



FOUNDED BY BRIGHAM AND WOMEN'S HOSPITAL
AND MASSACHUSETTS GENERAL HOSPITAL

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David M. Seltz
Executive Director, Health Policy Commission
50 Milk Street, 8th Floor
Boston, MA 02109

Dear Mr. Seltz:

Thank you for the opportunity to submit written testimony regarding proposed regulation 958 CMR 8.00 – Registered Nurse-to-Patient Ratio in Intensive Care Units in Acute Hospitals. The proposed regulation and related dialogue at recent Commission meetings raise a number of issues on which we offer comments in this letter.

At the start, however, we wish to align ourselves with the excellent testimony and comments of the ONL and MHA. We believe that those comments address a number of concerns not only to our hospitals, but also to hospitals large and small across the Commonwealth. We also believe that those comments reflect the importance of flexibility and discretion in the way in which specific provisions of the regulation need to be implemented in the real world setting of ICU delivery of care.

With respect to specific elements of the regulation, we submit comments on the following:

Neonatal ICUs (NICU)

Chapter 155 of the Acts of 2014 applies to intensive care units “as defined in 105 CMR 130.020.” Since NICUs are not defined in 105 CMR 130.020, but rather 105 CMR 130.601, we firmly believe that they should not be subject to the proposed regulation.

Moreover, it is important to recognize that the limited number of NIUCs in the Commonwealth are inherently different from adult ICUs both operationally and clinically. Compared to an adult ICU, there are fewer beds, nurses and physicians available to care for a NICU patient. As such, a variety of factors influence decisions on where to place patients, including anticipated and unanticipated deliveries, transports from other hospitals, and the availability beds. Staff nurses, nurse managers, physicians, and other members of the NICU team all work together and constantly assess and reassess patients using a standard set of perinatal guidelines (Guidelines for Professional Registered Nurse Staffing for Perinatal Units, which were developed by the Association of Women’s Health Obstetric and Neonatal Nurses, and have been endorsed by a variety of professional organizations including the American Academy of Pediatrics and the National Association of Neonatal Nurses). These guidelines help to determine appropriate patient assignments based on the level of care required by the patient, family needs, as well as the skill level of the practicing nurses.

Furthermore, while DPH regulations define a NICUs as a “Level III maternal and newborn service or a freestanding pediatric hospital with neonatology specialty services,” most NICUs are structured to offer both level III and level II (convalescing) care. The infants that occupy level II beds do not require an ICU level of care, despite the fact that these beds are physically located in NICUs. Imposing staffing ratios on these infants would likely result in the inability of NICUs to accept urgent and emergently transferred patients that do require level III care. Given the limited resources, members of the NICU team must have maximum flexibility when determining patient assignments, in order to ensure that patients and their families are getting the best care possible.

In light of these issues, we recommend in the strongest possible way that the Commission exclude Neonatal Intensive Care Units (NICUs) from the proposed regulation.

“At all times” and “At any time”

While hospitals agree with the staffing ratios required in the statute, the inclusion of the “at all time” and “at any time” language in the proposed regulation has created significant confusion, and could potentially create significant unintended consequences if rigidly applied.

An important component of high quality patient care delivery is an intact team that has developed a working relationship with the patients and their families, one that understands the environment in which they work, and one that has a clear understanding of the strengths and weaknesses of their colleagues. Mandating that staffing ratios must be satisfied “at all times” and “at any time” would require that institutions maintain a float pool of nurses who are shifted regularly from ICU to ICU in order to temporarily relieve assigned nurses during intervals when they are attending to other matters (i.e. during breaks, transporting patients to another unit, assisting with “codes” or in a bedside procedure for another patient, consulting with members of a patient’s family, etc.). These float nurses, while dedicated and respected members of our profession, would be placed in extremely difficult and uncomfortable situations as they would necessarily be required to cover several different ICUs during the course of a day, interacting with nurses, physicians and patients with whom they have no prior relationship. For us, this would pose a difficult situation for our nurses and a safety risk to our patients.

Given that patient outcomes of care in Massachusetts exceed those of most other states, we believe that adding this extremely costly new layer onto an already complex care unit is not only unnecessary, but also defeats the notion of a smooth working care team and the best and safest care for our patients. Therefore, we urge you to clarify the language such that it accounts for these realities, and does not exceed the statutory intent of the law.

Acuity Tool

We appreciate that the proposed regulation affords hospitals with the flexibility to develop or select an acuity tool of its choosing (with input from an advisory committee), so long as it meets certain minimum standards.

Currently in Massachusetts, less than 20% of hospitals utilize an acuity tool. Of that 20%, the majority utilize the Quadramed tool, including the hospitals in the Partners HealthCare System. Given its broad application across the state, we sought insight into the tool's development, in order to determine whether it met the minimum standards required by the proposed regulation. Enclosed, please find additional background information that highlights the years of research behind the Quadramed tool, including an in-depth description of what is entailed in ensuring the tool's validity, its transportability across units and patient populations, and how it incorporates the defined set of clinical indicators without requiring a separate indicator for each clinical system.

