ID       | The patients PERSON_ID                               |
|    | ADMIT_DT_TM     | The admission date and time for the visit            |
|    | DISCHARGE_DT_TM | The discharge date and time for the visit            |

The ENCOUNTER\_D table will commonly contain many more fields identifying data specific to each visit. However, for the purpose of this report, only the above fields are needed.

## The QI-CDS Tool / Report

Below are sample snapshots of the Fall Prevention Quarterly Summary report, shown with sample data. Figure 1 features a screenshot of the first page of the report including a details (numbers and percentages) for each data elements for each of the three months of the quarter selected for the report. Figure 2 features a screen shot of the second page/tab of the report with details on each of the documented falls for the unit listed by month.

**Figure 1. QI-CDS Tool Unit Quarterly Report: Summary Section (Tab 1)**

Report Name: Fall Prevention - Quarterly Summary  
 Facility: Hospital A  
 Unit: 2 North  
 Time Range: Q3 2010  
 Refresh Date/Time: 10-1-2010 3:23 PM  
 Page Number: 1 of 1

|   | Jul 2010 | Aug 2010 | Sep 2010 | Q3 QTD  |
|---|----------|----------|----------|---------|
| Number of Patients                            | 150      | 140      | 145      | 420     |
| Number of Encounters                          | 155      | 145      | 150      | 435     |
| Number of Patient Days                        | 435.2    | 441.1    | 420.6    | 1296.9  |
| Number of Patients with a Fall                | 1        | 1        | 2        | 4       |
| Number of Falls                               | 2        | 1        | 2        | 5       |
| % of Patients with a Fall                     | 0.7 %    | 0.7 %    | 1.4 %    | 1.0 %   |
| Number of Falls Per 1000 Patient Days         | 4.6      | 2.3      | 4.8      | 3.9     |
| % At Risk Prior to Fall                       | 100.0 %  | 100.0 %  | 50.0 %   | 80.0 %  |
| % Non-Risk Prior to Fall                      | 0.0 %    | 0.0 %    | 50.0 %   | 20.0 %  |
| Number of Injuries From a Fall                | 1        | 0        | 1        | 2       |
| Number of Injuries per 1000 Patient Days      | 2.3      | 0.0      | 2.4      | 1.5     |
| Number of Minor Injury per 1000               | 0.0      | 0.0      | 2.4      | 0.8     |
| Number of Moderate+ Injury per 1000           | 2.3      | 0.0      | 0.0      | 0.8     |
| % of Falls Resulting in Injury                | 50.0 %   | 0.0 %    | 50.0 %   | 40.0 %  |
| % of Falls with Minor Injury                  | 0.0 %    | 0.0 %    | 50.0 %   | 20.0 %  |
| % of Falls with Moderate+ Injury              | 50.0 %   | 0.0 %    | 0.0 %    | 20.0 %  |
| % Assessed within 24 Hrs of Admission         | 100.0 %  | 100.0 %  | 100.0 %  | 100.0 % |
| % Assessed for Risk Daily                     | 94.2 %   | 94.6 %   | 94.5 %   | 94.5 %  |
| % Identified at Risk for Falls                | 67.9 %   | 69.0 %   | 72.3 %   | 69.3 %  |
| % Identified at Risk for Fall Related Injury  | 82.5 %   | 80.2 %   | 69.8 %   | 77.6 %  |
| % At Risk with Fall Prevention Plan Initiated | 91.6 %   | 88.5 %   | 85.6 %   | 88.2 %  |
| % At Risk with Education Documented           | 46.1 %   | 39.1 %   | 15.8 %   | 35.4 %  |

**Figure 2. QI-CDS Tool Unit Quarterly Report: Fall Details Section (Tab 2)**

Report Name: Fall Prevention - Quarterly Summary  
 Facility: Hospital A  
 Unit: 2 North  
 Time Range: Q3 2010  
 Refresh Date/Time: 10-1-2010 3:23 PM  
 Page Number: 1 of 2

**Jul 2010**

| FIN           | Fall Date | Fall Time | Time to Document (hrs) | Admit Dt/Tm     | Discharge Dt/Tm | Enc Type    | Age | Sex | Activity at Time of Fall | Location of Fall | Initial Injurg Asmt | 24 Hr Injurg Asmt | 24 Hr Injurg Document Date | F V | FA | BA | R | Last MFS | MFS Span (Days) | At Risk | PP |
|---------------|-----------|-----------|------------------------|-----------------|-----------------|-------------|-----|-----|--------------------------|------------------|---------------------|-------------------|----------------------------|-----|----|----|---|----------|-----------------|---------|----|
| 1234          | 07/12     | 13:55     | 0.06                   | 7/11/2010 13:06 | 7/18/2010 13:03 | Inpatient   | 50  | M   | Sitting                  | Bed, Regular     | Minor               | Major             | 07/13/2010 16:00           | N   | N  | N  | N | 85       | 0.17            | Y       | Y  |
| Progress Note |           |           |                        |                 |                 |             |     |     |                          |                  |                     |                   |                            |     |    |    |   |          |                 |         |    |
| 2345          | 07/20     | 04:25     | 0.55                   | 7/18/2010 20:08 | 7/21/2010 14:00 | Observation | 59  | M   | Toileting                | Bathroom         | None                | None              | 7/20/2010 04:30            | Y   | N  | N  | N | 60       | 0.55            | Y       | Y  |
| Progress Note |           |           |                        |                 |                 |             |     |     |                          |                  |                     |                   |                            |     |    |    |   |          |                 |         |    |

