

The Acute Care Nurse Practitioner as Intensivist: Implementation of the Role

Presenter: Dr. Melanie G. Hardin-Pierce DNP, RN, ACNP-BC
University of Kentucky College of Nursing
Lexington, Kentucky

Acknowledgments

- Karen Hill, RN, MSN, CNAA, FACHE

Vice President/Nurse Executive

Central Baptist Hospital

Lexington, Kentucky

- John R. Thompson, MD

Board Certified in Critical Care, Internal Medicine, and Pulmonology

Pulmonary Associates PSC.

Lexington, Kentucky

- Susan Frazier, RN, PhD

Associate Professor

University of Kentucky College of Nursing

Lexington, Kentucky

Advanced Practice Nurses Managing Patient Care in Critical Care Settings



What is an Intensivist?

- An **intensivist** is a health care provider who specializes in the management of care for patients in critical care settings.
- Historically, intensivists are physicians.
- In 2008, an ARNP intensivist role was initiated in an acute care community hospital in Lexington, Kentucky as a strategy to improve triage and outcomes of critically ill patients admitted to intensive care units.

The Nurse Practitioner as Intensivist

- Has received training at the masters or Doctoral level
- Has passed a national certification exam in advanced nursing practice, i.e., Acute Care Nurse Practitioner
- Demonstrates a high level of independence in the clinical management of critically ill patients

Key Competencies of the ARNP Intensivist

- Demonstrates a knowledge of advance pathophysiology , physical assessment, and ability to order and interpret diagnostic tests
- Demonstrates technical competence with procedures
- Collaborates with other care providers to facilitate positive outcomes

Key Competencies of the ARNP Intensivist (continued)

- Provides “expert” resource for ICU nurses who need help with complex patient care issues
- Provides resource for the Rapid Response Team for early identification and treatment of problems in patients on floors or wards
- Serves as a liaison between ICU nursing staff and attending physicians to facilitate communication
- Provides leadership to staff with opportunities to mentor new staff

ARNP Intensivist Program

- A “nocturnalist” intensivist program who provides clinical leadership and expertise to nurses and other allied health professionals at the point of care from 7pm to 7am
- Each ARNP intensivist has a collaborative professional practice agreement with the Physician intensivist Medical Service, who are board certified pulmonologists certified in critical care medicine

ARNP Intensivist as Member of the Intensive Care Team

- Enhances interdisciplinary collaboration between physicians , nursing, and other allied health providers to improve patient outcomes
- Provides necessary leadership at the bedside during a time of acute nursing shortage
- Infuses a holistic nursing perspective and increased emphasis on prevention and comprehensive patient care management into the daily plan of care
- Provides increased “face” time with patient’s significant others for improved communication and education

Goals of the Role

- **Improve recognition and triage of unstable patients** during the night time hours when physicians are not physically present in the hospital
- **Reduce the “time to extubation” and ICU length of stay** for our mechanically ventilated post op cardiovascular surgery patients
- **Improve adherence** to DVT prophylaxis protocols, to PNA/Influenza vaccine protocols, and to the “sepsis bundle” protocol
- **Reduce infection rates** (VAP, urinary catheter related infection, and central line infection rates)

Implementation of the Role

- For one year prior to activating the role, each ARNP intensivist oriented with Internal Medicine and Pulmonary intensivist physician groups, and nursing supervisors
- Became credentialed with insertion of central venous and arterial lines
- Intensive staff education to introduce the role
- Flyers were posted with photos of the ARNP Intensivists throughout hospital, in publications, and during staff meetings

Implementation of the Role

- July of 2008, the role went “live”
- Staff one ARNP intensivist each night from 7pm to 7am
- Provide coverage for 5 ICUs (Cardiothoracic ICU; CCU; Surgical ICU; Neuro ICU; and Medical-Surgical ICU)
- Attends all “Code Blue” and “Rapid Response” events hospital wide

A “night” in the life of an ARNP Intensivist

- Brief with Nurse “house supervisor” to learn hospital capacity/ staffing status, and to identify specific patients who need follow up or ARNP consultation
- Review “hand off” communication from previous nights ARNP intensivist to determine priorities
- Review ICU patient census
- Visit each post op cardiovascular surgery patient to evaluate status, especially time to extubation

