Optimizing Nurse Roles
in Healthcare Delivery System Initiatives

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Hospitals and healthcare providers recognize that change is the new normal since provisions of the Affordable Care Act began affecting healthcare delivery in hospitals and other care delivery sites across North Carolina. And whether related to quality improvement imperatives or reimbursement tightening, nursing is playing a key role to ensure hospital sustainability through these times.

This is a time of transformational and complex health care system change. Health care systems have recognized the need to change since provisions of the Affordable Care Act have been enacted. According to the Journal of Patient Safety (Sept. 2013) between 210,000 to 440,000 deaths from care in US hospitals occur per year, and healthcare spending will reach $10,000 per person in the US (Dan Monro, Forbes, 1/4/2015) in 2015.

NCHA is an advocacy organization representing more than 130 hospitals and health systems in North Carolina. Those organizations have over 200,000 employees. NCHA promotes improved delivery of quality and affordable healthcare in North Carolina through leadership, advocacy, information, and education in its members’ interest and for public benefit.

The North Carolina Nursing Association is the statewide professional organization representing nurses. The Association’s Commission on Advanced Practice Nursing represents four specific advanced practice nursing areas: certified registered nurse anesthetist (CRNA), certified nurse-midwife (CNM), certified nurse practitioner (CNP) and clinical nurse specialist (CNS). APRNs are educated in one of those four roles and in at least one of six population foci: family/individual across the lifespan, adult-gerontology, pediatrics, neonatal, women’s health/gender-related or psych/mental health. APRN education programs, including degree-granting and post-graduate education programs, are accredited and follow the consensus model for APRN regulation.

The North Carolina Organization of Nurse Leaders is a not-for-profit professional organization of nurse leaders across North Carolina that provides leadership, professional development and health advocacy. NCONL serves as a voice for senior nurse executives and various levels of nurse leaders in hospitals and other healthcare organizations, while also working to advance nursing practice and health care policy across our state. In addition, these nurse leaders are in positions where they are able to identify opportunities for patient safety and quality improvement and implement changes in nursing practice to meet those needs.

The leaders of these organizations meet regularly, along with others involved in the nursing profession, to discuss statewide as well as national issues that mutually affect their members. Recent discussions have focused on federal and state laws, as well as accreditation, and the negative impact they may have on APRN autonomy in practice. North Carolina has not significantly modified the legislative or regulatory language regarding APRNs in over 40 years. Many of the issues identified could be addressed by a revision and
modernization of this legislation. However the group discussed that individual hospital policies were often suspect, and considered whether hospitals could better utilize the full potential of APRNs in a multitude of practice settings within current federal and state law. Due to the legislative challenges regarding APRN scope of practice issues, they decided to approach this from an educational perspective. By exploring the changing roles of nurses and established best practices within hospital systems that enable APRN's to function at the fullest scope of their license and training, their gains could be brought to other health care professional team members and to the public.

After a call to action was issued, the organizations agreed to work together to study and report on regulation, policies and potential best practices related to nurses and advanced practice nurses practicing to the full extent of their education and regulatory authority. The project would also include interviews and reports from member hospital locations where these practices are already in use.

This report will attempt to define some of the best practices in use among general practice nurses, nurse leaders and APRNs, and how they work together in interprofessional practice teams to impact the “Triple Aim” perspective. That perspective was brought to CMS by its former director Dr. Donald Berwick of the Institute for Healthcare Improvement. The approach requires simultaneously improving the patient experience of care (including quality and satisfaction); improving the health of populations; and reducing the per capita cost of health care.

**Institute of Medicine Report**

Five years ago the Institute of Medicine (IOM) released its landmark report, *The Future of Nursing: Leading Change, Advancing Health*. The report was timely, especially with the nursing shortage, losses of nurse teaching faculty due to high retirement rate, and major changes in patient care and the health care delivery systems. In light of these changes, there is a need for nurses in health care today, and in the future to be utilized to their fullest potential of their educational and training competencies. There are growing numbers of people with chronic diseases, an aging population, and the need for care coordination in complex systems.

The IOM Report provided an excellent blueprint on how to transform the nursing profession. Recommendations put forth by the report committee included removing barriers to practice and care, expanding opportunities for nurses to serve as leaders, and increasing the proportion of nurses with a baccalaureate degree to 80 percent by 2020. The report also facilitated a new partnership between its sponsor, the Robert Wood Johnson Foundation and the American Association of Retired Persons. Together they established the Campaign for Action, an initiative to mobilize State action coalitions in all 50 States to include North Carolina to utilize nurses more effectively in confronting the nations’ health challenges.

Nurses account for the largest segment of the healthcare workforce, totaling more than 2.8 million nation wide, with more than 90,000 living in North Carolina). Recent articles have reported that North Carolina laws do not enable advance practiced registered nurses
( APRNs) to practice to the full extent of their educational and training, due to regulatory, supervisory and oversight requirements.

**NC law & regulations**
Currently, there is no uniform model of regulation of APRNs across the states. Each state independently determines the APRN legal scope of practice, the roles that are recognized, the criteria for entry into advanced practice, supervisory oversight and the certification examinations accepted for entry-level competence assessment. *(Consensus model for APRN regulation)*

In North Carolina all APRNs are required to maintain credentials in addition to maintaining a current RN license. Certified Nurse Practitioners are also regulated by a joint subcommittee of the Board of Nursing and the Medical Board, and supervising physician sign off can be required on many aspects of care. Certified Nurse Midwives are regulated by a subcommittee of the Board of Nursing. Certified Registered Nurse Anesthetists and Clinical Nurse Specialists are regulated solely by the Board of Nursing.

The clinical role of Nurse Practitioners in North Carolina is governed by regulatory statutes that determine the range of services they can provide and the extent to which they can practice independently. Each licensed medical facility may determine the role and function of a nurse practitioner in that facility. This is generally regulated by the facility’s Medical Executive Committee. The By-Laws of the facility will determine membership on the Medical Executive Committee. And despite having full control over the delineation of privileges (scope of practice) granted to the APRN, it is uncommon for Medical Executive Committees to include APRNs as full voting members of their committee.

State laws vary widely in the degree of autonomy granted Nurse Practitioners to treat and prescribe medications for patients without physician supervision or collaboration. Currently, 21 states plus the District of Columbia permit them to diagnose and treat patients and prescribe medications without physician oversight, while seven states require physician oversight of Nurse Practitioner prescribing only, and 22 states require oversight of their diagnoses, treatment plans and prescribing. *(NIH NP study)*.