**Aug 2010**

| FIN  | Fall Date | Fall Time | Time to Document (hrs) | Admit Dt/Tm      | Discharge Dt/Tm  | Enc Type  | Age | Sex | Activity at Time of Fall | Location of Fall | Initial Injurg Asmt | 24 Hr Injurg Asmt | 24 Hr Injurg Document Date | F V | FA | BA | R | Last MFS | MFS Span (Days) | At Risk | PP |
|--|-----------|-----------|------------------------|------------------|------------------|-----------|-----|-----|--------------------------|------------------|---------------------|-------------------|----------------------------|-----|----|----|---|----------|-----------------|---------|----|
| 3456   | 08/16     | 02:05     | 0.70                   | 08/10/2010 08:47 | 08/18/2010 14:05 | Inpatient | 72  | F   | Toileting                | Bed, Regular     | None                | None              | 8/17/2010 02:05            | N   | N  | Y  | N | 70       | 0.60            | Y       | Y  |
| Progress Note  |           |           |                        |                  |                  |           |     |     |                          |                  |                     |                   |                            |     |    |    |   |          |                 |         |    |
| Nurse called by NA to the room. Nurse found pt laying on the floor in between bed and wheeled walker. Per pt, she got out of bed to go to bathroom, and went to grab her wheeled walker and fell. No apparent injuries. Pt stated she hit her back but was unharmed. |           |           |                        |                  |                  |           |     |     |                          |                  |                     |                   |                            |     |    |    |   |          |                 |         |    |

Key: FV = Fall Witnessed; FA = Fall Assisted; BA=Bed Alarm; R = Restraints; MFS = Last Morse Fall Score; PP = PowerPlan

Shown below are snapshots of the Fall Prevention Quarterly Summary, with the data replaced by field markers. Each letter in red corresponds to the index in the table following the snapshot. That table translates each of the fields within the report back to the data model detailed in the previous section of this document.

**Figure 3. QI-CDS Tool Unit Quarterly Summary (page 1) – Detailed Description for each Cell**

**Report Name: Fall Prevention - Quarterly Summary**

Facility: **A**  
 Unit: **B**  
 Time Range: **C**  
 Refresh Date/Time: **D**  
 Page Number: **1 of 1**

|   | Jul 2010 | Aug 2010 | Sep 2010 | Q3 QTD |
|---|----------|----------|----------|--------|
| Number of Patients                            | E        | E        | E        | F      |
| Number of Encounters                          | G        | G        | G        | H      |
| Number of Patient Days                        | I        | I        | I        | J      |
| Number of Patients with a Fall                | K        | K        | K        | L      |
| Number of Falls                               | M        | M        | M        | N      |
| % of Patients with a Fall                     | O        | O        | O        | P      |
| Number of Falls Per 1000 Patient Days         | Q        | Q        | Q        | R      |
| % At Risk Prior to Fall                       | S        | S        | S        | T      |
| % Non-Risk Prior to Fall                      | U        | U        | U        | V      |
|   |          |          |          |        |
| Number of Injuries From a Fall                | W        | W        | W        | X      |
| Number of Injuries per 1000 Patient Days      | Y        | Y        | Y        | Z      |
| Number of Minor Injury per 1000               | AA       | AA       | AA       | BB     |
| Number of Moderate+ Injury per 1000           | CC       | CC       | CC       | DD     |
| % of Falls Resulting in Injury                | EE       | EE       | EE       | FF     |
| % of Falls with Minor Injury                  | GG       | GG       | GG       | HH     |
| % of Falls with Moderate+ Injury              | II       | II       | II       | JJ     |
|   |          |          |          |        |
| % Assessed within 24 Hrs of Admission         | KK       | KK       | KK       | LL     |
| % Assessed for Risk Daily                     | MM       | MM       | MM       | NN     |
| % Identified at Risk for Falls                | OO       | OO       | OO       | PP     |
| % Identified at Risk for Fall Related Injury  | QQ       | QQ       | QQ       | RR     |
| % At Risk with Fall Prevention Plan Initiated | SS       | SS       | SS       | TT     |
| % At Risk with Education Documented           | UU       | UU       | UU       | VV     |

| Index<br>(Tab 1) | Report<br>Field | Description  | Formula                 |
|------------------|-----------------|--|-------------------------|
| A                | Facility        | Name of the facility for which the report has been run. This information is collected in the report prompt prior to running the report. Data is collected and stored for the patient facility for each location within the patient stay. Therefore, patients who are transferred across facilities will have data reflected for their time within each facility. | FALL_METRICS_F.FACILITY |
| B                | Unit            | Name of the nurse unit for which the report has been run. This information is collected in the report prompt prior to running the report. Data is collected and stored for each location within the patients stay. Therefore, patient data will split across multiple units and only data pertaining to the patient's time on the selected unit will display.    | FALL_METRICS_F.UNIT     |

| Index<br>(Tab 1) | Report<br>Field                          | Description   | Formula   |
|------------------|--|---|---|
| C                | Time Range                               | <p>The time range for the report. This information is collected in the report prompt prior to running the report. The report is always run for a quarter. If the current quarter is chosen, the report will display data from the beginning of the quarter through the last complete day.</p> | <p>CONCAT (DATE_D.QTRSTR, CONCAT (“ “, DATE_D.YEARNUM))</p> |
| D                | Refresh Date/Time                        | <p>The data and time of the report refresh.</p>   |   |
| E                | Number of Patients<br>( <i>Month</i> )   | <p>A count of distinct patients that had a stay on the nursing unit during the reporting month.</p>   | <p>COUNT (FALL_METRICS_F.PERSON_ID)</p>                     |
| F                | Number of Patients<br>( <i>Quarter</i> ) | <p>A count of distinct patients that had a stay on the nursing unit during the reporting quarter. This number will not be a sum of the monthly number of patients, as a single patient that spans two months will be counted in each month, but only once in the quarter.</p>                 | <p>COUNT (FALL_METRICS_F.PERSON_ID)</p>                     |