A “night” in the life of an ARNP Intensivist

- Visit each patient that requires mechanical ventilation and/or inotropic, vasoactive continuous IV medications to assess status, write progress note, and manage care
- Audit patient records for adherence to core measures (VTE prophylaxis, PNA/Influenza immunization, GI prophylaxis, glycemic control, discontinuation of prophylactic antibiotics within 24 hours); intervene as needed

A “night” in the life of an ARNPN Intensivist

- Communicate with members of the health care team about patient management issues
- Initiate consults, facilitate ventilator weaning, follow up on diagnostic testing
- Monitor nutritional status, pain and sedation
- Monitor need for indwelling urinary catheter and CVC devices
- Insert central lines as needed

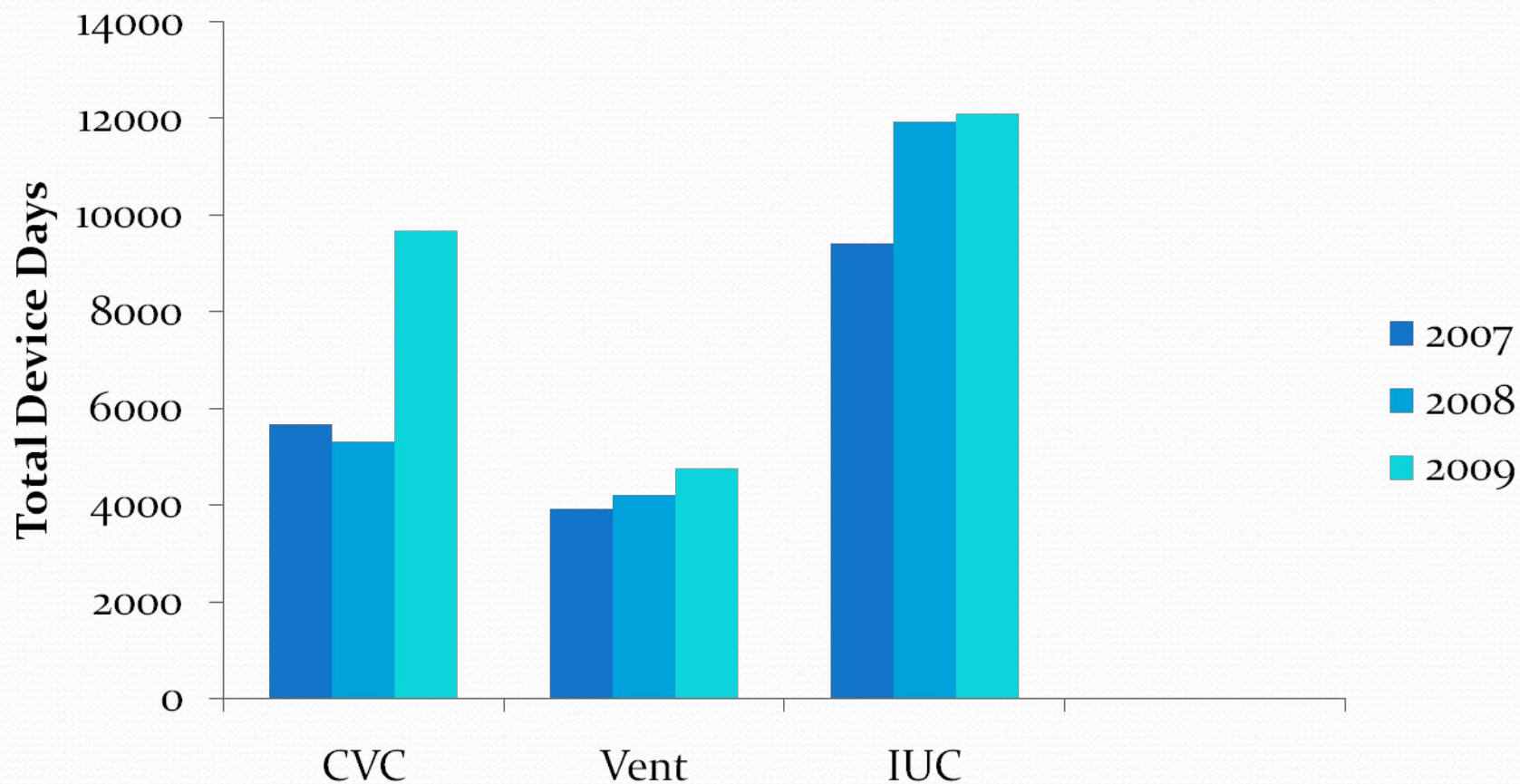
Sensitive Indicators of Role Performance

