



Improving Nursing Quality Indicator Outcomes with the Use of Nursing Informatics

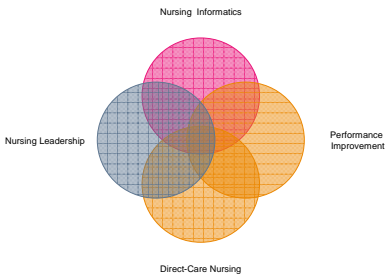
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Purpose

As the patient's length of stay increases during hospitalization, new priorities develop. As new priorities develop, older ones begin to get overlooked. At the University Medical Center of Princeton at Plainsboro, many of the councils and committees have the following three components:

- Nursing Leadership
- Performance Improvement
- Direct Care Nurses

The recent addition of Nursing Informatics to the core component of a committee has display a significant improvement in the nursing quality indicators.



Significance

The following nursing quality indicators in the acute care setting are a challenge that needs continuous improvement.

- Patient falls and fall related injuries
- Hospital acquired pressure ulcers
- Restraint usage
- Catheter related urinary tract infections
- Central line related blood stream infections
- Ventilator associated pneumonia

Effective information technology measures produce better outcomes.

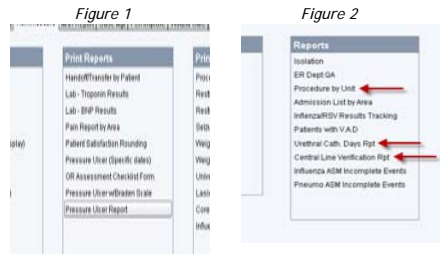
Nursing Informatics provide nursing a continuous mode of communication, information, and knowledge to help improve the quality of care.

Methods

REPORTS FOR ROUNDING

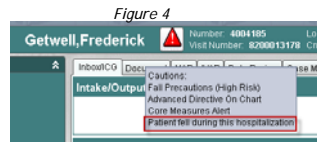
To assist rounding, specific reports were customized to improve quality indicators (Fig 1 and Fig 2)

- Fall Risk Patients
- Patients at risk for skin breakdown
- Restraint orders entered by physicians
- Urinary Catheter report
- Central Line Reports



UPDATES TO THE PRECAUTION TRIANGLE

- “patient fell during hospitalization”
- “risk for pressure ulcer”



Knowledge Icon Resources (Fig 6)

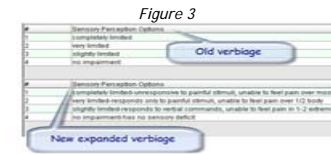
Resource guides uploaded into the “knowledge icon” encourages staff to research when in doubt

- Fall Risk Medication List
- Wound Care Manual
- Dressing selection guide
- Skin assessment guide
- Procedural guide on dressing changes



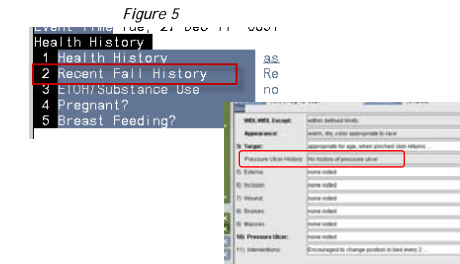
RN TO RN DOCUMENTATION IMPROVEMENTS

To improve the accuracy of scoring among the nursing staff, the Braden verbiage was further expanded (Fig 3)



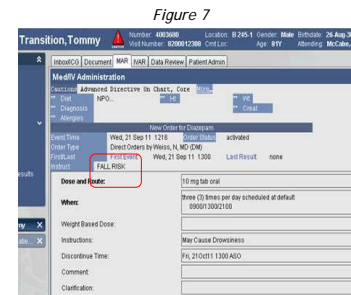
CHANGE OF SHIFT REPORT UPDATES

- Recent fall history added to the health history component of the RN admission assessment, which directly prints to the change of shift reports (Fig 4)



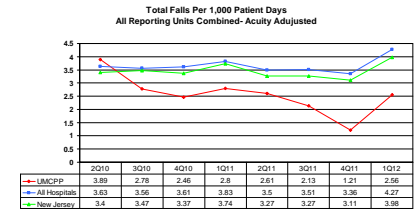
FALL RISK MEDICATION ALERT (Fig 7)

As the RN administers a medication, pharmacy has tagged all fall risk medications, to remind the staff of fall risk status.

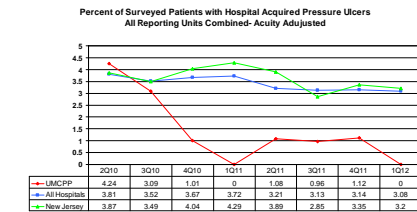


Results

Since the implementation of the IT changes, inpatient falls have dropped 25%, maintaining an average fall rate of 1.5 per 1,000 patient days.



UMCPP has been free of any hospital-acquired pressure ulcers for 7 months.



Conclusion

Some prevention strategies are obvious and may be sued with many patients, however, there are some patients who present more of a challenge and demand creative and innovative solutions. Methods used increased fall prevention, pressure ulcer awareness, and dramatically lowered rates.

Looking Forward

Improvement measures for CAUTI and CLABSI outcomes

- Since the implementation of the catheter and central line daily round reports, we have been free of catheter related urinary tract infections, and central line associated infections
- Continued reduction efforts in Falls and HAPU

References

- www.bradenscale.com
- www.healthinformatics.uic.edu/nursing
- www.nursingquality.org
- www.nlm.nih.gov