| <b>Index<br/>(Tab 1)</b> | <b>Report<br/>Field</b>                            | <b>Description</b>   | <b>Formula</b>  |
|--------------------------|--|--|---|
| G                        | Number of Encounters<br>( <i>Month</i> )           | A count of distinct patient visits that included a stay on the nursing unit during the reporting month.  | COUNT (FALL_METRICS_F.ENCNTR_ID)                                |
| H                        | Number of Encounters<br>( <i>Quarter</i> )         | A count of distinct patient visits that included a stay on the nursing unit during the reporting quarter. This number will not be the sum of the of the monthly number of encounters, as a single patient visit may span two months. | COUNT (FALL_METRICS_F.ENCNTR_ID)                                |
| I                        | Number of Patient Days<br>( <i>Month</i> )         | The sum of the total time spent by patients on the unit during the reporting month, displayed in days.   | SUM (FALL_METRICS_F.PATIENT_DAYS)                               |
| J                        | Number of Patient Days<br>( <i>Quarter</i> )       | The sum of the total time spent by patients on the unit during the reporting quarter, displayed in days.   | SUM (FALL_METRICS_F.PATIENT_DAYS)                               |
| K                        | Number of Patients with a Fall<br>( <i>Month</i> ) | The number of distinct patients with at least one fall recorded on the nursing unit during the month.  | COUNT (FALL_METRICS_F.PERSON_ID) WHERE FALL_METRICS_F.FALLS > 0 |

| <b>Index</b><br>(Tab 1) | <b>Report Field</b>   | <b>Description</b>  | <b>Formula</b>   |
|-------------------------|---|---|--|
| L                       | Number of Patients with a Fall<br>( <i>Quarter</i> )        | The number of distinct patients with at least one fall recorded on the nursing unit during the quarter. | COUNT (FALL_METRICS_F.PERSON_ID) WHERE FALL_METRICS_F.FALLS > 0                                      |
| M                       | Number of Falls<br>( <i>Month</i> )                         | The number of distinct fall incidents recorded for falls on the reporting unit during the month.        | SUM (FALL_METRICS_F.FALLS)   |
| N                       | Number of Falls<br>( <i>Quarter</i> )                       | The number of distinct fall incidents recorded for falls on the reporting unit during the quarter.      | SUM (FALL_METRICS_F.FALLS)   |
| O                       | % of Patients with a Fall<br>( <i>Month</i> )               | The percent of distinct patients on the unit who had at least one fall while on the unit.               | (COUNT (FALL_METRICS_F.PERSON_ID) WHERE FALL_METRICS_F.FALLS > 0) / COUNT (FALL_METRICS_F.PERSON_ID) |
| P                       | % of Patients with a Fall<br>( <i>Quarter</i> )             | The percent of distinct patients on the unit who had at least one fall while on the unit.               | (COUNT (FALL_METRICS_F.PERSON_ID) WHERE FALL_METRICS_F.FALLS > 0) / COUNT (FALL_METRICS_F.PERSON_ID) |
| Q                       | Number of Falls Per 1000 Patient Days<br>( <i>Month</i> )   | The number of distinct fall incidents recorded per 1000 patient days.                                   | (SUM (FALL_METRICS_F.FALLS) / SUM (FALL_METRICS_F.PATIENT_DAYS))*1000                                |
| R                       | Number of Falls Per 1000 Patient Days<br>( <i>Quarter</i> ) | The number of distinct fall incidents recorded per 1000 patient days.                                   | (SUM (FALL_METRICS_F.FALLS) / SUM (FALL_METRICS_F.PATIENT_DAYS))*1000                                |

| <b>Index<br/>(Tab 1)</b> | <b>Report<br/>Field</b>                                  | <b>Description</b>  | <b>Formula</b>   |
|--------------------------|--|---|--|
| S                        | % At Risk<br>Prior to Fall<br>( <i>Month</i> )           | Percent of falls were patient was identified as At Risk for Falls prior to the fall.  | (COUNT (CONCAT (FALL_DETAILS_D.FALL_DT_TM, FALL_DETAILS_D.ENCNTR_ID) WHERE FALL_DETAILS_D.AT_RISK = 'Y') / (COUNT (CONCAT (FALL_DETAILS_D.FALL_DT_TM, FALL_DETAILS_D.ENCNTR_ID)  |
| T                        | % At Risk<br>Prior to Fall<br>( <i>Quarter</i> )         | Percent of falls were patient was identified as At Risk for Falls prior to the fall.  | (COUNT (CONCAT (FALL_DETAILS_D.FALL_DT_TM, FALL_DETAILS_D.ENCNTR_ID) WHERE FALL_DETAILS_D.AT_RISK = 'Y') / (COUNT (CONCAT (FALL_DETAILS_D.FALL_DT_TM, FALL_DETAILS_D.ENCNTR_ID)  |
| U                        | % Non-Risk<br>Prior to Fall<br>( <i>Month</i> )          | Percent of falls were patient was not identified as At Risk for Falls prior to the fall.  | (COUNT (CONCAT (FALL_DETAILS_D.FALL_DT_TM, FALL_DETAILS_D.ENCNTR_ID) WHERE FALL_DETAILS_D.AT_RISK = 'N') / (COUNT (CONCAT (FALL_DETAILS_D.FALL_DT_TM, FALL_DETAILS_D.ENCNTR_ID)  |
| V                        | % Non-Risk<br>Prior to Fall<br>( <i>Quarter</i> )        | Percent of falls were patient was not identified as At Risk for Falls prior to the fall.  | (COUNT (CONCAT (FALL_DETAILS_D.FALL_DT_TM, FALL_DETAILS_D.ENCNTR_ID) WHERE FALL_DETAILS_D.AT_RISK = 'N') / (COUNT (CONCAT (FALL_DETAILS_D.FALL_DT_TM, FALL_DETAILS_D.ENCNTR_ID)  |
| W                        | Number of<br>Injuries<br>From a Fall<br>( <i>Month</i> ) | The number of distinct falls that resulted in an injury. The 24 hour assessment is used to determine if an injury occurred, unless no 24 hour assessment was performed. In that case, the initial fall assessment is used to determine if an injury occurred. | COUNT ( CONCAT( FALL_DETAILS_D.FALL_DT_TM, FALL_DETAILS_D.ENCNTR_ID)) WHERE (IF ISNULL( FALL_DETAILS_D.AFTER_INJURY_ABBREV) THEN FALL_DETAILS_D.INITIAL_INJURY_ABBREV ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV) IN ('Major', 'Minor', 'Moderate') |