North Carolina requires that Nurse Practitioners practice under a supervisory relationship with a physician, which it calls a collaborative practice agreement. This includes a Written Collaborative Practice Agreement with a physician for continuous availability (not necessarily on-site) and ongoing supervision, consultation, collaboration, referral, and evaluation. The first six months of the agreement, the Nurse Practitioner must meet with the primary supervising physician monthly. After the first six months, meetings must be held at least twice a year. The Collaborative Practice Agreement also addresses drugs, devices, medical treatments, tests, and procedures that may be prescribed, ordered, and performed by the Nurse Practitioner as well as a plan for emergency services. However these meetings may be very brief with only a signature obtained and no quality issue discussed in detail. In some cases APRNs have reported being charged significant fees from physicians to be listed as their supervising physician and sign necessary paperwork. And finally, many APRNs are willing to practice in underserved areas or volunteer their services...
for indigent clinics but are unable to due to the unavailability or unwillingness of a physician to serve as their supervising physician.

An economic impact study released by Duke University, Center for Health Policy and Inequalities Research entitled “Economic Benefits of Less Restrictive Regulation of Advanced Practice Registered Nurses in North Carolina: An Analysis of Local and Statewide Effects on Business Activity” supports modernization of our current legislation and states that “North Carolina residents consequently would enjoy better access to care of equivalent or better quality even as the health system sheds some avoidable costs (e.g., hospitalizations) in the process. It is rare that a health policy change offers such gains across all three dimensions of health system performance.”

Nurse Practitioners, along with Certified Nurse Midwives, do have full prescriptive authority as specified in their Collaborative Practice Agreement. And if the agreement also includes controlled substances, can obtain a DEA (Drug Enforcement Agency) number, (in addition to their approval number issued at the time of their approval as NPs/CNMs), as would a physician. Certified Registered Nurse Anesthetists and Clinical Nurse Specialists do not have prescribing authority.

North Carolina State law does not prohibit Nurse Practitioners from having admitting and hospital privileges. However, these are granted on a facility-by-facility basis. CMS regulations do however, require that Medicare and Medicaid patients admitted by these practitioners be under the care of a Medical Doctor or Doctor of Osteopathy.

Therefore hospitals may be able to address some of these limitations on APRN practice by modifying their policies. A recent survey of the American Academy of Nurse Practitioners (AANP) found that about 43 percent of the Nurse Practitioners in the United States have hospital privileges, and just over half of these have admitting privileges. NCNA has identified several non-regulatory barriers that may be inhibiting practice in hospital systems in North Carolina, including:

- A requirement that APRN orders or progress notes be co-signed by a physician.
- Restrictions against APRN’s obtaining privileges to admit patients and privileges to see and chart notes for patients in order to provide comprehensive care and information.
- Requirements for unnecessary proctoring of APRNs whose skills have been verified.
- Difficulty in accessing lab, x-rays/radiology reports, admitting stats, discharge and outcome data.
- Hospital bylaw language that denies reimbursement for services by an APRN, thus preventing consultation and delivery of services.
- Lack of APRN representation on Medical Executive and Credentialing Committees
- Lack of APRN representation in management structure

Hospitals and Health Systems should review these and consider the extent to which their bylaws facilitate APRN and nurse practice to the full extent of their education and training.
The potential for advanced practice specialists, through their work in collaborative practice, inpatient care improvement, anesthesia and other areas, will be needed if hospitals are to be successful in challenges like those described in the “Triple Aim”.

Further, payment models are now moving toward rewarding healthcare providers for keeping members healthy instead of providing treatment for various illnesses. These “Population health models” may require further health system involvement in the provision of primary care and ultimately involve undertaking some level of financial risk for ensuring their members obtain their optimum level of health.

**Nurse Practitioners and access to primary care**

As of March 2015 The Affordable Care Act and its related programs have resulted in more than 16 million newly covered enrollees. Most of them will be seeking preventive and primary care services, rather than just emergency care that they may have relied upon previously. Current debates focus on whether there will be enough primary caregivers, although studies are lacking if they omit the Advanced Practice Registered Nurse workforce in their research. Nurse practitioners can deliver the same care as physicians once credentialed for provision of primary care. After its recent review of this issue, “an Institute of Medicine (IOM) panel recently reiterated this conclusion and called for expansion of nurses’ scope of practice in primary care.” (NEJM Broadening the scope of Nursing Practice)

Access to primary care providers is of great concern due to limited numbers of practicing primary care physicians and medical students indicating they’ll specialize in fields like internal or family medicine. This concern is especially acute for Medicaid patients, which have grown in number since the law, (According to DHHS enrollment was up by 9 million (or 16%) last year) and which have traditionally had difficulty finding a physician. According to the Health Resources and Services Administration, “If the system for delivering primary care in 2020 were to remain fundamentally the same as today, there will be a projected shortage of 20,400 primary care physicians.” Others predict that the U.S. could have a shortage of up to 65,800 primary-care physicians by 2025, and both the National Governors Association and the Institute of Medicine have urged state legislatures to loosen laws that restrict Nurse Practitioners practice (wsj).

Many believe that Nurse Practitioners may be part of the solution. According to AARP there are over 158,000 Nurse Practitioners in the US, representing 58% of all APRNs. Nurse Practitioners are trained to examine, diagnose and treat patients, and manage acute and chronic illnesses. They also prescribe medications, including controlled substances, in all 50 states (wsj). According to the American Academy of Nurse Practitioners, 89 percent of Nurse Practitioners are trained in primary care, and more than 75 percent practice in primary care settings. In fact, the Health Resources and Services Administration also found that “Under a scenario in which the rapidly growing NP and PA (physician assistant) supply can effectively be integrated, the shortage of 20,400 physicians in 2020 could be reduced to 6,400 PCPs.” Further, a Health Affairs article also concluded that “primary care capacity can be greatly increased without many more clinicians: by empowering licensed personnel, including registered nurses and pharmacists, to provide more care.”
The New England Journal of Medicine reports that states vary in terms of what they allow nurse practitioners to do, and this variance appears not to be correlated with performance on any measure of quality or safety. For basic primary care services, the additional training that physicians have has not been shown to result in a measurable difference from that of nurse practitioners in quality. The Journal also reports that “there are no data to suggest that nurse practitioners in states that impose greater restrictions on their practice provide safer and better care than those in less restrictive states or that the role of physicians in less restrictive states has changed or deteriorated.”

