

Infrastructure to Optimize APRN Practice

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Because advanced practice registered nurses (APRNs) play a significant and escalating role on healthcare provider teams in both ambulatory and acute care settings, the rapid growth in hiring has surfaced a host of challenges and some confusion about the key systems and

processes healthcare organizations need for their successful integration, optimization and engagement. A key challenge is that in order to support successful APRN integration, highly effective and reliable organizations must have the infrastructure, processes, and people in place.

The good news is that healthcare organizations are eager to incorporate advanced practitioners into their care teams; APRNs are poised to play an integral role in controlling costs, improving quality, promoting innovation, expanding care – and helping healthcare stay competitive.

"As a former chief nursing executive and now chief operating officer, I know that providing access to care for the growing patient population will depend on the successful integration of APRNs and PAs [physician assistants] into the delivery teams," said Barbara Weber, MSN, MBA, MHRM, RN, FACHE, Advocate Lutheran General Hospital chief operating officer (personal communication, May 2014).

But how does a healthcare organization know if it has the infrastructure in place, and if not, what steps do you need to take to create a path for the future success of APRNs as members of your provider team?

At the University of Chicago Medicine (UCM), almost 200 APRNs deliver care in every specialty department, from cardiology and gastroenterology to orthopedic surgery. The Medical Center operates an entire patient care unit run exclusively by a nurse practitioner team and referring consulting physicians. The 16-bed "integrated care unit" is an adult medical and surgical patient floor staffed 24/7 by APRNs who diagnose and treat short-term patients from all adult services.

This trailblazing, team-focused care initiative speaks volumes about the new era of utilizing APRNs to coordinate care and optimize patient outcomes.

Significant and successful, UCM hospital leadership will be the first to admit, this APRN integration was forged as the result of key organizational systems and policies that were put into place to allow APRNs to practice to the full extent of their education and training.

"We faced a critical shortage in the number of medical residents to cover services due to the mandated 40-hour work week" said Michele Rubin, APN, CNS, CGRN, clinical nurse specialist and UCM APN chair (personal communication, July 2014). "We felt the answer would be to utilize our APRNs to the best of their abilities."

That involved rallying top leadership—physicians, advanced practice nurses, and executives—to open up dialogue and educate all about how this could work. "I can't tell you how many people said: 'I don't understand what APRNs do.' This process was complicated and took a long time," said Rubin.

Today, UCM's APRN integration is deemed successful; plans are underway to expand into the intensive care unit in the future, Rubin added.

BUILDING THE INTERNAL ENVIRONMENT TO SUPPORT APRN INTEGRATION

As a fast-growing number of healthcare systems look to follow these pioneering APRN integration models, their leaders are asking the same collective questions and voicing similar concerns:

- Does our organization have the infrastructure to support APRNs?

- How can we bring leadership to the table and inspire collaborative relationships among physicians, nursing staff and other key stakeholders throughout the organization?

Enter the Center for Advancing Provider Practices (CAP2), developed as a strategic resource and partner to help healthcare leaders navigate these critical issues. CAP2 was launched by reaching out and asking healthcare systems what they were doing and how it was working, and where the gaps were. Using this research, CAP2 developed benchmarking reports and toolkits based upon the guidance gleaned from pioneering providers such as UCM.

CAP2 data and findings represent more than 21,000 advanced practice nurses and physician assistants at 200 organizations in 27 states from 50 different clinical specialties. CAP2 is positioned as the first comprehensive national database designed to help providers nationwide optimize the use of advanced practice registered nurses and PAs. CAP2 was launched in 2012 by the Metropolitan Chicago Healthcare Council and the University HealthSystem Consortium to meet this growing demand.

Cited as a leading practice by The Joint Commission and the advisory board, CAP2 features the management tools necessary to help hospitals and health systems benchmark against industry leaders, and build the infrastructure necessary to successfully integrate, optimize, and engage all members of the provider team to better serve patients.

"By defining the capabilities and privileges of APRNs and PAs, CAP2 helps physicians and advanced practice registered nurses work as a cohesive unit, resulting in reduced lengths of stay, improved patient safety, and an overall increase of value-driven care," says Weber (personal communication, May 2014).

SIX STRATEGIC FOCUS AREAS

CAP2's work with over 200 healthcare organizations across the country has demonstrated that highly effective organizations have focused on 6 strategic areas to ensure the successful integration, optimization and engagement of APRNs during this time of rapidly evolving models of care. They include:

1. Leadership
2. Human resources
3. Credentialing and privileging
4. Competency assessment
5. Billing and reimbursement
6. Measurement/impact

We'll discuss CAP2's insights in each of these important areas.