| Index<br>(Tab 1) | Report<br>Field                                     | Description  | Formula  |
|------------------|---|--|--|
| X                | Number of Injuries From a Fall<br>(Quarter)         | The number of distinct falls that resulted in an injury. The 24 hour assessment is used to determine if an injury occurred, unless no 24 hour assessment was performed. In that case, the initial fall assessment is used to determine if an injury occurred.          | COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID)) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Major', 'Minor', 'Moderate')   |
| Y                | Number of Injuries per 1000 Patient Days<br>(Month) | The number of falls resulting in an injury per 1000 patient days. The 24 hour assessment is used to determine if an injury occurred, unless no 24 hour assessment was performed. In that case, the initial fall assessment is used to determine if an injury occurred. | (COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID)) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Major', 'Minor', 'Moderate') / SUM<br>(FALL_METRICS_F.PATIENT_DAYS))*1000 |

| Index<br>(Tab 1) | Report<br>Field  | Description   | Formula   |
|------------------|--|---|---|
| Z                | Number of Injuries per 1000 Patient Days<br>( <i>Quarter</i> ) | The number of falls resulting in an injury per 1000 patient days. The 24 hour assessment is used to determine if an injury occurred, unless no 24 hour assessment was performed. In that case, the initial fall assessment is used to determine if an injury occurred.                      | (COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID))) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Major', 'Minor', 'Moderate') / SUM<br>(FALL_METRICS_F.PATIENT_DAYS))*1000 |
| AA               | Number of Minor Injury per 1000<br>( <i>Month</i> )            | The number of falls resulting in a minor injury per 1000 patient days. The 24 hour assessment is used to determine if an injury occurred and the severity of the injury. If a 24 hour assessment was not performed, the initial fall assessment is used to determine if an injury occurred. | (COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID))) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Minor') / SUM<br>(FALL_METRICS_F.PATIENT_DAYS))*1000                      |

| Index<br>(Tab 1) | Report<br>Field                                | Description   | Formula  |
|------------------|--|---|--|
| BB               | Number of Minor Injury per 1000<br>(Quarter)   | The number of falls resulting in a minor injury per 1000 patient days. The 24 hour assessment is used to determine if an injury occurred and the severity of the injury. If a 24 hour assessment was not performed, the initial fall assessment is used to determine if an injury occurred.             | (COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID))) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Minor') / SUM<br>(FALL_METRICS_F.PATIENT_DAYS))*1000             |
| CC               | Number of Moderate+ Injury per 1000<br>(Month) | The number of falls resulting in a moderate or major injury per 1000 patient days. The 24 hour assessment is used to determine if an injury occurred and the severity of the injury. If a 24 hour assessment was not performed, the initial fall assessment is used to determine if an injury occurred. | (COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID))) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Major', 'Moderate') / SUM<br>(FALL_METRICS_F.PATIENT_DAYS))*1000 |

| Index<br>(Tab 1) | Report<br>Field   | Description   | Formula  |
|------------------|---|---|--|
| DD               | Number of Moderate+ Injury per 1000<br>( <i>Quarter</i> ) | The number of falls resulting in a moderate or major injury per 1000 patient days. The 24 hour assessment is used to determine if an injury occurred and the severity of the injury. If a 24 hour assessment was not performed, the initial fall assessment is used to determine if an injury occurred. | (COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID))) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Major', 'Moderate') / SUM<br>(FALL_METRICS_F.PATIENT_DAYS))*1000   |
| EE               | % of Falls Resulting in Injury<br>( <i>Month</i> )        | Percent of individual falls that had a patient injury associated with the fall. The 24 hour assessment is used to determine if an injury occurred and the severity of the injury. If a 24 hour assessment was not performed, the initial fall assessment is used to determine if an injury occurred.    | COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID))) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Major', 'Minor', 'Moderate') / COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID))) |