- ICU length of stay
- Ventilator days
- Device Associated Infection rate (VAP, CVC, IUC)
- Compliance with venothromboembolism (VTE) protocol
- Compliance with pneumonia/influenza vaccine protocol
- Time to extubation in post op CABG patients
- Physician and nursing staff satisfaction

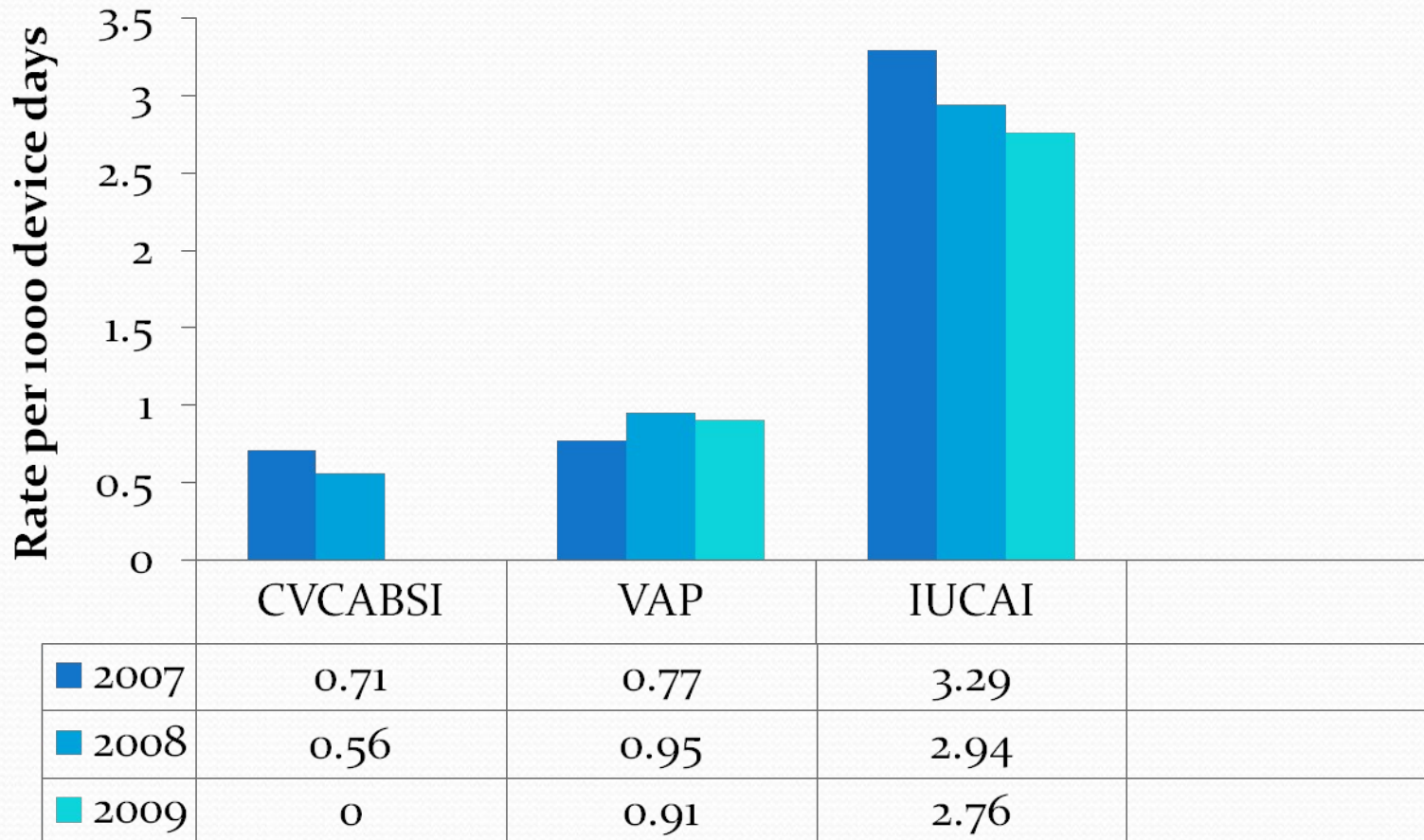
Evaluation Design

- Pre and Post measures
- Concurrent measures
- Survey of nursing staff
- Survey of physician staff

Device Days per Year



Device Associated Infections



Physician Satisfaction



- Survey is currently ongoing
- Anecdotal data is very positive

Physician Satisfaction

“We have found their services to be invaluable”