LEADERSHIP

The importance of leadership in supporting the introduction and integration of advanced practice nursing roles in organizations is paramount, with the chief nursing officer and chief medical officer playing a vital role as executive champions. A collaborative leadership team should include: the chief medical officer, chief nursing officer, physicians and nursing leaders, and leaders from quality, human resources and medical staff services.

Current practice: CAP2 data show that 29% of organizations have a dedicated leader identified to coordinate and oversee successful APRN practices and their integration.

Recommendations: Organizations' leadership teams need to clearly define the following to ensure initial and ongoing success:

- Model of care and scope of practice for the APRN:
What types of patients will the APRN see? What medical services will the APRN provide? What additional activities will the APRN perform?
- Organizational culture: How will the culture support these new roles? Do the medical staff bylaws allow APRNs to practice to top of license? If not, how will they be changed? What education do key stakeholders need to understand and promote the APRN role and scope of practice?
- Organizational structure: How do APRNs fit into the medical staff structure/committees? The nursing structure/committees? To whom do the APRNs report? Should an advanced practice council be chartered? Should a director of advanced practice position be developed to build the infrastructure to support APRNs?
- Impact and outcomes: What data will be collected to determine baseline performance prior to introduction of the role? What will be measured to determine whether the role has achieved desired outcomes?
- Support resources: Similar to physicians, what support does the APRN need to be successful—support staff? Office space? Technology?

HUMAN RESOURCES

One of the primary challenges for human resource departments and medical staff offices is that they may not be familiar with recruiting and hiring APRNs. Since APRNs may be hired throughout the organization, recruitment and hiring practices may vary among departments.

Current practice: CAP2 data show only 44% of organizations have a formal orientation for APRNs that goes beyond the general all-employee orientation. Recent CAP2 data show that 4% of organizations perceive their orientation to be very effective; 73% perceive it to be somewhat effective, and 25% of organizations perceive their orientation to be not effective.

Recommendations:

- Recruitment and hiring: Organizations should:
 - Clarify which department is responsible for coordinating each step in the hiring process. These departments may include: physician recruitment; nurse recruitment; human resources; medical staff office; and/or the hiring department. Some organizations have created a new advanced practice recruiter role tasked specifically with the recruitment of APRNs.
 - Identify who will be involved in the interview process and who will make the final hiring decision. Some possibilities include:
 - Chief nursing officer (CNO) and/or chief medical officer
 - Director of advanced practice
 - Service line administrator or nursing director

- Medical group or faculty practice director
- Practice manager
- Individual physician(s)
- Another APRN

- Create a recruitment strategy. With increased competition to hire APRNs and PAs, the recruiter should work closely with the hiring department to develop a recruitment strategy. More organizations are offering clinical placements to student APRNs for difficult-to-fill positions. This strategy provides organizations with the opportunity to assess students' potential as future employees and allows the students to familiarize themselves with the organization, thus possibly reducing future orientation time. Organizations should also consider developing partnerships with APRN academic programs to address future workforce needs.
- Orientation: All APRNs should receive formal orientation to their new roles in the organization. This applies to new graduates and experienced APRNs. This supports the Institute of Medicine report on the "Future of Nursing,"¹ which recommends all nurses work to the full extent of their education and licensure. As APRNs transition to their roles, they should be supported by residency, fellowship, or transition-to-practice programs.
 - Identify an orientation program coordinator to develop the orientation program; this may include orientation to the organization at the system, specialty, and site level and as to the APRN role, as well.
 - Assign a preceptor. Of the 44% of hospitals that have an orientation for the APRN and PA roles, 64% also assign a preceptor, who is a current APRN, to the new APRN to guide the orientation process and ensure it is successfully completed.
- Other key human resource considerations include:
 - Compensation strategy: How will APRN compensation be determined? Will the local market dynamics drive different pay levels? Will compensation vary according to specialty? Volume of patients seen? Work schedule? Setting? Role? Will APRNs have an incentive opportunity?
 - Workforce planning: How many APRNs need to be recruited in the next 3 years? Into which specialties? Experienced or new graduates? Can academic partnerships be developed to fill these needs? Are any current employees enrolled in APRN programs? Can they be targeted for future APRN openings?

CREDENTIALING AND PRIVILEGING

Credentialing and privileging APRNs also presents many layers of complexity; 1 key aspect is that the scope of practice acts vary from state to state in such areas as a required "contract" or relationship with a physician and level of prescriptive authority. This variation is even more pronounced at the organizational level.

