

Integrated Technology Serves and Informs Clinical Practice: Pressure Ulcer Prevalence Surveys

Lori D Merkel, MS, BSN, RNC-NIC, NDNQI Site Coordinator
Debbie L Stoner, AS, Systems Analyst

Purpose

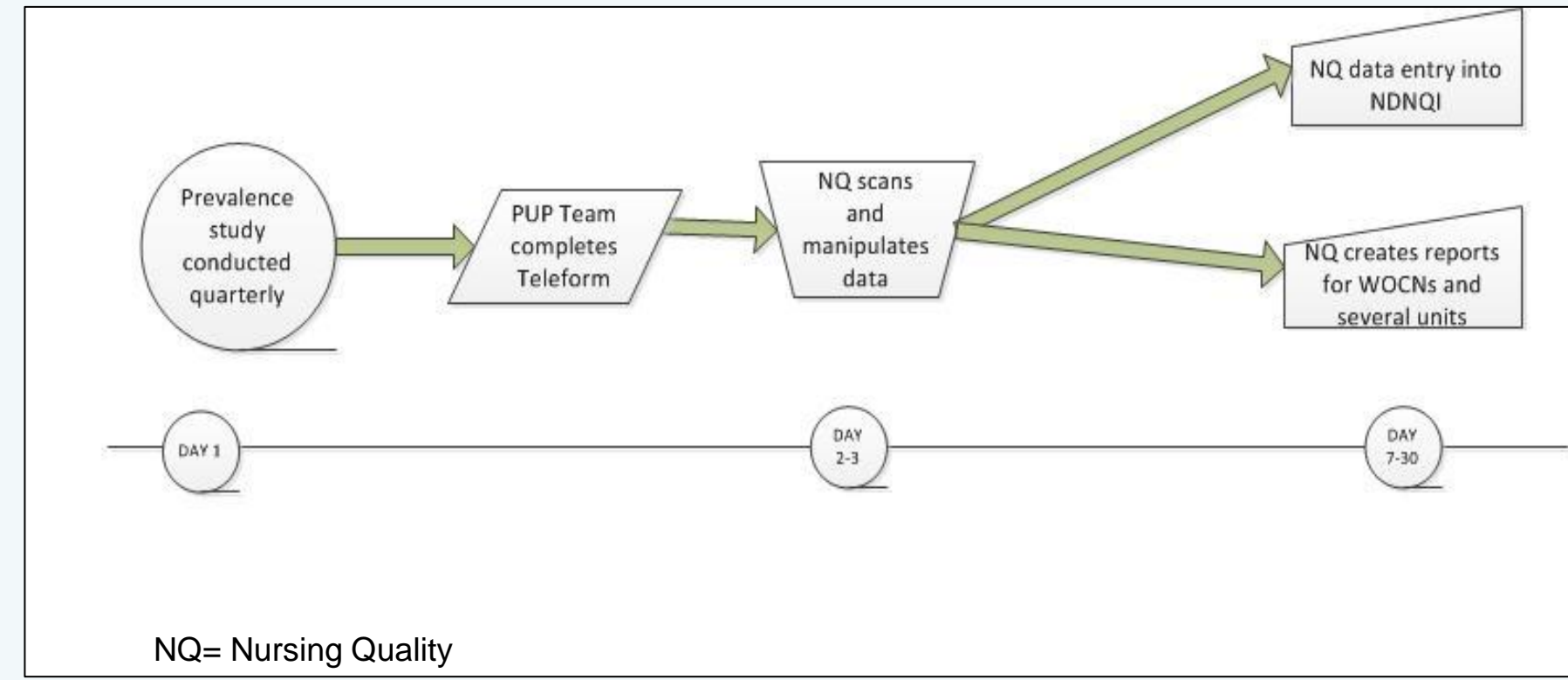
This intervention provides real-time feedback to nursing units about NDNQI Pressure Ulcer (PU) prevalence survey findings. Integrating technology into the process improves efficiency and accuracy of data collection. Rapid distribution of the quarterly evaluation results increase opportunities to implement prevention measures.