Nurse practitioners are eligible for reimbursement from government and insurance programs. They receive Medicaid reimbursement at 100% of the physician rate for primary care activities. Nurse Practitioners who are enrolled as psychiatric/mental health providers receive 85% of the physician rate. Statutory authority for third-party reimbursement for Nurse Practitioners provides direct reimbursement to them for services within their scope. Psychiatric and mental health CNS services are reimbursable by insurance. Many third party insurance companies are now also reducing the reimbursement of Nurse Practitioner services by as much as 15 to 20% from what is reimbursed for the same services delivered by physicians.

New care delivery models in medical homes and Accountable Care Organizations are also well suited to the capabilities of APRNs. They depend on these providers to provide coordinated high quality care to their Medicare patients. This includes managing chronic diseases and providing transitional care, while avoiding duplication of services. These functions are facilitated by interdisciplinary teams, where nurses provide a range of services from case management to health and illness management.

**Quality improvement**

Hospitals are feeling the competitive and financial pressures to improve care, as more models like the Triple Aim arise from the DHHS. Innovations that result in cost savings and quality improvement are specifically targeted through a CMS innovation center. A host of programs have been initiated through CMS’ “Pioneer ACO Model” which, along with “shared savings” and bundled payment program pilots, focus on incentives to progress toward a population health model. Others like the Hospital Readmissions Reduction Program and the Value Based Purchasing, which pays for inpatient care using a set of quality measures, establish goals based on both care improvement and cost savings. Other quality initiatives focus on surgical checklists and the prevention of infections, adverse drug events and adverse OB outcomes. CMS is looking to each of these initiatives to improve the care that is provided in hospitals, and each one is heavily reliant upon nurses and advanced practice nurses to be successful. So while some APRN practice settings may not provide options for “billable care,” hospitals and other providers are recognizing the value derived from potentially fewer medical errors, shorter stays and improved care.
New roles

The adoption of best practices and care performance metrics can help to establish quality care provision without the level of oversight previously established in many settings. Hospitals are finding that many of the traditional restrictions to nursing have come from within, and that they can take steps to further their nursing staffs to better meet triple aim goals while performing within the full frame of its expertise and authority. Changes can be implemented along the spectrum of hospital nursing, and can include actions that enable registered nurses to spend more of their time in professional care activities like patient assessments, education, and supervisory activities that cannot be delegated to licensed practical nurses or nursing assistants. While direct care-giving has always been part of nursing responsibilities, many hospitals have implemented measures to ensure that duties not requiring RN skills, like blood draws and helping with personal hygiene, are delegated to LPNs and CNAs.

Innovation of best practice typically results from a rigorous process of peer review and evaluation that indicates effectiveness in improving health outcomes from a target population (AMCHP, 2013). This project also considered value-based purchasing initiatives, in which are intended to realign providers’ financial incentives by rewarding them for achieving identified quality care outcomes or penalizing them for failing to do so. For nursing, hospital performances tied to Medicare reimbursement levels have been important implications for demonstrating nursing’s economic value. In 2004, Medicare initiated a program, now known as the Hospital Inpatient Quality Reporting (IQR) program, that requires hospitals to report specified process, outcomes, and experience of care measures; based on responses to the Hospital Consumer Assessment of Healthcare Providers and Systems, (HCAHPS). Medicare payment to hospitals that fail to report these data may be reduced by up to 2%. As a result of the Affordable Care Act, Medicare now also rewards hospitals based on their performance, not just for reporting data on their performance. Key to this process, hospitals receive additional payment based either on how well they perform on certain quality measures or how much their performance improves. Therefore, fully utilizing advanced nurse practitioners and ensuring clinical nurses work to their fullest scope of practice can contribute to the timeliness and effectiveness of quality patient care delivery.

In addition, an important health care change in recent years is in the area of care transitions, which refers to the movement of patients from one health care practitioner or setting to another as their condition and care needs change. The Transitional Care Model, especially in the elderly, developed by Mary Naylor, PhD, RN, of the University of Pennsylvania School of Nursing, utilizes APRNs to facilitate transitions across care settings (Naylor 2013). This nursing-led model has successfully reduced readmissions and lowered costs. Recent research has suggested a relationship between readmissions and nursing workload and work environments. Paying for quality performance, non-payment for preventable HACs and penalizing readmissions are aimed at incentivizing improved inpatient hospital care. To the extent that nursing care is linked to quality outcomes, these initiatives may also provide an incentive for improving nursing care, including nurse staffing.
Therefore, for this report, the team was seeking innovative, value-based nursing practice and patient-centered care models within North Carolina healthcare organizations. The evaluation team included the following criteria as it related to the areas of field clinical study (AMCPH, 2014): 1) Emerging Practices, based on guidelines and practice patterns to be effective which also incorporated a process of continual quality improvement were considered; 2) Promising Practice met previous criteria and had a strong quantitative and qualitative data showing positive outcomes, but doesn’t have enough research or replication data to support generalized practice; and 3) Best Practice resulting from a rigorous process of peer review and evaluation that indicates effectiveness to improving health outcomes for a target population. And produced desirable results in various settings that clearly links positive effects to the program/practice being evaluated and not to other external factors.

We conducted four site visits, including interviews from hospital leaders, nurses and others, in our research. In doing so we found that hospitals in NC are taking opportunities to more fully utilize the capabilities of their workforce, especially nurses and advanced practice nurses, and that they are integrating advanced practitioners into their systems of care. In these sites nursing professionals are taking on new challenges and responsibilities in providing quality healthcare, independent of any legislation or regulatory changes directly affecting the practice. And they are also finding that the benefits extend beyond improving access to primary care.

**Clinical Site Visits:** *(Each of these site visits is further described in Attachments 1-4)*

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<td>Carolinas Health System, Carolinas Medical Center (August 2014)</td>
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Southeastern Regional Medical Center, Lumberton

Vice President of Acute Care Services (RN, MSN) at Southeastern Regional Medical Center (SRMC) provided a one-day site visit / program in which centered on patients and their various innovative programs highlighting the efforts of Registered Nurses practicing to the full extent of their education and regulatory authority. SRMC is using this approach in all of its providers/staff, not just nursing, in efforts for improving quality care delivery and more cost effective care. SRMC’s CEO is a nurse and three of their governing body members are composed of nurse leaders with a vast amount of executive and clinical expertise. General theme from presenters (5) leadership are quality improvement focused and utilize metrics across the continuum of the health system related to Length of Stay, readmission rates, patient and staff satisfaction assessments.

