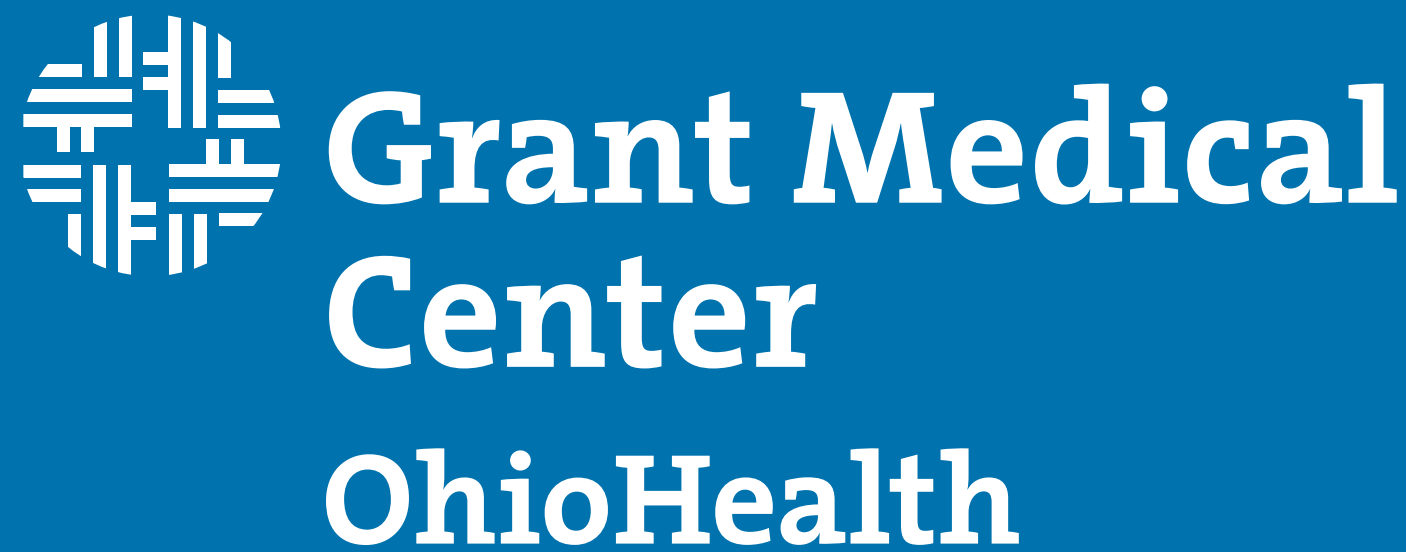


GET LINKED-IN: Auto populating Nursing Sensitive data elements across quality scorecards

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PROBLEM:

There are many nursing sensitive indicators that were being processed independently of one another, at different times of the month, distributed to a large number of outcomes managers and nurse managers who were individually populating their unit scorecards. Consequently, this lack of standardization led to disparate processes by individual unit nurse managers in populating all of the metrics in a timely and accurate manner. It was a very inefficient, confusing and time-consuming process.

BACKGROUND:

We identified a huge potential to streamline the process of populating the nursing unit scorecards when we recognized that the majority of the data came from only two data sources that was initially all processed by one Senior Quality Engineer. We sought to develop a new process whereby the processing of the data and auto-populating all of the nursing unit scorecards could essentially be done in a single step, greatly minimizing the number of people involved in the process and thus improving the accuracy and timeliness of populating the scorecards.

OBJECTIVES:

- Leverage available resources to minimize or eliminate redundancies associated with re-keying data into nursing scorecards.
- Create links in Excel that serve to auto-populate the nursing scorecards directly from a single source.

PROCESS/PROCEDURE:

- Senior Quality Engineer wrote a single SAS program to pull all of the data from its source (Midas or Excel spreadsheets) and generate a single Excel "source" workbook with all of the data in tabular format (with a tab for each nursing scorecard).
- Nursing unit scorecards and an overall nursing scorecard were created with links to this Excel source workbook so that each month when the SAS program is run to pull updated data, the updated indicators appear almost simultaneously in the nursing scorecards.

MEASURE OF SUCCESS:

- Timeliness and accuracy of all auto-populated cells (approximately 2160 in total) that constitute the Quality quadrant of nursing scorecards as evidenced during the monthly review process at Nursing Quality Leaders.

CONCERNS/LIMITATIONS:

- Although the linked cells are locked and the worksheets protected, the risk remains for nurses to unprotect the sheet and inadvertently break the linked data.
- Initial set up of the scorecards is resource intensive.
- There is room for error in creating the links, especially when copying and pasting. Special attention must be paid to relative and absolute cell references in Excel.

NEXT STEPS:

- Automate more indicators, especially those that are specific to only certain scorecards (e.g. critical care) and/or those that appear on page 2 ("daily management") of nursing scorecards.
- Color-code or identify some other means to visually indicate which indicators are auto-populated so that nurse managers know which indicators they still have to populate manually.

Excel Source Document (generated by SAS program)

Indicator	Unit	Ytd	JUL11	AUG11	SEP11
FALLS W/INJURY-RATE	TALL	0.459942	0.238237	0.348718	0.463043
FALLS W/INJURY-#	TALL	16	2	3	4
CMS HA STAGE III/IV PU-RATE	TALL	0	0	0	0
CMS HA STAGE III/IV PU-#	TALL	0	0	0	0
NURSING MED ERRORS F4 (#)	TALL	1	0	0	0
HANDWASHING COMPLIANCE NURSE+PSA - %	TALL	0.553191	0.509804	0.613636	0.423077
CLABSI PER 1000 LINE DAYS-CC	TALL	0	0	0	0
CLABSI - CRITICAL CARE - #	TALL	0	0	0	0
CLABSI - RATE PER 1000 PT DAYS - UNIT	TALL	0.336474	1.254705	0	0
CLABSI - NON-CC - UNIT - #	TALL	1	1	0	0
UTI PER 1000 FOLEY DAYS - RATE	TALL	1.589615	0.525762	2.189381	2.197802
UTI PER 1000 FOLEY DAYS - #	TALL	12	1	4	4
DISCHARGES BEFORE NOON - %	TALL	0.22975	0.245571	0.215	0.223046
FALLS-RATE	TALL	2.93213	2.501489	2.789725	3.283302
FALLS-#	TALL	102	21	24	28
NURSING MED ERRORS E (#)	TALL	1	0	0	0

Formula that auto-populates scorecards from Excel Source Document

Grant Medical Center FY12 Nursing Balanced Scorecard

QUALITY	Benchmark	Final FY11	FY12	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11
Falls with injury per 1000 patient days	GMIC	0.39	0.38	0.46	0.24	0.35	0.47	0.76
Number of falls with injury	MIDAS	38	16	2	3	4	7	
Prevalence of Pressure Ulcers - Stages II & IV - CMS Never-Event Rate (PUs/1,000 pt days)	GMIC	0.07	0.09	0.00	0.00	0.00	0.00	
Pressure Ulcers - Stage III & IV - CMS Never-Event - Number PUs		0	0	0	0	0	0	

