# ICU Staffing Ratios Using an Acuity Tool

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# Introduction/Background

North Shore Medical Center had been using QuadraMed AcuityPlus, an acuity tool since 2002, as well as the Assignment Feature since 2013 to create Medical/Surgical nursing assignments. QuadraMed AcuityPlus is used by all Partners acute and rehab hospitals for tracking patient acuity. However, not all Massachusetts Health Policy Commission (HPC) regulations could be met using the existing version of QuadraMed. For example, the system could not denote whether the patient should have a 1:1 or 1:2 ratio for nurse assignment. This is required by Massachusetts law.

# Methods

Partners QuadraMed Council met for a strategy session with QuadraMed developers. A new version of the tool was drafted using input from the Partners Council that included input from NSMC charge nurse interviews and lessons learned. QuadraMed provided an update to AcuityPlus that NSMC Beta tested in December 2015. NSMC implemented the QuadraMed update in February 2016. In March 2016 the ICU implemented the assignment feature for patient ratios in accordance with HPC requirements. QuadraMed Acuity Plus uses an objective classification process using twenty four indicators to quantify patient care needs for the next 12 hour shift. Nurses are required to complete a classification on their patients based upon the patients' anticipated care needs for the next twelve hours. This calculates the patient's workload for direct nursing care, which is used to determine nurse-to-patient ratios for the ICU nursing assignments.

# Results

The assignment feature uses the selected indicators for each patient to calculate patient workload. The patient workload is then used to determine the patient ratio, 1:1 or 1:2 assignment for the ICU nurse. The patient ratios are denoted next to a patient name with R1:1 or R1:2. In addition to using ratios other factors including continuity of care, isolation patients, and environmental factors, such as the physical layout of the unit are taken into account when creating nursing assignments.

# **Discussion/Conclusion**

In using the enhanced version of QuadraMed AcuityPlus, NSMC is meeting the current HPC regulations. Details for public reporting have yet to be finalized by the HPC. The assignment feature is meeting the goals of the ICU staffing committee and the ICU staff nurses.

# **References:**

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