Based on the Triple Aim Initiative (IHI) and the National Association of Material and Child Health Best Practice Categories and Criteria (Emerging Practice, Promising Practice, Best Practice--AMCHP, 2014) [www.amcp.org](http://www.amcp.org) the following information was selected:

1. **Emerging practice** – wound clinic staffed by Nurse Practitioners. Able to provide most wound care services and supplies, then refer more complex cases to surgeons

2. **Best Practice** – Use of Nurse Practitioner in the Clinic we visited. Has own schedule and panel of patients to see; is seen as a clinical expert in teaching for inhaler use, diabetes management; Nurse midwives have admitting privileges;

3. **Promising Practice** – Cancer center navigator role for Clinical Nurse Specialist and Nurse Practitioner; Nurse Practitioners used for house calls

Carolina’s Medical Center, Charlotte

Carolina’s Medical Center is using a comprehensive approach for optimizing the crucial role of NPs in response to the changing healthcare delivery platform. They believe that advanced clinical practitioners or ACPs (all four advanced practice nurse roles and physician assistants) will play a larger role in the delivery of care, and they have recently taken steps to address some of these issues at several locations. Other changes are as follows:

- Countersignature requirements for orders written by Advanced Clinical Practitioners (ACP) have been removed by the Metro Area Medical Executive Committees.
- Physicians will no longer receive Orders to sign in their Message Center entered by an ACP.
- ACPs will no longer be presented with the Supervising Physician prompt upon Order Entry and Admission Medication Reconciliation.
- Prescriptions will still require a supervising physician to be noted on the script based on NC & SC prescription regulations, but no co-signature is required.
When entering telephone or verbal orders for ACPs, nurses will no longer view the supervising physician field on the order details.

Carolinas HealthCare System, the parent organization of Carolinas Medical Center, is also moving to use the term “Provider” instead of “Physician” when appropriate to ensure recognition that ACPs are truly team members and patient care providers. They have also developed an Allied Health Credentialing Committee that reviews credentials of ACPs and makes recommendations to the full Credentialing Committee of the Medical Executive Committee. The facility Chief Nurse Executive is a member of this committee as are other ACPs that are credentialed by the facility.

With these initiatives in place, the hospital system plans to move toward a model that can more appropriately utilize the skills of Nurse Practitioners and other advanced clinical practitioners in delivering primary, urgent and specialty care.

Executive innovative nurse leaders make a difference, (MSN educated) and we witnessed within the CHS—nursing practice is evolving, incorporating advanced educated nurses at the bedside in ways that are impacting clinical outcomes in the areas of sepsis, utilization of APRNs, CNS, and the Clinical Nurse Leader Model for example.

The Vice President of Nursing is the Chief Nurse Executive at CMC Main. Embracing change and innovative practices, she is optimizing the role and function of nurses at all levels in the organization. Her work with the clinical nurse leaders has led real change in the operational role of the unit nurse manager as a key participant in patient care outcomes. This pioneering work has made significant and measurable improvements in patient education, adherence to infection reduction initiatives and patient satisfaction.

Carolinas Medical Center has also demonstrated how its Advanced Clinical Practitioners are improving patient care through projects on evidence-based practice. As a level 1 Trauma center CMC is interested in improving care for traumatic brain injury (TBI) patients and their families. A doctoral prepared acute care nurse practitioner studied initiating and communicating end of life discussions. Through its research, CHS found that up to 80% of family caregivers also exhibited posttraumatic stress symptoms. This study demonstrated that time spent with families, educating them about radiologic scans and predicted outcomes, led to more informed decision making with less stress.

CHS is using Nurse Practitioners to engage family members early on in discussion about the complexities of caring for a patient with TBI. Based on the patient’s CT scan, potential behavioral characteristics are mapped out for team members to use in developing care plans for the patient.

The Chief Nurse Executive saw the need to improve medical surgical care nursing. She discussed the “clinical nurse leader (CNL)” program that CHS is implementing. CNLs function on 9 units and serve 24-36 patients. Each CNL functions in a generalist role with a limited caseload of patients, taking evidence obtained from care situations across disciplines and shifts, and interpreting it for future practice considerations.
A local university is offering the graduate program for clinical nurse leaders (CNLs). Part of their education includes working closely with the care team on topics like quality improvement, assessment skills, leadership etc. Workflow considerations require that the CNL be able to identify the cost savings achievable through the role he/she performs. This is an important consideration for a care model in the context of the triple aim. The role is still developing.

One of the doctoral prepared Clinical Nurse Specialist roles is to measure whether the staff is delivering effective care. CHS’ “sepsis initiative” establishes criteria to prioritize suspected infections and provide early treatment, as infections can develop into organ failure and other severe complications. Sepsis was chosen because staff doesn’t always understand or support current treatment guidelines, and because early effective treatment has great potential to improve survival rates.

The sepsis project is also part of a Hospital Engagement Network grant, which enabled CHS to hire BSN staff dedicated to improving sepsis care practice across the system. The project will incorporate evidence-based standards, leverage of expertise, increased collaboration and, through better use of quality data, reporting of progress and benchmarking. The return on investment is already being measured in greater compliance in care bundles as well as lower mortality and stay lengths.

These CHS initiatives are making important contributions to the patient experience while developing best practices that also move toward improving population health, important consideration in implementing the triple aim.

**WakeMed Health & Hospitals, Raleigh**

Senior Vice President and Chief Nursing Officer provided an insight to an innovative best practice. It involves an interprofessional practice team, including primary nurse, charge nurse, physicians, case manager, and pharmacists who all participate in Structured Interdisciplinary Bedside Rounds (SIBR). The Senior Vice President and CNO role is responsible for ensuring quality nursing care for a 919 bed health care system and for leading the innovative practices we saw at the downtown Raleigh site. This team-based, patient-center care model occurs at the bedside with a structured communication format. The purpose and achieved impact is to improve the following: 1) increase collaboration and satisfaction with the patient and family and the health care team, 2) facilitate communication among the healthcare team, 3) reduce errors, 4) reduce length of stay, 5) improve patient flow, and 6) expedite smooth discharge teaching and planning which could decrease readmission rates.