| Index<br>(Tab 1) | Report<br>Field                             | Description  | Formula  |
|------------------|---|--|--|
| FF               | % of Falls Resulting in Injury<br>(Quarter) | Percent of individual falls that had a patient injury associated with the fall. The 24 hour assessment is used to determine if an injury occurred and the severity of the injury. If a 24 hour assessment was not performed, the initial fall assessment is used to determine if an injury occurred. | COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID)) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Major', 'Minor', 'Moderate') / COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID)) |
| GG               | % of Falls with Minor Injury<br>(Month)     | Percent of individual falls that had a minor injury associated with the fall. The 24 hour assessment is used to determine if an injury occurred and the severity of the injury. If a 24 hour assessment was not performed, the initial fall assessment is used to determine if an injury occurred.   | COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID)) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Minor') / COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID))                      |

| Index<br>(Tab 1) | Report<br>Field                             | Description  | Formula   |
|------------------|---|--|---|
| HH               | % of Falls with Minor Injury<br>(Quarter)   | Percent of individual falls that had a minor injury associated with the fall. The 24 hour assessment is used to determine if an injury occurred and the severity of the injury. If a 24 hour assessment was not performed, the initial fall assessment is used to determine if an injury occurred.             | COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID)) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Minor') / COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID))             |
| II               | % of Falls with Moderate+ Injury<br>(Month) | Percent of individual falls that had a moderate or major injury associated with the fall. The 24 hour assessment is used to determine if an injury occurred and the severity of the injury. If a 24 hour assessment was not performed, the initial fall assessment is used to determine if an injury occurred. | COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID)) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Major', 'Moderate') / COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID)) |

| Index<br>(Tab 1) | Report<br>Field                                  | Description   | Formula   |
|------------------|--|---|---|
| JJ               | % of Falls with Moderate+ Injury<br>(Quarter)    | Percent of individual falls that had a moderate or major injury associated with the fall. The 24 hour assessment is used to determine if an injury occurred and the severity of the injury. If a 24 hour assessment was not performed, the initial fall assessment is used to determine if an injury occurred.  | COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID)) WHERE (IF<br>ISNULL(<br>FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>THEN<br>FALL_DETAILS_D.INITIAL_INJURY_ABBREV<br>ELSE FALL_DETAILS_D.AFTER_INJURY_ABBREV)<br>IN ('Major', 'Moderate') / COUNT ( CONCAT(<br>FALL_DETAILS_D.FALL_DT_TM,<br>FALL_DETAILS_D.ENCNTR_ID)) |
| KK               | % Assessed within 24 Hrs of Admission<br>(Month) | The percent of patients that were assessed for a risk of falls or fall related injury during their first 24 hours after admission. A patient will qualify for a nursing unit only if part of their stay on that unit occurred during the first 24 hours of the visit. However, the assessment only needs to occur once during the first 24 hours, not on each unit, for the patient to qualify. | SUM (<br>FALL_METRICS_F.FIRST_DAY_ASSESSMENT) /<br>SUM ( FALL_METRICS_F.FIRST_DAY_IN_MONTH)   |

| Index<br>(Tab 1) | Report<br>Field                                    | Description   | Formula   |
|------------------|--|---|---|
| LL               | % Assessed within 24 Hrs of Admission<br>(Quarter) | The percent of patients that were assessed for a risk of falls or fall related injury during their first 24 hours after admission. A patient will qualify for a nursing unit only if part of their stay on that unit occurred during the first 24 hours of the visit. However, the assessment only needs to occur once during the first 24 hours, not on each unit, for the patient to qualify. | SUM ( FALL_METRICS_F.FIRST_DAY_ASSESSMENT) / SUM ( FALL_METRICS_F.FIRST_DAY_IN_MONTH)   |
| MM               | % Assessed for Risk Daily<br>(Month)               | The percent of patients assessed for risk during each 24 hour period following the initial 24 hours after admission. A patient's day (24 hour period) will qualify for the nursing unit if any part of that day was spent on the unit. However, the assessment only needs to occur once during the 24 hours, and not necessarily on each unit.  | (SUM ( FALL_METRICS_F.DAILY_ASSESSMENTS) – SUM ( FALL_METRICS_F.FIRST_DAY_ASSESSMENT)) / (SUM ( FALL_METRICS_F.DAYS_IN_MONTH) – SUM ( FALL_METRICS_F.FIRST_DAY_IN_MONTH)) |

| <b>Index<br/>(Tab 1)</b> | <b>Report<br/>Field</b>   | <b>Description</b>   | <b>Formula</b>  |
|--------------------------|---|--|---|
| NN                       | % Assessed<br>for Risk<br>Daily<br>( <i>Quarter</i> )                       | The percent of patients assessed for risk during each 24 hour period following the initial 24 hours after admission. A patient's day (24 hour period) will qualify for the nursing unit if any part of that day was spent on the unit. However, the assessment only needs to occur once during the 24 hours, and not necessarily on each unit. | (SUM ( FALL_METRICS_F.DAILY_ASSESSMENTS) – SUM ( FALL_METRICS_F.FIRST_DAY_ASSESSMENT)) / (SUM ( FALL_METRICS_F.DAYS_IN_MONTH) – SUM ( FALL_METRICS_F.FIRST_DAY_IN_MONTH)) |
| OO                       | % Identified<br>at Risk for<br>Falls<br>( <i>Month</i> )                    | The percentage of distinct patient visits where the patient was found to be at risk for falls.   | COUNT (FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_FALLS = 1) / COUNT ( FALL_METRICS_F.ENCNTR_ID)  |
| PP                       | % Identified<br>at Risk for<br>Falls<br>( <i>Quarter</i> )                  | The percentage of distinct patient visits where the patient was found to be at risk for falls.   | COUNT (FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_FALLS = 1) / COUNT ( FALL_METRICS_F.ENCNTR_ID)  |
| QQ                       | % Identified<br>at Risk for<br>Fall Related<br>Injury<br>( <i>Month</i> )   | The percentage of distinct patient visits where the patient was found to be at risk for fall related injury.   | COUNT (FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_INJURY = 1) / COUNT ( FALL_METRICS_F.ENCNTR_ID)   |
| RR                       | % Identified<br>at Risk for<br>Fall Related<br>Injury<br>( <i>Quarter</i> ) | The percentage of distinct patient visits where the patient was found to be at risk for fall related injury.   | COUNT (FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_INJURY = 1) / COUNT ( FALL_METRICS_F.ENCNTR_ID)   |