Current practice: CAP2 data show 86% of organizations across the country grant core privileges to APRNs, but there is variation among organizations in those core privileges (*Table 1*).

Table 1. Core Privilege Variations in Organizations

Core Privileges		CAP2 Database (N = 125)	
Core Privilege	Practitioner	# Hospitals	% of Total
Write admission orders	APRN	75	60.00%
Write discharge orders	APRN	83	66.40%
Write transfer orders	APRN	72	57.60%
Obtain history and physical	APRN	99	79.20%
Order and interpret diagnostic testing and therapeutic modalities	APRN	101	80.80%
Order and perform referrals and consults	APRN	88	70.40%
Order blood and blood products	APRN	80	64.00%
Order inpatient non-schedule medications	APRN	81	64.80%
Order inpatient schedule (II–V) medications	APRN	38	30.40%
Order conscious sedation	APRN	93	74.40%
Order topical anesthesia	APRN	81	64.80%
Prescribes outpatient non-schedule medications	APRN	83	66.40%
Prescribes outpatient schedule (II–V) medications	APRN	71	56.80%
Incision and drainage with or without packing	APRN	72	57.60%

Wide variation in the privileges granted to APRNs are reported in the same specialty across the country, a state, and even a health care system. The data in [Table 2](#) show a hospital system, de-identified.

Though privileges should be granted only for activities at the “medical level of care” (i.e., diagnosis and treatment), APRNs frequently ask for privileges that are typically within the basic registered nurse (RN) scope of practice ([Table 3](#)).

Twenty-four percent of organizations have an advanced practice committee with a role in the credentialing of APRNs and PAs.

Recommendations:

- Create a credentialing and privileging process for APRNs that is the same as the process for all physicians. Medical staff office professionals are experts in credentialing and privileging, and should help coordinate the process for employed and aligned APRNs.
- Standardize core and specialty privilege lists for APRNs throughout the organization.
- Begin the credentialing and privileging process upon notification of hire, before the APRN’s first day. Develop a process that keeps the application moving through the medical staff office. Set target dates or timeframes for each step to occur. Maintain communication with the new APRN or PA throughout the process.
- Involve the advanced practice committee as the initial review in the credentialing and privileging process, and

incorporate their recommendations into the medical staff credentialing and privileging process.

- Consider adding an APRN or PA representative to the medical staff credentialing committee. The responsibilities of this individual may include:
 - Providing expertise on questions about federal and state laws and regulations, along with academic programs, training, and certifications.
 - Conducting initial and ongoing reviews of APRN and PA applicants, reviewing privileges requests, and providing colleague insight and recommendations.
 - Following up on medical staff concerns, regulatory interpretations, etc.
- The CNO is responsible for nursing practice, including APRN practice, throughout the organization. The CNO or his or her designee should be involved in the credentialing, privileging, and competency assessment for APRNs in the organization. This is especially important in Magnet[®]-designated organizations.

COMPETENCY ASSESSMENT

One of the key challenges facing health systems is to develop the infrastructure to assess the initial and ongoing competency of their APRNs who provide services at the “medical level of care”. This is a Center for Medicare & Medicaid Services (CMS) and The Joint Commission² requirement to ensure the safe provision of care to patients. Critical considerations include:

- What data will be collected?

Table 2. Variation in Hospital System Core Privileges

Cardiology Specialty		CAP2™ Database (N = 125)	Illinois (N = 66)	General Hospital Healthcare		Northwest General Hospital	Suburban General Hospital	Urban City Hospital	Western County General
Privilege	Practitioner	% of Total	% of Total	# Hospitals	% of Total	Privilege			
Arterial line insertion and removal	APRN	30.40%	25.76%	2	50.00%	N	Y	N	Y
Cardiac stress testing	APRN	32.80%	19.70%	1	25.00%	N	N	N	Y
Cardioversion	APRN	18.40%	7.58%	1	25.00%	Y	N	N	N
Central line insertion and removal	APRN	26.40%	21.21%	3	75.00%	Y	Y	N	Y
Chest tube insertion	APRN	18.40%	13.64%	1	25.00%	N	N	N	Y
Internal jugular IV exchange/ removal	APRN	16.00%	15.15%	2	50.00%	N	Y	N	Y
Intra-aortic balloon removal	APRN	17.60%	22.73%	2	50.00%	N	Y	N	Y
Pacing wires removal	APRN	26.40%	22.73%	3	75.00%	Y	Y	N	Y
Seroma drainage	APRN	15.20%	9.09%	1	25.00%	N	N	N	Y
Swan-Ganz catheter adjustment	APRN	20.80%	24.24%	2	50.00%	N	Y	N	Y
Wound debridement	APRN	26.40%	19.70%	3	75.00%	Y	Y	N	Y