The SIBR team nurse spokesperson and physician champion spoke proudly about their team approach to quality care delivery on the medical unit. Another physician champion described the process as “WE and Not I ---ONE team that is providing thoughtful, intentional, and thorough care.”
The standardized SIBR process includes enhanced communication between patient/family and healthcare team at the bedside that starts on time, less than 60 mins to see all patients, has a standard script and checklist which is focused on the care plan and actions needed for discharge. The Charge Nurse leads the SIBR rounds and ensures the team members are present and ready which starts at the same time each day. New patient orders are entered in real time in the EMR. For those patients off the unit or otherwise not available, the team still continues to dialogue about the patient in order to keep the communication and patient plan moving forward. The communication script includes care coordination needs, real time review of patient status, goal clarification, and quality outcomes as it pertains to this patient illness/disease process against national and local benchmarks. Preliminary SIBR outcomes are promising in the areas of reducing the average length of stay and 30 Day readmissions. Positive, patient experience themes are consistent in the areas of “really appears everyone is on the same team” and “my concerns were eased by having real time pharmacist input during rounds.” Staff satisfaction was also positive and include the following themes, SIBR has led our patients/families to experience the coordination among team members in their care, patients feel like they are actively involved and more participative in their care.”

**UNC WakeBrook Behavioral Health Services, Raleigh**

Nursing has been an instrumental part of behavioral health care since NC’s first state psych hospital was authorized after Dorothea Dix’ visit to NC in 1848. This century’s move away from long term institutionalization is evident on the WakeBrook campus in Raleigh, where UNC hospitals operate facilities providing short term hospitalization, residential care, and behavioral and primary care outpatient services.

There are several options for behavioral health crisis care at the WakeBrook complex. The behavioral health triage center provides initial crisis and assessment services, and includes an 8 bed unit for patients awaiting transfer to another level. The campus also includes a 16 bed inpatient unit (with a state designated service for involuntarily committed patients), and separate residential units for detoxification and mental health crisis patients.

And while it does not have an emergency department, WakeBrook works within an arrangement that enables law enforcement or Wake EMS to bring respondents with suspected psychiatric conditions directly to their triage center, where they are assessed for psychiatric or substance related issues. Those with medical based conditions are transported directly to a hospital ED or can be referred to the hospital ED after triage at Wakebrook.

Wakebrook works with other local community providers and the Local Management Agency/Managed Care Organization to provide a continuum of behavioral care services, with a primary goal of providing crisis alternatives to the hospital emergency department.
• The STEP (Schizophrenia Treatment and Evaluation Program) Community Clinic is a nearby outpatient clinic treating those with serious mental illnesses.

• WakeBrook provides step-down services for local patients upon return from state hospitals and other inpatient care settings, freeing beds so those hospitals can admit patients from their waiting lists.

• WakeBrook operates an “honored guest” program. Through close communications with local ED clinicians, patients can be discharged directly to the crisis center for care.

• Wake Assertive Community Treatment Team is one of a few hospital affiliated “ACT” teams in the state, assisting clients in maintaining community placement using an evidenced-based practice model.

Wakebrook uses a team approach to patient/resident care, and nurse practitioners work alongside physicians as team leaders. The teams, which may also include a Pharm. D, social worker and RN and UNC medical residents, specialize in either psychiatric or medical care, providing care for one of the inpatient or residential units. Teams call on patients daily, also meeting with their counterpart (medical/psychiatric) teams, to provide care. In addition to severe and persistent mental illness (schizophrenia, depression, anxiety, detoxification), many of their patients also have chronic medical conditions.

Studies of mortality data several states show that, on average, Americans with major mental illness die 14 to 32 years earlier than the general population, and that they are more likely to suffer chronic diseases associated with addiction (especially nicotine), obesity (sometimes associated with antipsychotic medication), and poverty (with its attendant poor nutrition and health care) and they may suffer the adverse health consequences earlier. * The UNC School of Medicine has embraced integrated health programming, which is also evident at the WakeBrook Campus. Their integrated care approach is to detect and address their patients’ medical issues while in the behavioral care setting, and continue with “whole person” treatment going forward through the outpatient primary care clinic.

The APRNs clinical and operational skills were very evident during the site visit, however another critical skill was also evident, which was leadership. The five APRNs we met with were articulate of their population health/social needs, clinical operations, and the importance of interprofessional collaboration among the healthcare team and the supervising physician. Based on the interprofessional collaborative practice competency domains (IPEC, 2011) of 1) Values for interprofessional practice, 2) Roles/Responsibilities, 3) Interprofessional Communication, and 4) Teams/Teamwork; this group of advanced practicing nurses exhibited all four of these competencies.

The clinical personnel and diversity of skills required to offer an integrated care model are present in the WakeBrook system. In fact, quality improvement, financial viability and other pressures are pushing North Carolina in the direction of integrated care.
The North Carolina General Assembly is considering a reform of the Medicaid Program. The model supported by the Department of Health and Human Services includes the use of Accountable Care Organizations, including the integration of behavioral and physical health as an alternative to improve care. According to the Center for Health Care Strategies, Inc., “Medicaid accountable care organizations (ACOs) offer the potential to improve health care quality and control rising costs, particularly for complex, high-need beneficiaries. Given the prevalence of behavioral health conditions and the related cost implications among the Medicaid population, coordinating behavioral health services within Medicaid ACOs may help states to improve quality of care and generate savings from avoidable utilization. Other integration models are also being tested in primary and behavioral care settings across North Carolina and elsewhere. Further information can be found below.

- The Substance Abuse and Mental Health Services and Health Resources Administrations have jointly developed a Center for Integrated Health Solutions, with evidence, examples and models of primary and behavioral care integration
- SAMHSA has released The Business Case for Behavioral Health Care detailing the evidence for establishing a primary-behaviorally integrated system of care
- A toolkit for those working toward integration of care has been developed by the Integrated Behavioral Health Project (IBHP).
- The North Carolina Center for Excellence for Integrated Care is dedicated to improving patient health and wellness by fostering integrated care for both physical and behavioral concerns. The Center is a resource for assessment, training, and technical assistance to health care professionals and organizations.

Family/adult and psychiatric mental health nurse practitioner team leaders practice with minimal restrictions at WakeBrook. However, the “involuntary commitment process” still requires that initial evaluations be performed by a physician in many parts of NC, although several rural counties have exemptions permitting NPs and other clinicians to conduct the first evaluation. The team approach used at WakeBrook is intended to foster opportunities for consultation with physicians and other team members, enabling them to work together to identify and treat medical as well as behavioral conditions, and to appropriately move patients to lower levels of care. Implementation of practices that include greater collaboration and integration of care will be an important component in achieving the goals set forth in the Triple Aim. As Medicare reimbursement moves toward rewarding preventive care and reducing chronic conditions, rather than specific procedures, teams working collaboratively to improve care will demonstrate their value. UNC WakeBrook and each of the health care providers we visited have demonstrated practices that move toward those goals, while at the same time enabling their nurses to work to the fullest scope of their license and training.