| <b>Index<br/>(Tab 1)</b> | <b>Report<br/>Field</b>   | <b>Description</b>   | <b>Formula</b>  |
|--------------------------|---|--|---|
| SS                       | % At Risk with Fall Prevention Plan Initiated<br>( <i>Month</i> )   | The percentage of patients who are at risk for falls that have a fall prevention plan initiated.     | COUNT ( FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_FALLS = 1 AND FALL_METRICS_F.ON_PLAN = 1) / COUNT ( FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_FALLS = 1)  |
| TT                       | % At Risk with Fall Prevention Plan Initiated<br>( <i>Quarter</i> ) | The percentage of patients who are at risk for falls that have a fall prevention plan initiated.     | COUNT ( FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_FALLS = 1 AND FALL_METRICS_F.ON_PLAN = 1) / COUNT ( FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_FALLS = 1)  |
| UU                       | % At Risk with Education Documented<br>( <i>Month</i> )             | The percentage of patients who are at risk for falls that have fall prevention education documented. | COUNT ( FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_FALLS = 1 AND FALL_METRICS_F.EDUCATION = 1) / COUNT (FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_FALLS = 1) |
| VV                       | % At Risk with Education Documented<br>( <i>Quarter</i> )           | The percentage of patients who are at risk for falls that have fall prevention education documented. | COUNT ( FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_FALLS = 1 AND FALL_METRICS_F.EDUCATION = 1) / COUNT (FALL_METRICS_F.ENCNTR_ID) WHERE ( FALL_METRICS_F.AT_RISK_FALLS = 1) |

Figure 4. QI-CDS Tool Unit Quarterly Fall Details Section (Tab 2) – Detailed Description for each Cell

Report Name: Fall Prevention - Quarterly Summary  
 Facility: A  
 Unit: B  
 Time Range: C  
 Refresh Date/Time: D  
 Page Number: 1 of 2

Jul 2010

| FIN           | Fall Date | Fall Time | Time to Document (hrs) | Admit Dt/Tm | Discharge Dt/Tm | Enc Type | Age | Sex | Activity at Time of Fall | Location of Fall | Initial Injury Asmt | 24 Hr Injury Asmt | 24 Hr Injury Document Dt/Tm | FW | FA | BA | R | Last MFS | MFS Span (Days) | At Risk | PP |
|---------------|-----------|-----------|------------------------|-------------|-----------------|----------|-----|-----|--------------------------|------------------|---------------------|-------------------|-----------------------------|----|----|----|---|----------|-----------------|---------|----|
| E             | F         | G         | H                      | I           | J               | K        | L   | M   | N                        | O                | P                   | Q                 | R                           | S  | T  | U  | V | W        | X               | Y       | Z  |
| Progress Note |           |           |                        |             |                 |          |     |     |                          |                  |                     |                   |                             |    |    |    |   |          |                 |         |    |
| AA            |           |           |                        |             |                 |          |     |     |                          |                  |                     |                   |                             |    |    |    |   |          |                 |         |    |
| FIN           | Fall Date | Fall Time | Time to Document (hrs) | Admit Dt/Tm | Discharge Dt/Tm | Enc Type | Age | Sex | Activity at Time of Fall | Location of Fall | Initial Injury Asmt | 24 Hr Injury Asmt | 24 Hr Injury Document Dt/Tm | FW | FA | BA | R | Last MFS | MFS Span (Days) | At Risk | PP |
| E             | F         | G         | H                      | I           | J               | K        | L   | M   | N                        | O                | P                   | Q                 | R                           | S  | T  | U  | V | W        | X               | Y       | Z  |
| Progress Note |           |           |                        |             |                 |          |     |     |                          |                  |                     |                   |                             |    |    |    |   |          |                 |         |    |
| AA            |           |           |                        |             |                 |          |     |     |                          |                  |                     |                   |                             |    |    |    |   |          |                 |         |    |

Aug 2010

| FIN           | Fall Date | Fall Time | Time to Document (hrs) | Admit Dt/Tm | Discharge Dt/Tm | Enc Type | Age | Sex | Activity at Time of Fall | Location of Fall | Initial Injury Asmt | 24 Hr Injury Asmt | 24 Hr Injury Document Dt/Tm | FW | FA | BA | R | Last MFS | MFS Span (Days) | At Risk | PP |
|---------------|-----------|-----------|------------------------|-------------|-----------------|----------|-----|-----|--------------------------|------------------|---------------------|-------------------|-----------------------------|----|----|----|---|----------|-----------------|---------|----|
| E             | F         | G         | H                      | I           | J               | K        | L   | M   | N                        | O                | P                   | Q                 | R                           | S  | T  | U  | V | W        | X               | Y       | Z  |
| Progress Note |           |           |                        |             |                 |          |     |     |                          |                  |                     |                   |                             |    |    |    |   |          |                 |         |    |
| AA            |           |           |                        |             |                 |          |     |     |                          |                  |                     |                   |                             |    |    |    |   |          |                 |         |    |