“ We have had measurable improvement in indicators such as post-cardiac surgery ventilator times, however, their major impact is more difficult to quantify”

“Unstable patients are being identified and triaged more appropriately and in a more timely fashion”

“Nursing frustration with physician lack of responsiveness appears to be less common”

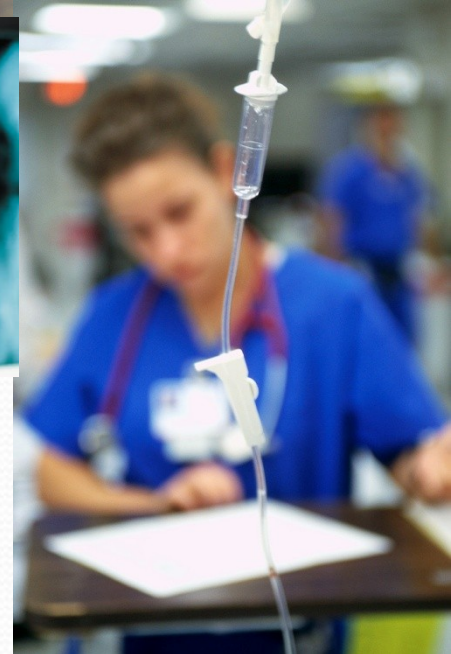
Physician Satisfaction

“Physician reliance on the ARNP’s is increasing to the point that other physician groups are asking to expand their responsibilities”

“Overall the physicians of Pulmonary Associates, PSC have found the Central Baptist Hospital Critical Care ARNP “Nocturnalist” Intensivist program to be effective at improving the care of critically ill patients in the ICU’s and on the floors”