Significance

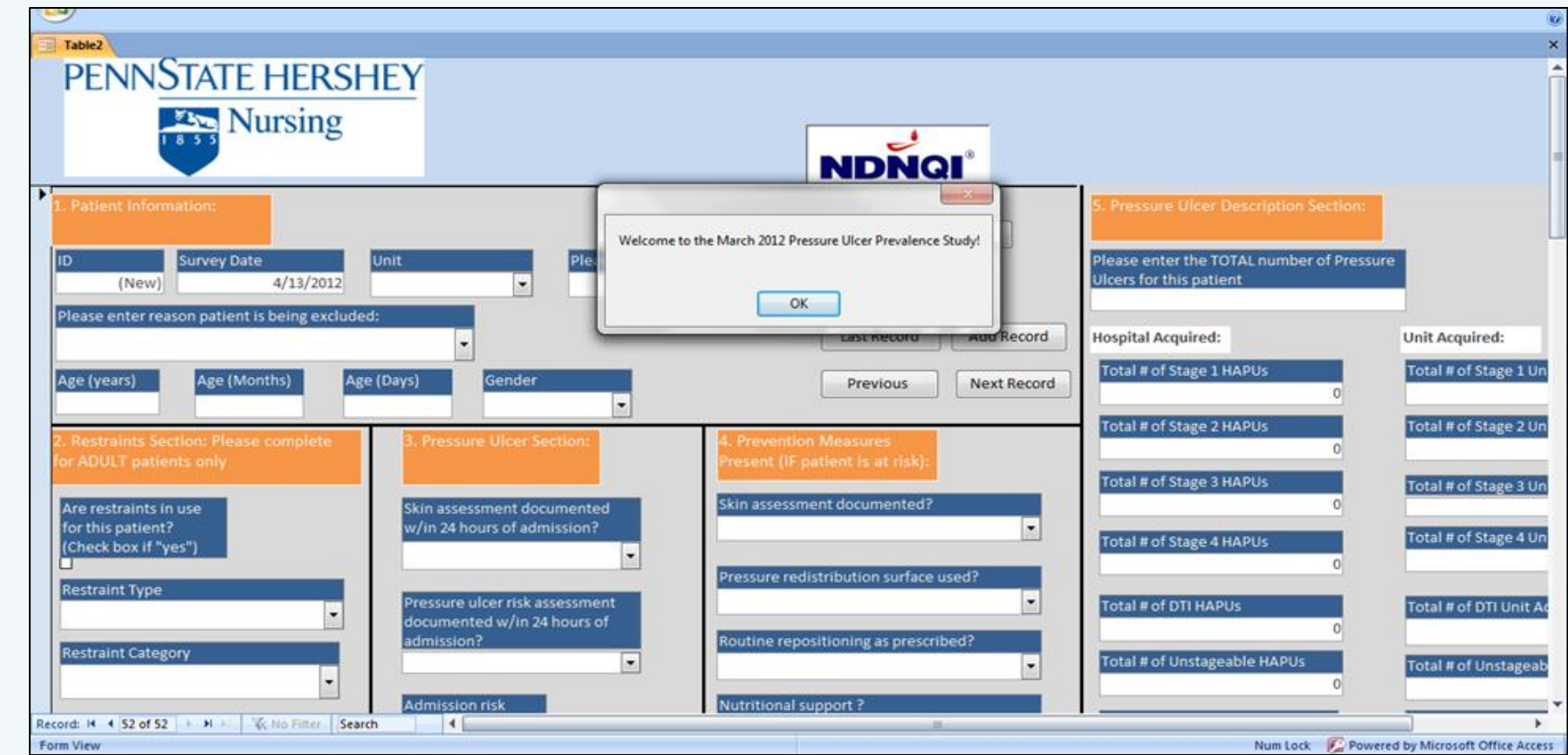
The Pressure Ulcer Prevention (PUP) team assesses approximately 380 patients each PU survey day. Previously a paper audit tool (Teleform) was used to collect data. The process was cumbersome and delayed communication of important findings to nursing units. Data integrity and accuracy also suffered.