- What processes are in place to assess APRN competency? How frequently (e.g., quarterly, monthly, annually) will competency be assessed or data be collected? Who will coordinate this assessment and data collection process?
- Once the data are collected, who will review it and determine competency?
- What will be the process for addressing competency concerns?
- How can the competency assessment process become an educational/improvement process and become integrated with overall performance improvement efforts?

Current practice: CAP2 data show that only 63% of organizations have the same competency review process for physicians, APRNs, and PAs. This is an important finding, as The Joint Commission requires the competency assessment process be comparable for physicians and APRNs and PAs who are providing a “medical level of care.”

- Forty-two percent of organizations have an advanced practice committee; of those, 50% develop peer review or competency assessment tools and processes.
- A variety of approaches are used to assess APRN competency (Table 4).
- Organizations conduct competency reviews at a variety of intervals; the most commonly reported frequency was an annual assessment (23%), which does not meet The

Joint Commission standard for ongoing (meaning more than annual) assessment.

- Twelve percent of organizations perceive their approach to competency assessment to be very effective; 71% perceive it to be somewhat effective, and 14% perceive it to be not effective.

Recommendations:

- Standardize the competency process for APRNs. It should be the same as the medical staff process for physicians (do not include elements that are not in the medical staff process).
- Incorporate the recommendations of the advanced practice committee (if present) into the medical staff review process.
- Address the many non-focused professional practice evaluation (FPPE)/ongoing professional practice evaluation (OPPE) aspects of performance, such as patient and internal staff relations, interpersonal communications skills, education requirements, and research participation in the human resources process.
- Ensure a more efficient process. The Joint Commission requires that granted privileges must be assessed. Practitioners should only ask for privileges that will be used.
- Include a chart review, procedure review, or direct observation with a patient or in a simulation lab, peer review, case review, and quality/outcome measures

Table 3. Typical Core Privileges Granted to APRNs

RN Activities Not Requiring Privileges	RN Activities # Hospitals (N = 125)	CAP2 Database % of Total
<i>Application and removal of casts, braces, or splints</i>	58	46.40%
<i>Clinical breast exam</i>	22	17.60%
<i>Compression wrap for venous disease</i>	17	13.60%
<i>Conduct nursing research and participate in interdisciplinary research</i>	26	20.80%
<i>Conduct preventative screening procedures</i>	30	24.00%
<i>Develop and implement a client education plan</i>	31	24.80%
<i>Drain management</i>	35	28.00%
<i>Initial care of newborn and assessment</i>	35	28.00%
<i>Initiate ACLS to include defibrillation/cardioversion</i>	38	30.40%
<i>Initiate BLS (CPR)</i>	38	30.40%
<i>Initiate Neonatal ACLS</i>	33	26.40%
<i>Perform waived tests (rapid strep, urine dip, blood glucose, etc.)</i>	23	18.40%
<i>Placement of synthetic or biological dressings</i>	18	14.40%
<i>Removal of pleural chest tube</i>	35	28.00%
<i>Removal of venous access</i>	30	24.00%
<i>Update and record changes in health status</i>	40	32.00%

ACLS, advanced cardiovascular life support; BLS, basic life support; CPR, cardiopulmonary resuscitation.

- Make the competency assessment process ongoing and performed more than once a year. CAP2 recommends every 8 months, which means 3 times per 2-year credentialing cycle; 1 review cycle will then coincide with re-credentialing every 2 years.
- A peer is a practitioner in the same discipline as the person being reviewed who has personal knowledge of the applicant. If a peer is not available, a colleague (physician, APRN, or PA who has the same privilege) may conduct the review. The optimal process ensures random distribution of reviews (which removes bias) among peers.
- Move toward assessing competency and safety of more than the individual practitioner, toward evaluating the team of providers.