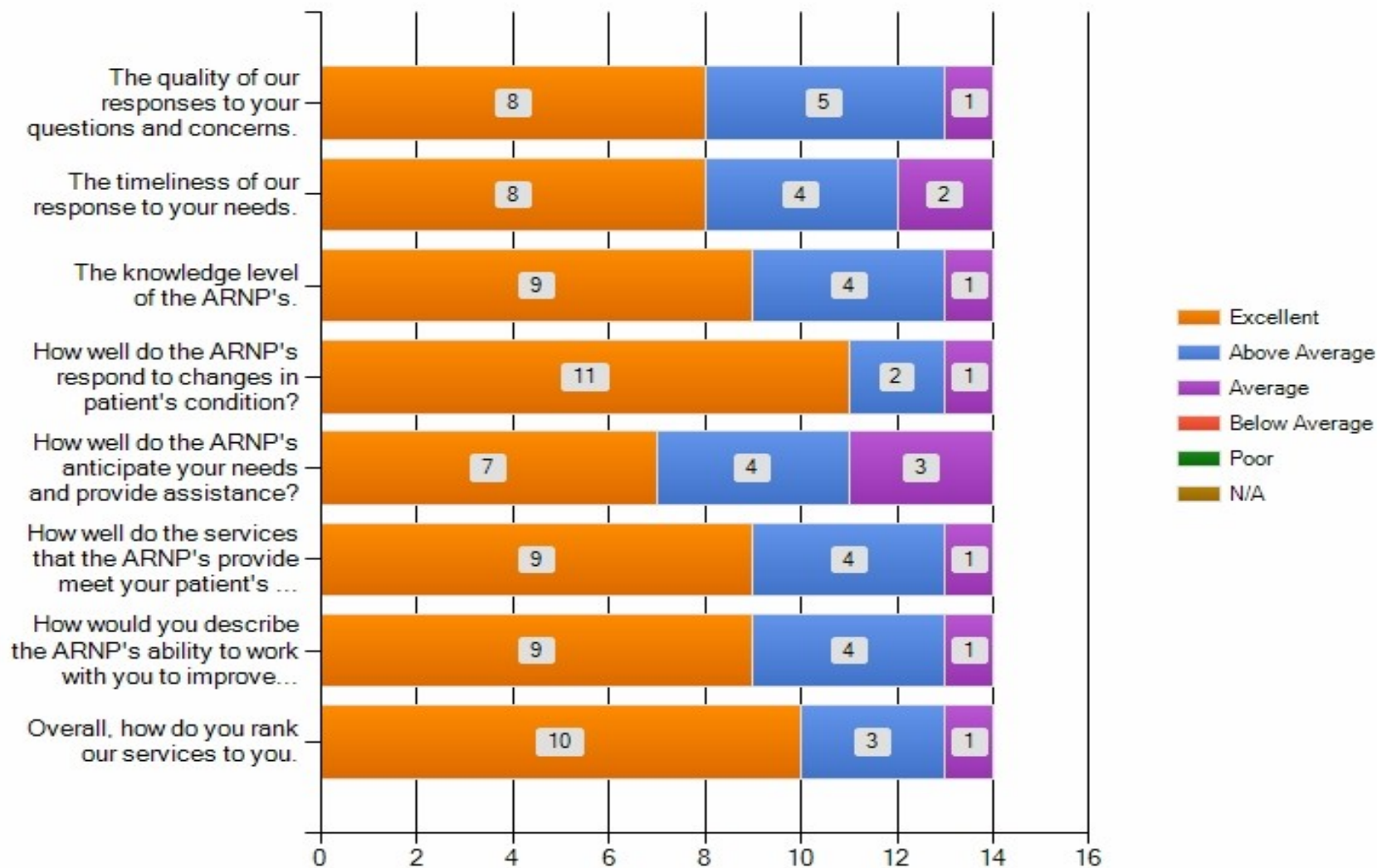
Nursing Satisfaction

- Surveyed nursing staff



Nurse Satisfaction

Please rate the following:



Nurse Satisfaction

- **What should we improve on?**

“Being willing to take the time to teach new RN's so that

they feel more comfortable asking questions and addressing concerns”

- **What do we do well?**

“Help exceptionally well during crisis situations”

“The ARNP's are always available and willing to give Input to questions about patients and their conditions”

“Consistently round on all the units”

“ARNPs are knowledgeable and helpful. They work on

...best patient treatment and patient satisfaction”

Nurse Satisfaction

- **How can the ARNP's help meet the most important challenges facing your organization this year?**