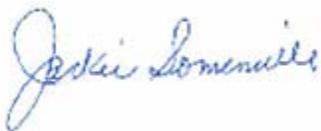
We support the requirement that hospitals provide evidence of acuity tool validity, but would urge the Commission to allow hospitals to utilize a single tool across multiple ICUs. Furthermore, we would ask that the Commission extend the current deadline of October 1, 2015, in order to provide hospitals with sufficient time to ensure compliance with the final regulation as it pertains to the acuity tool.

Thank you again for your time and attention to these matters, as you implement Chapter 155. We look forward to a final regulation that advances the intent and objectives of the law, without creating an undue burden on hospitals or negatively impacting patient care. If you have any questions, please do not hesitate to contact us.

Sincerely,



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AcuityPlus Inpatient 2.0 Development Summary

Overview

QuadraMed Corporation provides a valid and reliable inpatient methodology to differentiate patients based on their needs for care. The AcuityPlus Inpatient 2.0 methodology is the latest generation of the inpatient methodology that was originally developed in 1975. QuadraMed maintains the validity, transportability and reliability of the methodology using an evidence-based approach to the development process. The AcuityPlus Inpatient 2.0 development process spanned twelve months, involving data collection at thirteen client institutions and the evaluation of over 3,300 patient workload classifications covering a wide variety of clinical specialties. The result of the project was the release of the AcuityPlus Inpatient Methodology in May of 2012. The project involved two main phases. Each phase is outlined below.

Alpha Testing

Alpha testing activities included an extensive review of the AcuityPlus Inpatient 1.0 Methodology statistics, indicator usage and trends. Alpha testing also included a literature search, client surveys and focus groups. Seven new patient care indicators were developed for additional testing along with the AcuityPlus Inpatient 1.0 patient care indicators.

Beta Testing

During beta testing, the utility of the patient care indicators was determined and the validity, reliability, and transportability of the methodology was established. Clinical experts collected data on 3,331 patients from 63 patient care units. The institutions that participated in the data collection process included academic medical centers, teaching hospitals, and community hospitals; the average daily census in the participating facilities ranged from a volume of 100 to over 1000 patients; and the locations of the institutions included sites across the United States and 1 Canadian organization. The Brigham & Women's Hospital and the Massachusetts General Hospital were two of the sites that participated in the study.

Results

The AcuityPlus Inpatient 2.0 Methodology included revisions to the patient care indicators, patient type point ranges and patient type weights of the AcuityPlus Inpatient 1.0 methodology. In testing, validity for both the acuity and complexity measures was improved at the overall levels and over the majority of clinical specialties. Extensive client feedback indicates that the methodology revisions will provide greater face validity to staff nurses.

Validity

The validation of the AcuityPlus Inpatient 2.0 Methodology included analysis of content validity, face validity, criterion-related validity, predictive validity and construct validity (transportability). Clinical Nurse Experts were used extensively in the development and testing of the methodology. The methodology was tested against several other measures of patient care including similar methodologies, patient work sampling and clinical expert estimates of patient care hour requirements. Transportability was insured through validation in various institution sizes, types, locations, and, over various clinical specialties.



Validation in ICU Units

The AcuityPlus Inpatient 2.0 methodology was tested extensively in the ICU population. Twelve adult ICU units participated in the validation study including a CCU, two Surgical ICUs, four Medical/Surgical ICUs, a Cardiovascular ICU, two Neuro ICU and two Trauma ICUs. Testing also took place in five Neonatal ICU units and one Pediatric ICU unit. In addition, four of the tested ICU units were from Massachusetts hospitals.

Validation in Non-ICU Units

The non-ICU validation study included Med/Surg, Orthopedic, Oncology, Neurological, Telemetry, Progressive Care, Rehabilitation, Soft Organ Transplants, Mother/Baby and Pediatric patient populations.

Clinical Indicators

During the research process to determine the clinical indicators that differentiate patients, indicators for multiple clinical systems were tested. This included system such as pulmonary, cardiovascular, neurological, and fluid management. The analysis of data revealed that selection of various assessment indicators were highly correlated with each other. Thus, separate indicators for each system did not provide additional information to differentiate patients based on their need for care; the frequency of assessments was the differentiating factor.

Inpatient 2.0 Methodology

The Inpatient methodology is comprised of three components: 1) clinical indicators, 2) patient turnover, and 3) activities requiring additional 1:1 care for one hour or greater duration. The clinical indicators account for the variance in the patient's needs for care and are allocated a weight based on the indicator's ability to differentiate patient care needs. The total points of the indicators applicable to each patient determines the category or patient type. The patient turnover component captures the relative care needs related directly to admission, transfer and discharge process of patient care. Patient activities that require 1:1 or greater staff to patient ratio for one hour or longer include both bedside procedures and procedures where the RN needs to stay with a patient to meet their care needs when an off-unit procedure or activity is performed.

In addition to the methodology components, the system implementation process incorporates a determination of other factors that impact the units staffing needs. This includes factors such as: geographical layout of the unit, number of beds, unit support systems, and experience of the staff in caring for the specific clinical population. Further, the patient assignment component of the system can factor in nurse experience competencies and well as geographical unit constraints.

Methodology Reliability

The use of straight-forward clinical indicators that measure patient needs facilitates the reliability of the methodology. Reliability testing guidelines are provided and the system automates reliability testing and scoring.