- SRMC References:
  - Forbes (U.S. Healthcare Spending On Track To Hit $10,000 Per Person This Year) Pharma and Healthcare 1.4 2015, Munro D.) http://www.forbes.com/sites/danmunro/2015/01/04/u-s-healthcare-spending-on-track-to-hit-10000-per-person-this-year/
**Attachment 1: Southeastern Regional Medical Center Visit (June 2014)**

Southeastern Regional Medical Center is a general medical and surgical hospital in Lumberton, NC, with 6 adult specialties. Southeastern Regional Medical Center has 385 beds. The hospital had 14,763 admissions in the latest year for which data are available. It performed 2,302 annual inpatient and 4,471 outpatient surgeries. Its emergency room had 74,650 visits (Website, Apr 2015). Chief Executive Officer: Joann Anderson, BSN, MSN

**Key Awards:**

Southeastern Wound Healing Center - Center of Distinction by Healogs (2013 & 2014)

HealthGrades 5-Star Rated for:

- Cardiac Services Treatment of Heart Failure for 9 Years in a Row (2007-2015)
- Pulmonary: Five-Star Recipient for Treatment of Pneumonia for 5 Years in a Row (2011-2015)
- Critical Care Treatment of Respiratory Failure for 6 Years in a Row (2010-2015)

Excellence Recognition by Prevention Partners, in partnership with The Duke Endowment, as part of the WorkHealthy America Initiative (2014)

Role Discussions with the following:

- VP Acute Clinical Services
- Chief Nurse Executive
- Wound Care Nurse

APRN: CRNA/Midwife/NP (ED/ Clinic)

**Best Practice Identification:**

**Emerging practice**

- Wound clinic staffed by NPs. Able to provide most wound care services and supplies, then refer more complex cases to surgeons
- Inter and Intra-professional team approach -- Wound Care nurse provides certified quality care in conjunction with a Nurse Practitioner and MD
- This practice requires need for only 1 day/week Surgeon visit

**Best Practice**

- Nurse Practitioners (NP) in the Family Practice Clinic. Has own schedule and panel of patients to see; is seen as a clinical expert in teaching inhaler use, diabetes management.
- Nurse midwives have admitting privileges
- Nurse Care Managers (24-7) provide care coordinators as navigators through transitional care from acute stage to community
- Cancer center navigator role for Clinical Nurse Specialist & NP; s used for house calls
- ED NP bridged care with local nursing home prior to ED visit; this limited ED visits
Clinical Delivery
Improving the patient experience of care (including quality and satisfaction)
- Institutionalized a high-risk readmit patients link to community care manager
- Created better utilization of paramedic partners who provided timely home visits
- Midwives have admission privileges; do routine deliveries as admitting MDs
- Built stronger teams-- initiated Nurse Assistance Bathing & Basic Needs course
- Hospital Day 1 Goal: Meet all educational objectives, Day of Discharge team member goes to patient’s home; 7 Staff review 600 patients/month; 12 Case Managers/Social Workers
- Care Managers are aligned with home care needs. Example: No Refrigerator, purchase fridge, 0 Readmission Story
- All follow-up appointments are made before leaving the hospital 24-7
- Cancer Center APRN is Navigator for all new diagnoses, plus lung screenings
- NP available for house calls...new system (Need volume)

Improving the health of populations
ED fully utilizes nurse care managers 24-7; has elevated nursing care provided
- ED Critical Care NP independent role for high volume (70K visits/year)
- Cancer Center APRN is Navigator for all new diagnoses, plus lung screenings
- Fully utilized Nurse Practitioner in Primary Care Clinic utilizing the Medical Home Model as a care manger for a comprehensive diabetic and cardiac patient enrollment panel
- In-patient units, decreased Length of stay and established a 4-Day goal
- Instituted innovative: MD - nurse assessment teams by utilizing RN Bachelors in Nursing (BSN) prepared by utilizing Tele-health population health management program.
  - Program is “portal” to the health system; decrease maintenance visits/year of utilization
  - Team had developed a payment model back to the Hospital.
- Developed new mental health model for a Nurse Practitioner to lead a nurse-run mental health service; which has 33 licensed beds and provides medical, mental health and telehealth mental health.
- Led/maintains partnership with long term care facility by providing NP Liaison to enhance communication and care partnership; decrease readmission rates
- In patient care, improving the patient experience of care, there is a 1:10 staff to nursing ratio in the non-acute areas, and they instituted a new care delivery system for this population is from 66% rural communities and 6% are not able to pay for their healthcare
- FNP Clinic tremendous impact/Former diabetes educator
- Patient base - 75% of patients have Type 1 or 2 DM
18 patients per day – approximately 30 min allocated per visit

New patient blocked for appropriate time frame 30 minutes vs. 15 minutes appointment slot

Also handles most women's health issues

Key lessons learned: Barriers: patient literacy and money indigent care program

**Reducing the per capita cost of health care.**
Cut costs by 20% by fully utilizing care management by maximizing nurses in patient case
ring the hospital stay by decreasing the length of stay by 4%.

Decreased Length of stay from 5 to 3.9 days = $ 2.5 M per year savings

Changing organizational culture, the physician mental change from driver to encouraging
nurses lead the transitional care processes as their partner in patient care.

Care Manager Service provides support care network saving $340K/month by keeping
patients out of the hospital (Jun 2014)

Transitional team – Congestive Heart Failure, AMI, DM, Pneumonia, MH; goal to keep 40-50
patients per week out of the hospital

Certified Registered Nurse Anesthetists provide epidural service

Emergency Department has Pharmacy within service; patients D/C with medications

Stronger Nurse Practitioner roles in patient navigation, advanced teams in Emergency
Departments

ED/NP communicates with the local Long Term Care faculty and evaluates the patient prior
to moving patient to the ED for care. By providing this assessment and continuity of care
practice, less fewer patients have to go to the ED (%) which is providing timely care), which
is providing timely care, and decrease cost of an ED visit.

Cardiac decision unit (NP/PA) – changed to clinical decision unit (hospitalist)

Great team approach 75,000- 80,000 visits per year

**Point of Contact:**

**Teresa Barnes, MSN, RN, Vice-President, Acute Care Services**
Southeastern Health
300 W 27th Street
Lumberton, NC 28358
910-671-5000
www.srmc.org
Attachment 2: Carolinas HealthCare System Visit (Aug 2014)

Carolinas HealthCare System, one of the nation's leading and most innovative healthcare organizations, provides a full spectrum of healthcare and wellness programs throughout North and South Carolina. Our diverse network of more than 900 care locations includes academic medical centers, hospitals, healthcare pavilions, physician practices, destination centers, surgical and rehabilitation centers, home health agencies, nursing homes, and hospice and palliative care. Carolinas HealthCare System works to improve and enhance the overall health and wellbeing of its communities through high quality patient care, education and research programs, and a variety of collaborative partnerships and initiatives.