Working more effectively with new RN's

Facilitate collaboration with physicians

Place central lines

- **How can we help you do your job better?**

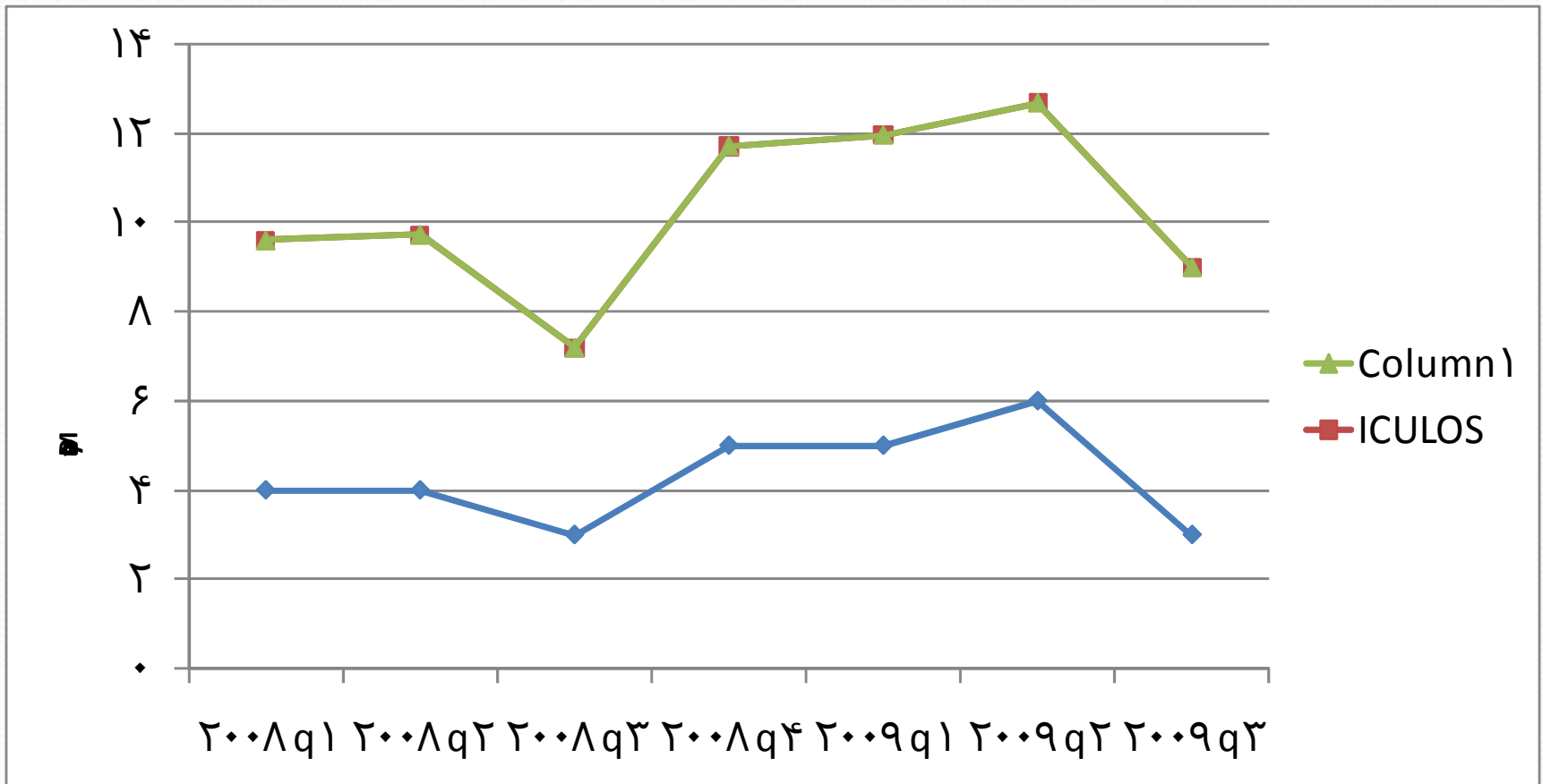
Continue to be approachable and available

“You are an inspiration to us as you do your jobs”