| Index<br>(Tab 2) | Report<br>Field                | Description  | Formula   |
|------------------|--------------------------------|--|---|
| A                | Facility                       | Name of the facility for which the report has been run. This information is collected in the report prompt prior to running the report. Data is collected and stored for the patient facility for each location within the patient stay. Therefore, patients who are transferred across facilities will have data reflected for their time within each facility. | FALL_METRICS_F.FACILITY                                     |
| B                | Unit                           | Name of the nurse unit for which the report has been run. This information is collected in the report prompt prior to running the report. Data is collected and stored for each location within the patients stay. Therefore, patient data will split across multiple units and only data pertaining to the patient's time on the selected unit will display.    | FALL_METRICS_F.UNIT   |
| C                | Time Range                     | The time range for the report. This information is collected in the report prompt prior to running the report. The report is always run for a quarter. If the current quarter is chosen, the report will display data from the beginning of the quarter through the last complete day.   | CONCAT (DATE_D.QTRSTR, CONCAT (“ “, DATE_D.YEARNUM))        |
| D                | Refresh<br>Date/Time           | The data and time of the report refresh.   |   |
| E                | FIN                            | The patient's financial number. Only patients who had a fall are listed on the second tab of this report. The FIN is a unique number identifying each visit.   | ENCOUNTER_D.FIN   |
| F                | Fall Date                      | The date of the fall event in MM/DD format.  | FALL_DETAILS_D.FALL_DT_TM                                   |
| G                | Fall Time                      | The time of the fall event in HH:mm format.  | FALL_DETAILS_D.FALL_DT_TM                                   |
| H                | Time to<br>Document<br>(hrs)   | The time between the initial documentation of the fall and the fall event, displayed as a numeric value representing the number of hours.  | FALL_DETAILS_D.DOCUMENTED_DT_TM – FALL_DETAILS_D.FALL_DT_TM |
| I                | Admit<br>Dt/Tm                 | The inpatient admission date and time for the current visit, displayed in MM/DD/YYYY HH:mm format.   | ENCOUNTER_D.ADMIT_DT_TM                                     |
| J                | Discharge<br>Dt/Tm             | The inpatient discharge date and time for the current visit, displayed in MM/DD/YYYY HH:mm format.   | ENCOUNTER_D.DISCHARGE_DT_TM                                 |
| K                | Enc Type                       | The encounter type of patient visit (ie. Inpatient, Observation)   | ENCOUNTER_D.ENCNTR_TYPE                                     |
| L                | Age                            | The patients age at the time of the fall, displayed as a whole number.   | FALL_DETAILS_D.FALL_DT_TM – PERSON_D.DATE_OF_BIRTH          |
| M                | Sex                            | The sex/gender of the patient (M or F).  | PERSON_D.GENDER   |
| N                | Activity at<br>Time of<br>Fall | The patient's activity at the time of the fall.  | FALL_DETAILS_D.ACTIVITY_AT_FALL                             |

|    |                             |  |  |
|----|-----------------------------|--|--|
| O  | Location of Fall            | The patient's location at the time of the fall.  | FALL_DETAILS_D.LOCATION_OF_FALL                        |
| P  | Initial Injury Asmt         | The results of the initial injury assessment, performed directly after the fall.   | FALL_DETAILS_D.INITIAL_INJURY_ABBREV                   |
| Q  | 24 Hr Injury Asmt           | The results of the 24 hour fall assessment, performed 1 day after the patient fell. This is expected to be null if the patient was discharged within 24 hours of the fall. | FALL_DETAILS_D.AFTER_INJURY_ABBREV                     |
| R  | 24 Hr Injury Document Dt/Tm | The date and time the 24 hour fall assessment was performed, displayed in MM/DD/YYYY HH:mm format.   | FALL_DETAILS_D.AFTER_INJURY_DATE                       |
| S  | FW                          | Was the fall witnessed (Y/N).  | FALL_DETAILS_D.FALL_WITNESS                            |
| T  | FA                          | Was the fall assisted (Y/N).   | FALL_DETAILS_D.FALL_ASSIST                             |
| U  | BA                          | Was a bed alarm in place prior to the fall (Y/N).  | FALL_DETAILS_D.BED_ALARM                               |
| V  | R                           | Was the patient in restraints at the time of the fall (Y/N).   | FALL_DETAILS_D.RESTRAINTS                              |
| W  | Last MFS                    | The results of the last Morse Fall Scale taken prior to the patient's fall.  | FALL_DETAILS_D.MORSE_SCORE                             |
| X  | MFS Span (Days)             | The difference (displayed as a numeric representation of days) between the time of the fall and the time of the last Morse Fall Scale.                                     | FALL_DETAILS_D.FALL_DT_TM – FALL_DETAILS_D.MORSE_DT_TM |
| Y  | At Risk                     | Did the patient have an active, documented Risk for Falls at the time of the fall.   | FALL_DETAILS_D.AT_RISK                                 |
| Z  | PP                          | Did the patient have an active fall prevention plan of care at the time of the fall.   | FALL_DETAILS_D.POWER_PLAN                              |
| AA | Progress Note               | The nurses or physicians progress note, documented with the fall data.   | FALL_DETAILS_D.PROGRESS_NOTE                           |

## Data Element Descriptions

### Report Definitions: Falls Summary (Page 1)

**Facility:** The facility abbreviation for the hospital for which the report was run.

**Unit:** The unit name for which the report was run.

**Refresh Date:** The date on which the report was last refreshed.

**Page Number:** Page number and number of pages for Falls Summary.

### Body of report

**Number of Patients:** The number of distinct patients that stayed on the unit during the month. The QTD total will not be the sum of the individual months, as it is a total of distinct patients who stayed on the unit during the quarter. Therefore, a patient whose stay crosses two months will be counted in the metric for each of the months, but only once for the quarter.

