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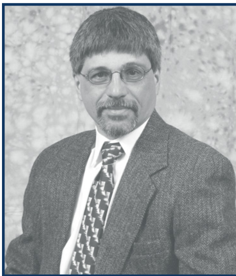
pcc pulse

Fall 2006

ROBERT WOOD JOHNSON HEALTH NETWORK

PCC Launches Critical Care Initiative: Focus on Protocols, Practices, Data Collection

Recognizing that a network of both academic and community hospitals offers fertile ground for the cultivation of new ideas and refinements to enhance critical care medicine, the Physicians Coordinating Council (PCC) has launched the Network's first Critical Care Directors initiative. Scheduled to meet quarterly, the directors of critical care medicine within the Network will share information on practice models, staffing, clinical protocols, and data collection and analysis at all seven acute care hospitals. The goal: to incorporate and tailor successful critical care modalities into Network critical care units, create protocols that optimize outcomes, define admission criteria and work to develop more standardized data collection and analysis for Network-wide comparison.



John DeTullio, MD

"There are differences between larger tertiary hospitals and community hospitals," said committee co-chair Thomas Bojko, MD, MS, Senior Vice Chair, Clinical Affairs, Department of Pediatrics, RWJMS and immediate past chair, Critical Care Committee, RWJUH. "Having a Network of community and academic medical centers working together is pretty novel, and we can learn from each other."

The development and implementation of new critical care approaches would need to be tailored to the specific cultural and financial issues of each institution. Still, Dr. Bojko and his co-chair, John DeTullio, MD, Critical Care Director, CentraState Medical Center, see value in exploring the advantages – and disadvantages – of various critical care models.

The Network's Practice Models

Network hospitals employ a variety of critical care practice models; the main divergence is in how units are staffed. RWJUH employs full-time intensivists and faculty physicians, while some hospitals use intensivists part-time or implement a physician advisor model. While there are data to suggest that intensivists can improve mortality rates and outcomes, communication and coordination of care issues can arise.

Thomas Bojko, MD

"In the academic model, intensivists' interaction with different services and specialties, and the way it is coordinated, can be a challenge," said Dr. Bojko. "Community hospitals are often better with communication. I'm not saying one model is better than another, but there are differences and we can learn from each other."

Models in use at Network hospitals include (see chart below):

- **Full-time intensivist**: Medical school physicians certified as critical care intensivists manage the care of patients
- **Part-time administrative/part-time private physicians:** Physicians are employed on a part-time basis while maintaining private practice
- **Physician advisor:** Physicians accept responsibility to periodically monitor critical care unit activities, with compensation.

A medical school/administrative model, which uses a medical school faculty member to serve as the administrative director of the critical care unit, is not in use at any Network hospital.

NETWORK HOSPITAL CRITICAL CARE UNIT OVERVIEW

Hospital	CCU Type/# of Beds	Patient Population	Open/Closed Unit	Practice Models
Bayshore Community Hospital	CCU-16 beds	Medical/surgical	Open	Physician advisor
Bristol-Myers Squibb Children's Hospital	PICU-20 beds; NICU-11+ beds	Combined medical/ surgical with all subspecialties performing all interventions; patients up to 18 years (19-21 on a case by case basis)	Open only to critical care certified faculty physicians	n/a
CentraState Medical Center	Mixed medical/ surgical-9 critical care beds & 6 step-down beds	Medical/surgical/ cardiac (primarily pulmonary, nephrology, or cardiac)	Open	Part-time private physician
RWJUH	MICU-16 beds	Pulmonary, stroke, sepsis; severe intensity of illness	Semi-open (faculty/ private physicians admit patients; mandatory critical care consultant oversight)	Full-time intensivist
RWJUH	Level 1 Trauma/surgical ICU-17 beds	1/3 neuro; 1/3 trauma 1/3 surgical	Open (mandatory critical care consult)	Full-time intensivist
RWJUH Hamilton	ICU/CCU - 20 beds	Medical/surgical/ cardiac	Open	Part-time private physician
RWJUH at Rahway	CCU - 8 beds; General medical/ surgical - 8 beds	Medical/surgical, cardiac	Open	Physician advisor

Improving Network Critical Care Data Collection

The dearth of critical care data will be a major focus of the PCC committee moving forward. According to Dr. DeTullio, systems throughout the Network vary, making it difficult to trend outcomes or make meaningful comparisons between Network hospitals.

Working with the PCC, the Network will explore data analysis systems options, the expanded use of PACs (currently used by Network medical directors) and discuss staffing options for systemized data collection, analysis and interpretation.