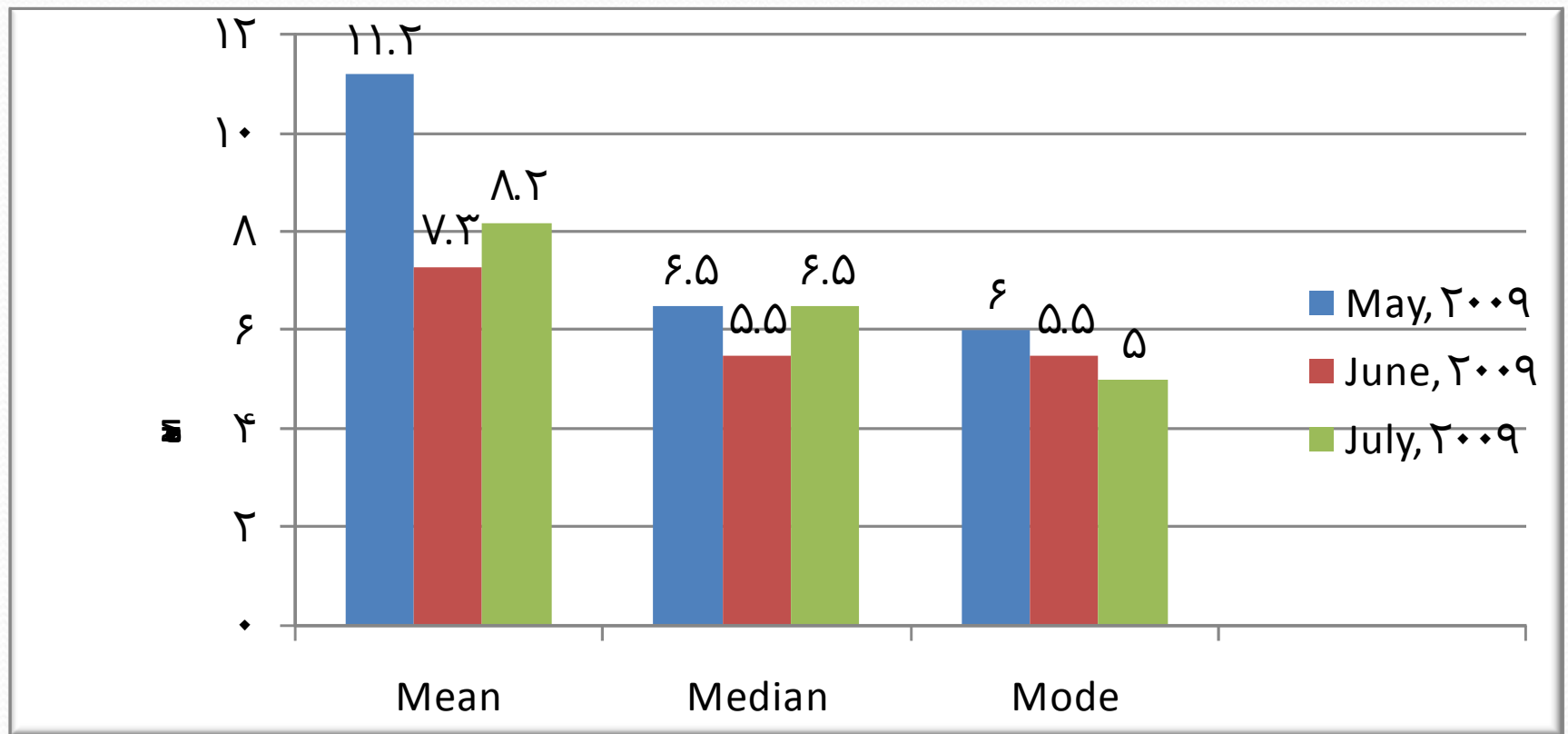
Help us to learn and anticipate problems