**Number of Encounters:** The number of distinct patient encounters or stays that occurred sometime within the month and included a stay on the unit. An encounter does not need to be fully contained within a month in order to count for that month.

**Number of Patient Days:** Patient days are calculated from the patients admit time to the next day. Each patients day may start at a different time, matching their admit time on their first day. Each day is grouped into the month in which the day starts. Therefore a patient who is admitted October 31<sup>st</sup> at noon and released November 2<sup>nd</sup> at noon will have 2 patient days. The first day would count as an October day and the second day would count as a November day. Each individual day can be subdivided across multiple units and fractions of a day are included in totals.

**Number of Patients with a Fall:** The number of patients who fell on the unit. Each patient is counted a maximum of one time per month, regardless of the number of falls.

**Number of Falls:** The number of individual fall events on the unit.

**% of Patients with a Fall:** The number of patients with a fall divided by the number of patients who spent time on the unit.

**Number of Falls per 1000 Patient Days:** The number of falls divided by the number of patient days \* 1000.

**% At Risk Prior to Fall:** The number of falls where the patient was identified as “At Risk for Falls” prior to the fall divided by the total number of falls.

**% Non-Risk Prior to Fall:** The number of falls where the patient was not identified as “At Risk for Falls” prior to the fall divided by the total number of falls.

**Number of Injuries From a Fall:** The number of falls with an injury documented on the most recent fall assessment.

**Number of Injuries per 1000 Patient Days:** The number of injuries from a fall divided by the total number of patient days \* 1000.

**Number of Minor Injury per 1000:** The number of injuries documented as minor divided by the total number of patient days \* 1000.

**Number of Moderate+ Injury per 1000:** The number of injuries documented as moderate or major divided by the total number of patient days \* 1000

**% of Falls Resulting in Injury:** The number of Injuries from a Fall divided by the total number of falls.

**% of Falls with Minor Injury:** The number of falls with a minor injury documented on the most recent fall assessment divided by the total number of falls.

**% of Falls with Moderate+ Injury:** The number of falls with a moderate or major injury documented on the most recent fall assessment divided by the total number of falls.

**% Assessed within 24 Hrs of Admission:** The percentage of patients with at least a portion of their first 24 hours after admission spent on the unit with an assessment performed during that 24 hour period of time. This assessment may have occurred on another unit. In order for a person to be counted within a month, their date of admission has to be within that month.

**% Assessed for Risk Daily:** The percentage of patients with at least a portion of each 24 hour period after their first 24 hours after admission spent on the unit with at least one assessment performed during that period. Each patient may count multiple times in both the numerator and denominator.

**% Identified at Risk for Falls:** The percentage of patients that stayed on the unit and where identified as “At Risk for Falls” during their stay.

**% Identified at Risk for Fall Related Injury:** The percentage of patients that stayed on the unit and where identified as “At Risk for Fall Related Injury” during their stay.

**% At Risk with Fall Prevention Plan Initiated:** The number of patients identified as At Risk with a Fall Prevention Power Plan initiated divided by the total number of patients identified as At Risk.

**% At Risk with Education Documented:** The number of patients identified as At Risk with Fall related education documented divided by the total number of patients identified as At Risk.

## Patient Falls (Page 2)

**Facility:** The facility abbreviation for the hospital for which the report was run.

**Unit:** The unit name for which the report was run.

**Refresh Date:** The date on which the report was last refreshed.

**Page Number:** Page number and number of pages for the Patient Fall portion of the report.

### Body of report

**FIN:** The financial (FIN) number (unique identifier) of the patient who fell.

**Fall Date:** The date of the patients fall.

**Fall Time:** The time of the patients fall.

**Time to Document:** The number of hours between the patient's fall (date/time) and the start of the fall documentation.

**Admit Dt/Tm:** The patients admit date and time.

**Discharge Dt/Tm:** The patient's discharge date and time, if discharged by report run time.

**Enc Type:** The encounter type of the patient (Inpatient, Observation, etc.)

**Age:** The age of the patient at the time of the fall.

**Sex:** The gender of the patient.

**Activity at Time of Fall:** The documented activity at the time of the patients fall.

**Location of Fall:** The documented location of the fall.

**Initial Injury Asmt:** The Injury Assessment at the time of the initial fall documentation.

**24 Hr Injury Asmt:** The Injury Assessment (if documented) for the 24-hour post fall assessment.

**24 Hr Injury Document Dt/Tm:** The date and time the 24-hour post fall assessment was documented.

**FW:** Was the fall witnessed? (Yes or No)

**FA:** Was the fall assisted? (Yes or No)

**BA:** Was a bed alarm (BA) documented for patient prior to the time and date of the fall?. (Yes if present.

**R:** Were restraints (R) documented prior to the time and date of the fall? (Yes if present).

**Last MFS:** The last Morse Fall Score (MFS) documented prior to the fall. (Fall Risk Assessment tool used at the facility)

**MFS Span:** The number of days (including fractional days) prior to the fall that the most recent Morse Fall Score (MFS) was documented.

**PP:** Was a Fall Prevention Plan initiated prior to the fall? (Yes if present)

**At Risk:** Was the patient “At Risk for Falls” prior to the fall (based on the presence of an active problem on the problem list).

**Progress Note:** The progress note documented with the initial fall assessment. This free text will only be extracted in the note was created in the context of completing the Post Fall Initial Assessment form.