PCC Pulse is published quarterly by the Robert Wood Johnson Health Network's Physician Coordinating Council.

Medication Reconciliation: PCC Focuses on Standardizing Forms, Protocols

Creating a standardized medication reconciliation algorithm for use by all Network hospitals will be the focus of the Physician Coordinating Council's (PCC) new subcommittee, the Medication Reconciliation Committee. The Committee, which first met in July, will take up the challenge of developing more standardized approaches to medication reconciliation despite daunting complexities.

"Medication reconciliation is an issue for all Network facilities and all institutions in the state," said Benjamin Weinstein, MD, PhD, Senior Vice President, Medical Director, CentraState Medical Center, interim committee chair. "The question is – how do you do it? Each facility has different approaches, different clinical information systems, different software, and different protocols and policies. It is a challenge to create uniformity."

The Joint Commission on Accreditation of Healthcare Organizations has mandated improvements in medication safety beginning this year. Data has shown that medication discrepancies are relatively common, particularly at time of admission. While studies have found that most admission errors have no potential to cause harm, more than one-third of errors have the potential to cause significant patient discomfort or clinical deterioration (*Arch Intern Med*, 2005;165:424-429). Previous reports show that up to 50 percent of all medication errors and up to 20 percent of adverse drug events in hospitals are caused by communication breakdowns.

The Medication Reconciliation Committee will be working to address these questions in the coming months, and move toward ease of compliance and conformity among Network hospitals:

- What is the medication reconciliation process at admission?
- How is medication reconciliation handled at change of level of care within the hospital?
- What is the process for patients discharged from the emergency department?
- How does the hospital identify the next care provider?
- What constitutes compliance?
- What is the role of the pharmacist?

Different Systems, Different Standards

The PCC's immediate goal – to develop a standard Network medication reconciliation form – is being pursued in conjunction with an effort to gain support and involvement from the New Jersey Hospital Association and The Medical Society of New Jersey which each have a stake in the issue, said Dr. Weinstein. The South Carolina Hospital Association has been successful in developing standardization in their state of protocols and forms.

The PCC will also discuss the optimum organizational approach to improving medication reconciliation both in each hospital and Network-wide, a process made more challenging due to the diversity of systems and approaches – from fully computerized, to manual, to a combination – used by each hospital.

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RWJ Health Network Updates

- *Christy Stephenson, President and Chief Executive Officer of RWJ University Hospital Hamilton, will step down December 31 after serving eight years as CEO. Under her leadership, the hospital earned numerous recognitions, and was the first hospital in New Jersey to receive the prestigious Malcolm Baldridge National Quality Award in 2004.*
- *RWJUH New Brunswick is one of only three hospitals in the US to offer AbioCor, the first FDA-approved implantable artificial heart. (Johns Hopkins Hospital and Jewish Hospital in Louisville, KY are the other two). Led by Mark Anderson, MD, Chief of the Section of Cardiac Surgery, the hospital has been a Center of Excellence for AbioMed, the device manufacturer, setting physician standards for the company's ventricular assist devices.*
- *Cone-beam computed tomography (CBCT), an emerging advance in image-guided radiation therapy, is now available at CentraState Medical Center. The CBCT quickly processes three dimensional images that can verify tumor location and proportions, and promote comparisons to existing reference images.*
- *Raritan Bay Medical Center has named Joan Harewood, RN, MA, as Senior Vice President, Patient Care Services and Chief Nursing Officer (CNO). A hospital and nursing administrator for more than 20 years, she most recently was CNO at Mountainside Hospital in Montclair, and has also held positions at Hospital Center of Orange, Newark Beth Israel Medical Center and UMDNJ-University Hospital.*

The Physician Coordinating Council is comprised of the medical leadership of the Robert Wood Johnson Health Network members which include:

- Bayshore Community Health Services, Inc.
- Carrier Clinic
- CentraState Healthcare System
- Children's Specialized Hospital
- Raritan Bay Medical Center (Perth Amboy and Old Bridge)
- Robert Wood Johnson University Hospital (New Brunswick, Hamilton, and Rahway)
- UMDNJ-Robert Wood Johnson Medical School (New Brunswick)
- Eric B. Chandler Health Center
- Henry J. Austin Health Center
- Plainfield Health Center
- VNA Community Health Center
- Presbyterian Homes & Services, Inc.

It is the only health care network in New Jersey to include a medical school among its partners.

Please direct questions about any information contained in PCC Pulse to your chief medical officer or the Network's Director, Clinical Integration lois.dornan@rwjuh.edu.

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