Carolinas HealthCare System is an outgrowth of a community hospital originally founded in 1940. Since that time Carolinas HealthCare System has grown into one of the nation's largest and most comprehensive systems, with more than 65,000 full-time and part-time employees, more than 7,460 licensed beds (acute care and post-acute care), and an annual budget exceeding $8 billion (comparable to many Fortune 500 companies).

Premier facilities include Levine Cancer Institute, Levine Children's Hospital, Sanger Heart & Vascular Institute, Carolinas HealthCare System Neurosciences Institute, a facility of Carolinas Medical Center and The Transplant Center. Other specialties include maternity (regular and high risk), assisted reproduction, interventional oncology, radiation therapy, minimally invasive surgery, and many others. Through careful integration of services, Carolinas HealthCare System has built some of the nation's largest accredited multi-hospital networks for treatment of stroke and heart attack. Chief Executive Officer: Michael Tarwater, MHA, FACHE

Key Awards:

The American Institute of Architects (AIA) Technology in Architectural Practice awarded honorable mention for “exemplary use of BIM (building information management) in facility management/operations” for Carolinas Rehabilitation-NorthEast.

For the third consecutive year, Carolinas HealthCare System has been named to the list of “Best 100 Places to Work in IT” for 2014 by IDG’s Computerworld. The System was also named one of the “Most Wired” hospitals and healthcare systems by Hospital & Health Networks for the 11th consecutive year.

The 3Tower medical-surgical unit at Carolinas Medical Center (CMC), a facility of Carolinas HealthCare System, was awarded the AMSN PRISM AwardTM for exceptional nursing practice, leadership and outcomes in medical-surgical (med-surg) units. Only five hospital units in the country have received the designation since it launched in October 2012, and CMC is the only hospital in North Carolina awarded to date – the other units are located in hospitals in Roslyn, N.Y., Middletown, Conn., and Kansas City, Kan.

Carolinas HealthCare System's medical practices have been recognized nationally for delivering an excellent patient experience over the past year. The System's On-Site Care
clinics received the 2014 Press Ganey Guardian of Excellence AwardSM for reaching the 95th percentile or higher for the composite “Overall Rating” in Press Ganey Quarterly Reports from May 2013 to April 2014. At least 75 percent of the clinics met the criteria for patient experience. In 2013, numerous Carolinas HealthCare System care locations earned Guardian of Excellence Awards in the areas of employee engagement, patient satisfaction and physician engagement. The System also was one of only 17 recipients of the 2013 Success Story Award®, which recognizes healthcare organizations that have demonstrated innovation and leadership to measurably improve patient care, clinical quality, physician partnership or employee partnership.

Role Discussions with the following:

VP/Chief Nurse Executive, Carolinas Medical Center Main
Chief Nurse Practitioner, Department of Surgery, CMC Main
ACP Fellowship Director, Center for Advanced Practice
Director, Critical Care Practice and Education

**Best Practice Identification:**

**Emerging practice –**

One compelling example of innovation was the introduction of the "Primary Care Redesign Project" by the Physician Services Group. This initiative identified numerous pilots, one of which is already underway: the delivery of primary care via group sessions instead of individual appointments. With a group that might include 8-to-12 patients who share common health issues, a single physician or advanced clinical practitioner can lead a discussion, answer questions and provide guidance for multiple patients in a single sitting.

Patients in Cleveland, Rutherford, Burke and Lincoln Counties were given access to genetic counseling from specialists at Levine Cancer Institute in Charlotte, eliminating the need to travel long distance for services.

In addition to these achievements, Carolinas HealthCare System made substantial progress on a new "virtual critical care center" in Mint Hill, NC. The center will provide expert clinical oversight for critical care patients in hospitals across the enterprise. For example, highly trained physicians and nurses in Mint Hill will have direct video and audio links to patients in intensive care units throughout the network. In this manner, they can augment local monitoring of the most fragile patients, providing additional expertise and immediate response to urgent or emergent situations. The new center will have the capacity to monitor more than 500 critical care beds in nearly 30 hospitals, making it the largest endeavor of its kind in the nation. Also, it has the potential to service both regional affiliates and hospitals not associated with Carolinas HealthCare System.
Clinical Delivery

Improving the patient experience of care (including quality and satisfaction)

Grace Sotomayor, DNP, NEA-BC. Objective: To determine whether implementation of a Clinical Nurse Leader (CNL) led evidence based practice (EBP) improvement strategy would improve nursing staff compliance. Background: The role of the CNL is to ensure EBP in nursing care delivery. Hourly rounding and Bedside report are two nursing practices associated with high patient satisfaction and quality of nursing care. Compliance with them on the study unit in an academic medical center was unreliable. Methods: Baseline compliance with rounding and bedside report was assessed. Three Clinical Nurse Leaders used Rosswurm and Larrabee’s EBP model supplemented by an implementation guide to coach nursing staff. Results: A 75% improvement in compliance with rounding expectations and an 80% improvement in compliance with bedside report was observed when measured one week after CNL coaching. Conclusion: CNL intervention can improve nursing compliance with the evidence-based practices of rounding and bedside report.

Britney Broyhill, DNP, ACNP-BC. Purpose: This project serves to evaluate the effect of providing detailed information regarding a patient’s traumatic brain injury via computerized tomography scan for a visual cue on surrogate decision making.

Methodology (or Data Sources): Surrogate decision-makers for patients admitted to Carolinas Medical Center diagnosed with Traumatic Brain Injury with a GCS of eight or less were asked to participate in this study. A total of ten surrogate decision makers were shown a normal CT brain scan in comparison with their loved one’s CT brain scan with the injury. The injury was identified on the scan as well as information was given on the basic function of that area of the brain. At the time of discharge from the ICU whether by death or transition to a lower level of care, surrogates were given a survey to evaluate what was helpful in making decisions while in the ICU.