Mentor and coach as you care for our patients

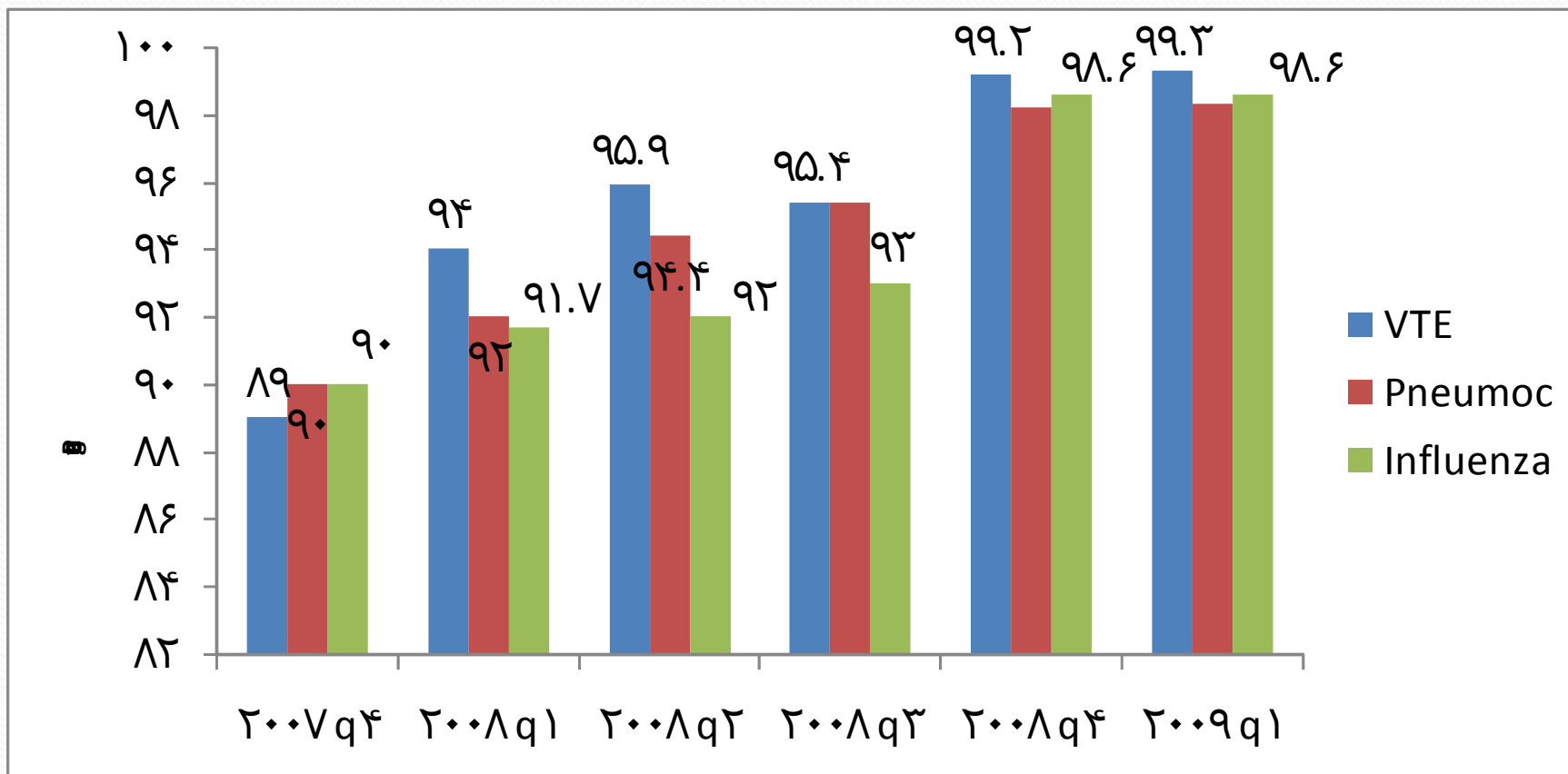
Average Ventilator Days and ICU Length of Stay



Time to Extubation: Post op CABG



Compliance with VTE Prophylaxis and Pneumococcal PNA/Influenza Screening



Lessons Learned

- Interdisciplinary approaches are needed to improve clinical outcomes of critically ill patients
- Early involvement of unit based change champions have facilitated role implementation
- Providing regular feedback to all stakeholders prior to and during the implementation process improved dissemination of the new practice role
- Prior to implementation of new role, it is best to determine how the role will be evaluated
- Obtain baseline data prior to implementation of new practice role

Implications for Practice

- Preliminary evaluation results suggest that the Advanced Registered Nurse Practitioner Intensivist program is associated with measurable improvement in indicators such as post-cardiac surgery ventilator times, and adherence to VTE, PNA/Influenza prophylaxis protocols
- Data suggests that the ARNP Intensivist services may be reducing device related infections, and nursing satisfaction
- Anecdotal communication from physicians suggest satisfaction with the role

Implications

- Feedback from physicians and nurses suggest that nursing frustration with physician lack of responsiveness appears to be less common
- Unstable patients are being identified and triaged more appropriately and in a more timely fashion, although this needs to be measured
- Physician reliance on the ARNP's is increasing to the point that other physician groups are asking to expand their responsibilities

Future Considerations

- Major impact of the role is more difficult to quantify
- Further data needs to be collected to identify cost effectiveness of the role
- Further study of the impact on nurse retention, quality and safety is needed
- At present, plans are being made to expand the role from 7p to 7a coverage to full 24 hour coverage
- Investigation of the effects of this innovative role on nurse/physician collaboration is warranted

Thank you

Questions?