



# APNs

## Invisible champions?

*On a daily basis, advanced practice nurses in acute and critical care settings impact outcomes for patients, families, and evidence-based practice.*

By **Ruth M. Kleinpell**, RN, PhD, FAAN, FAANP, FCCM

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**P**atient care provided by advanced practice nurses (APNs) is often “invisible,” despite yielding significant contributions. Aside from direct care management and oversight, APNs help promote evidence-based care, patient adherence to health promotion, and education. APNs also build the research base of nursing. In short, they’re champions of quality improvement.

### **Research, measurement**

Studies of APN practice in acute care have focused on a number of outcomes, including general ones such

as length of stay, resource use, costs, patient satisfaction, and technical skill proficiency. Research has also targeted more specific parameters such as time to reach hemodynamic goals, mechanical ventilation time, reintubation rates, emergency department wait times, and duration of catheter use.<sup>1-4</sup> Experts have used a variety of outcomes to assess APN care impact, including those directly related to APN care (decreased patient length of stay) and those related to APN subroles (nurse education and satisfaction and retention rates). (See “Examples of outcome measures for APNs.”)

### Examples of outcome measures for APNs

- ◆ Patient length of stay
- ◆ Staff nurse knowledge
- ◆ Patient and family education
- ◆ Staff nurse retention rates
- ◆ Patient and family satisfaction rates
- ◆ Nurse satisfaction rates
- ◆ Hand hygiene compliance
- ◆ Nosocomial infection rates
- ◆ Blood glucose control
- ◆ Readmission rates
- ◆ Symptom management
- ◆ Hospital care costs
- ◆ Nutritional intake and nutritional improvement
- ◆ Adverse events (e.g., accidental extubation)
- ◆ Skin breakdown rates
- ◆ Restraint use
- ◆ Smoking cessation
- ◆ Rates of adherence to best practices

*Adapted from: Kleinpell R, Gawlinski A. Assessing outcomes in advanced practice nursing practice: the use of quality indicators and evidence-based practice. AACN Clin Issues. 2005;16(1):43-57.*

The measurement of outcomes in APN practice is a process and requires the formulation of an outcomes management plan. (See “Formulating an APN outcomes management plan.”) Consider identifying what outcomes are most influenced by a specific APN role or an area of APN care. Then determine what can be measured and how it can be done. Assess how the outcome measurement can be feasibly done. For example, if you choose to measure patient satisfaction via postdischarge or post-clinic visit surveys, you could identify those patients under the care of an APN via information system reports currently in existence and assess/compare patient satisfaction rates with other healthcare providers.

Developing a specific plan may require consulting resources for measuring out-

### Formulating an APN outcomes management plan

Determine:  
 ? what can be measured  
 ? how it can be done  
 ? how it can be started now  
 ? what will be done with the information.

comes in APN practice, such as resources for conducting outcomes management or outcomes research.<sup>5,6</sup> As a nurse manager, you can support APN efforts to monitor care outcomes by allocating the necessary time and resources.

One study revealed that APN usage resulted in lower rates of urinary tract infection, skin breakdown, and pneumonia for patients. In addition, patients receiving APN care had significantly fewer days with an indwelling urinary catheter, fewer days to tracheostomy tube placement, fewer days to out-of-bed activity, fewer days of intensive care unit (ICU) care, and less wait time to posthospital placement once orders were written for discharge.<sup>4</sup>

In a recent study of cardiac surgery patients, experts examined length of stay, treatments, complications, and costs for those cared for by cardiac surgeons, alone, and those receiving care from the surgeons and acute care nurse practitioners (ACNPs). Patients cared for

### Sources for identifying indicators

- The Joint Commission
- National Quality Forum's Nursing-Sensitive Care Performance Measures
- National Database of Nursing Quality Indicators
- Institute for Healthcare Improvement
- Hospital report cards
- Condition-specific evidence-based guidelines

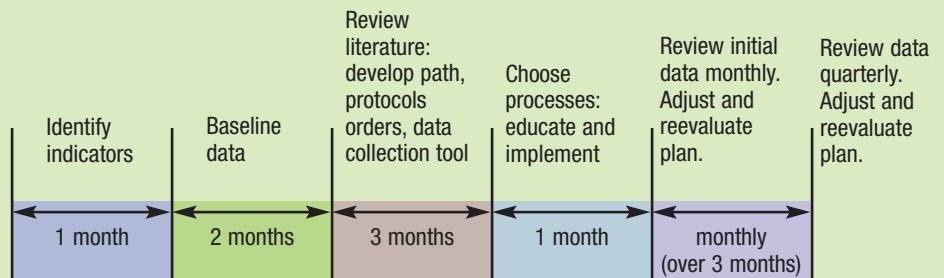
### Planning an outcomes assessment: Beginning steps