Results of analysis from the paper audits revealed inconsistent, incomplete and/or unnecessary data collected on patients. Furthermore, findings disseminated weeks after the survey proved to be untimely and unactionable.

Current State Map and Timeline:



Electronic Tool:



Electronic Report:

March 2012 Pressure Ulcer Prevalence Unit Report									
4 ACUTE									
Patients Surveyed:		32	For "AT RISK" Patients, Utilization Percentage of Prevention Measures						
Percent of Patients "AT RISK" on your unit:		31.3%	100.0%	100.0%	90.0%	30.0%	60.0%		
Patient's Room Number	Patient Exclusion	At Risk	Skin Assessment Documented	Pressure Redistribution Surface Used	Routine Repositioning as Prescribed	Nutritional Support	Moisture Management	Total HAPUs	Total Unit ACO PUs
4123-01		Yes-based on risk assessment score	Yes	Yes	Pt refused	No	Yes	0	0
4215-01		No	Yes	Yes	Yes	Unnecessary for pt	Unnecessary for pt	0	0
4219-01		No	Yes	No				0	0
4221-01		Yes-based on risk assessment score	Yes	Yes	Yes	Yes	Yes	0	0
4222-01	Patient not on unit							0	0
4223-01	Patient not on unit							0	0
4224-01	Patient not on unit							0	0
4225-01								0	0
4227-01		Yes-based on risk assessment score	Yes	Yes	Yes	No	No	0	0

Strategy and Implementation

➤ Plan, Do, Check, Act (PDCA) methodology was used to create an electronic data collection tool.

➤ This process decreased data entry errors and enabled real time communication of survey findings to each nursing unit via an electronic report.

➤ Data collector training provided time to practice with the new tool prior to going live.

➤ Training emphasized the importance of sending the electronic report to the nurse manager and skin resource nurse immediately after completing each unit's survey.

➤ Electronic reports heightened awareness of patient needs and current nursing practice observed on each unit.

➤ Follow up evaluation was conducted on usefulness of the process and data consumer satisfaction.

Pre and Post Results for Pressure Ulcer Survey Data Collection

Required Data Fields	Missing Data: Q4 2011 (%)	Missing Data: Q1 2012 (%)	Relative % Change
Time since last assessment?	1.4	0.4	71.4
Patient at risk?	1.4	0.7	50.0
If at risk, prevention in place?	35.2	3.3	90.6
Overall % Missing Data:	38	4.4	88.4
Inconsistent Data Elements	# of Errors (n)	# of Errors (n)	Relative % Change
Ulcer Mismatches	2	0	100
Ulcers recorded without Stage	3	1	66.7
Overall # Inconsistent Data	5	1	80.0

The implementation of this intervention resulted in an 88% decrease in missing data, 80% decrease in inconsistent data and a 3.5 hour collective time savings among all PUP teams due to the decrease in collecting unnecessary data. Survey result communication time also decreased from 1-3 weeks to less than 10 minutes.

Practice Implications

Integrating technology and enhancing the process of conducting the NDNQI quarterly PU prevalence survey proved successful in providing timely, meaningful information to nursing units. Engaging nurses in real-time assessment of patients' needs results in immediate implementation of quality care.

Avoiding Unnecessary Data Collection Improves Efficiency and Decreases Wasted Time:

Q4 2011 (Pre)

- 73 patients excluded
- 38 had detail collected (52%)
- 228 minutes or 3.8 hours**

Q1 2012 (Post)

- 33 patients excluded
- 3 had detail collected (9.1%)
- 18 minutes**