BILLING AND REIMBURSEMENT

As organizations begin to optimize their provider teams, they must determine whether the services provided by APRNs are reimbursable and whether they will bill for them. Careful consideration of the organizational factors associated with accurate billing requires a multidisciplinary process. These factors include:

- Organizational desire to change system-wide processes in an effort to capture APRN revenue
- Organizational preparedness to bill (e.g., credentialing, privileging, sites of service, and ability to capture charges)

- APRN preparedness to bill (orientation to required documentation guidelines)

Current practice: Billing and reimbursement for services provided by APRNs presents significant challenges to hospitals and other organizations. Many institutions simply bill under the physician National Provider Identifier. Others include APRNs in their hospital Medicare cost reports (Part A billing), a practice that may have started before 2007 when the CMS regulations changed, now permitting APRNs to bill directly for inpatient services. This may no longer be the best model. CAP2 recent data show that organizations are more commonly billing for APRN services only in outpatient settings, especially for nurse practitioners. Less than half of the organizations are billing for inpatient APRN services

Recommendations:

- Create systematic processes to assess and standardize the APRN billing and reimbursement practices. This review should include:
 - Whether the service provided can be billed
 - Whether bylaws or policies pose barriers to billing
 - Which provider is most appropriate to bill for the service
 - Whether providers are in agreement on the principles and educated sufficiently for appropriate billing
 - Whether it is most advantageous to bill professional services directly or include the position(s) on the hospital's Medicare cost report

Table 4. Varied Approaches for APRN Assessment

Assessment Method	
Physician review	92%
Chart/documentation review	91%
Peer review	84%
Co-worker review	83%
Direct observation	80%
Adverse/sentinel events reports	80%
Focused case review	76%
Compliance with national patient safety goals	76%
Quality data compiled by quality department/medical staff office	75%
Patient satisfaction/complaints	73%
Simulation testing	34%

- Organize a multidisciplinary group to determine organizational billing practices. This may include a member of the revenue cycle team, the director of advanced practice, a service line leader, a subject matter expert in billing and coding, a representative of the medical staff office, a representative from organizational compliance, a representative from information systems with knowledge of the electronic medical record (EMR), and importantly, an APRN or PA with knowledge of Medicare regulations and billing requirements.
- Provide initial and ongoing education to APRNs about documentation best practices and ongoing changes to payer and contract requirements, as well as ongoing feedback about denied payments or missed charges

MEASUREMENT SYSTEMS

Key metrics should be put into place to evaluate APRN impact, outcomes, and engagement. Organizations have found this to be very challenging because the APRNs may not be billing and therefore the data may be very difficult to extract.

Current practice: CAP2 data show that very few organizations are collecting APRN outcome data. A follow-up study showed that the majority of those who reported collecting outcome data were actually only collecting data about compliance with documentation and regulatory requirements.

Recommendations: The process for collecting data to assess competency and outcomes for APRNs should be the same process used for physicians. APRNs should not be expected to collect their own data—this should be an organizational process. Possible metrics to be developed include:

- APRN engagement: APRN satisfaction and turnover
- Human resource measures: time to fill APRN positions; positions filled by current employees

- Quality/patient outcomes measures including length of stay, infections, complications, and readmission rates
- Financial measures including total expenses, revenue generated, and the cost per case
- When possible, data collection should be done electronically to enable accuracy. This will take upfront planning but ensure a better process going forward
- An executive champion should be identified to elevate the importance of creating the ability to measure APRNs' impacts
- Give APRNs provider level status in the EMR to be able to extract data to assess competency and impact. The organization must clearly identify where APRNs and PAs should document in the EMR for easier extraction of data to be reviewed
- Educate APRNs where to document and what to document to ensure compliance with regulatory and billing requirements, and to ensure easier extraction of data

Summary: Even though healthcare has come a long way relative to integrating APRNs into the provider team and the daily care of patients, experts at the hospitals and organizations we have surveyed are still working to create the infrastructure and manage these emerging practices. Many tell us there continues to be widespread confusion not only about the role of APRNs, but about the education and structures that need to be put into place for successful management.

"I can't tell you how many meetings I've been in over the years where I have to explain what APRNs do," said Maureen Slade, Vice-President of Operations and Associate Chief Nurse Executive at Northwestern Memorial Hospital in Chicago (personal communication, June 2014). "The hospitals and medical teams don't know where to even start to do this crucial assessment, integration and then management of APRNs. A resource such as CAP2 provides the data to show what other hospitals are doing successfully and provide the language, structure, and proven knowledge, plus the business case for why we need to integrate advanced practices nurses into our healthcare system." ^{NL}

References

1. Institute of Medicine. *The Future of Nursing: Leading Change, Advancing Health*. Report Recommendations. Washington DC: National Academies Press; 2010.
2. The Joint Commission. *2015 Hospital Accreditation Standards*. Oakbrook Terrace, IL: Joint Commission Resources; 2014.

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