1. What outcomes might be indicated to target in a specific area of APN practice?
2. How might these be measured?
3. What might be a realistic plan for assessing outcomes related to a specific aspect of APN practice?

by the ACNP and cardiac surgeon team had less intubation time, less time on supplemental oxygen, lower length of stay, and lower costs of care.<sup>7</sup> Other studies of acute care patients receiving APN care have revealed similar positive outcomes, including decreased ventilator duration, ICU length of stay, hospital length of stay, mortality rates, and mechanical ventilation care costs.<sup>1,8</sup>

Experts have also compared outcomes from APN care to that of other

### Timeline for outcome assessment of APN practice



*Adapted from: Gawlinski A, McCloy K, Jesurum J. Measuring outcomes in cardiovascular APN practice. In: Kleinpell R, ed. Outcome Assessment in Advanced Practice Nursing. New York, NY: Springer; 2001:131-188.*

### Factors to consider

- ◆ What are APN role components that may impact outcomes?
- ◆ How easily can the outcome be measured?
- ◆ Can a relationship be established between APN care and the outcome?
- ◆ What are important outcomes currently being monitored?
- ◆ What are institutional or system goals?
- ◆ What are departmental goals?
- ◆ Have there been situations or sentinel events that indicate specific areas to target?
- ◆ What current hospital databases exist?
  - patient medical record
  - critical pathway data
  - financial reports
  - discharge database
  - information systems department data

*Adapted from: Gawlinski A, McCloy K, Jesurum J. Measuring outcomes in cardiovascular APN practice. In: Kleinpell R, ed. Outcome Assessment in Advanced Practice Nursing. New York, NY: Springer; 2001:131-188.*

healthcare providers. Team-based care of an ACNP and an attending physician for medical ICU patients resulted in similar patient outcomes compared to care given by an attending physician and critical care/pulmonary fellows.<sup>9</sup>

### Sources for identifying indicators

A number of sources exist for identifying indicators that can be used to measure APN care, including organizational ones such as the National Patient Safety Goals of The Joint Commission (formerly JCAHO), the National Quality Forum's Nursing-Sensitive Care Performance Measures, the National Database of Nursing Quality Indicators, and those from the Institute for Healthcare Improvement. (See "Sources for identifying indicators.") As an example, based on recommendations by the Institute for Healthcare Improvement and other organizations identifying the value of rapid response teams, monitoring the outcomes of an APN-

led rapid response team can highlight the value of an APN-based initiative.

A recent study of APN care impact on establishing a rapid response team demonstrated significant decreases in hospital mortality rates and cardiac arrest rates occurring outside the ICU.<sup>10</sup> As quality indicators are advocated for improving hospital care related to a variety of care aspects, they can easily be used by APNs to delineate the impact of their care.<sup>11</sup>

### Planning an outcomes assessment

Awareness of the processes involved in assessing APN outcomes is important for nurse managers. There are several key steps in planning an outcomes assessment, including identifying relevant outcomes and how they can be measured. (See "Planning an outcomes assessment: Beginning steps.") A realistic timeline is essential. Components of the process include identifying outcome indicators, reviewing the literature, collecting baseline data, implementing the APN initiative, and collecting data to assess the impact. (See "Timeline for outcome assessment of APN practice.")

Consideration of factors such as role components of the APN, how easily an outcome can be measured, what outcomes are currently being measured, and what data are currently available to the APN are important. (See "Factors to consider.") For example, if the infection control department routinely tracks hand hygiene measures on a monthly basis, access of this information would benefit an APN implementing measures to increase hand hygiene compliance to target infection prevention.

As there are many outcome measures that can be used to assess the impact of APN care, no one set of indicators is appropriate for all APNs. Select indicators that are easily identifiable, measurable, and

practical. Also consider outcomes related to a specific APN role, such as impact on patient care. In addition, professional accomplishments such as publishing, presentations, and mentoring can showcase the APN's contribution. **NM**

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