Results (Conclusions): In comparing verbal communication and visualization of the CT scan for helping surrogate decision makers in making decisions, visualization was slightly more helpful with a mean of 4.7 (SD = 0.67). The mean for verbal communication was 4.1 (SD = 1.29). One hundred percent of participants reported that time spent with the nurse practitioner was extremely helpful in making decisions regarding their loved one’s care (M = 5.0, SD = 0). Implications for practice: This intervention is effective in supporting surrogates through the decision making process and should be included in communication techniques for those who are responsible for patients who have suffered a traumatic brain injury. The most significant finding of this project was the importance of spending time with surrogates in order to help them with decision-making. This intervention will allow for surrogates to feel that they have spent adequate time with a provider in order to feel more comfortable in making decisions.

Improving the health of populations

Erika Gabbard, DNP, CNS-BC. Utilizing a Multi-faceted Approach to Improve 6-hour Bundle Compliance of Patients with Severe Sepsis and Septic Shock.
Purpose: The purpose of this DNP Scholarly Project was to evaluate the impact of Virtual Critical Care (VCC) and Sepsis Program Coordinators on 6 hour bundle compliance, (divided into 3 time frames: first 3 hour, second 3 hour, total 6 hour) for patients with severe sepsis and septic shock following the Society of Critical Care Medicine’s Surviving Sepsis Campaign Guidelines. Background: Severe sepsis and septic shock is defined as a systemic infection leading to massive widespread vasodilation and poor tissue perfusion resulting in organ dysfunction and death. While cases have tripled in the last twenty years, mortality among this patient remains approximately 25% or higher. Through the use of the Surviving Sepsis Guidelines, a bundled approach to care for this population focuses on timely antibiotics, intravenous volume replacement, and invasive hemodynamic monitoring. Methods: This is a pre and post measure of an intervention designed to improve adherence to the standard of care for the patient with severe sepsis and septic shock, defined as Code Sepsis. Data was collected from December 1st 2013 to December 31st 2014 on Code Sepsis patients admitted to the intensive care unit at nine different hospitals. A total of 1775 patients met the inclusion criteria. Results: Results demonstrated a statistically significant improvement in first 3 hour bundle compliance (6.4%, 95% CI 1.6-11.3%), p-value = 0.01., second 3 hour bundle compliance (6.2%, 95% CI 2.7-9.7%), p-value = 0.001 and full 6 hour bundle compliance (4.2%, 95% CI 1.5-6.9%), p-value=0.003. Approximately 45 readmissions were prevented with a cost avoidance of $290,619, and among the survivors, it was demonstrated that the intervention group avoided 1,011 hospital days for a cost avoidance of $374,088. In addition, there was a reported reduction in mortality by 8.3% (95% CI 4.5% to 12.2%) p-value < .0001, which demonstrated a total of 80 lives saved. Implications for Practice: This project assists in validating supporting current literature that a coordinated, systematic approach improves bundle compliance, hospital length of stay, readmission, and mortality.

Reducing the per capita cost of health care.

MariAlice Gulledge, DNP, ANP-BC. Mechanical ventilation (MV) is a common treatment modality for patients admitted to intensive care units (ICU). Patients are at risk for complications when the duration of MV is extended, specifically due to delayed weaning. Given the recent perceived increase of the rate of self-extubations, re-intubation, and ventilator associated pneumonia (VAP); the Intensive Care Unit (ICU) nursing leadership staff sought out the project investigator (PI) for options to help decrease adverse patient outcomes. Nurses are empowered by virtue of their position to provide critical information that is necessary to help drive patient care decisions. Therefore, it is imperative that they are included in the weaning readiness assessment process. This project introduced an evidence-based multidisciplinary approach towards mechanical ventilator weaning with the staff working in the ICU to respond to the clinical problem. An educational PowerPoint presentation with a question and answer period was mandated for all ICU nurses followed by an implementation of the weaning readiness assessment tool on the unit for four weeks. Nursing knowledge outcomes were measured by a pre and post-test. Mechanically ventilated patient outcomes were measured through chart audit and system reporting one month prior and one month following the educational sessions. Seventy-nine ICU nurses participated in one of twenty-five educational sessions on weaning readiness assessment. Forty-five nursing participants completed both the pre
and post-test measures. The results demonstrated a significant increase in nursing knowledge ($p < 0.001$) and a 12% decrease in the duration of mechanical ventilation in the ICU patient. Longer term monitoring is necessary to assess the rates of self-extubations, re-intubations, and ventilator associated pneumonia.

Point of Contact:

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Carollinas HealthCare System/Carolinas Medical Center  
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704-355-2000  
www.carolinashealthcare.org
Attachment 3: WakeMed Health and Hospitals (Oct 2014)

WakeMed is a 919-bed private, not-for-profit health care system based in Raleigh, North Carolina. Services unique to WakeMed that bring added value to the communities we serve include: • North Carolina’s first freestanding Children’s Emergency Department. It is a national model and serves thousands of children each year. • The WakeMed Heart Center ranks in volume among the top North Carolina hospitals providing cardiac care and is also one of the highest volume heart centers in the United States. • Mobile critical care services offering ground and air transport for adults and children. • One of 18 mother’s milk banks in the United States. • Two nationally accredited, award winning Stroke Centers. • Two nationally accredited, award winning Chest Pain Centers. In addition, • Level I Trauma Center, Rehabilitation Hospital, Level IV Neonatal Intensive Care Unit, Children’s Hospital, Women’s Pavilion.

Key Awards:

- Heart Failure Accreditation - WakeMed Raleigh Campus and Cary Hospital are accredited in Heart Failure care by the Society of Cardiovascular Patient Care (SCPC)/2014
- 2014 Gold Plus and Honor Roll awards for stroke care as well as the Heart Failure Gold Plus Achievement award.

Role Discussions with the following:

VP Senior Vice President and Chief Nursing Officer (RN, BSN, CRRN)
Nurse Manager, 5 C Medicine Unit (RN, BSN, MHA)
MD, Internist, Hospitalist (WakeMed Physician Practices)
VP Health Information Management and Utilization Management (MSCL)
Director, Nursing Operations and Adult Medicine (MSN, RN, NE-BC)

Best Practice Identification:

- Best Practice – Structured Interdisciplinary Bedside Rounds (SIBR) which provides interprofessional team-based, patience-centered bedside rounds with the patient and family. Best practice due to purposeful and meaningful discussions, decisions, plan of care with the patient, family, MD-Hospitalist, Nurse Manager, Clinical Nurse, and Pharmacist. This is intentional to improve patient flow, centered care, ONE healthcare Team that is focused.
- Emerging Practice – Clinical Nurse Council
  - Work Life balance
Utilizing evidence-based practices influencing nursing care
  - Foley removal practice
  - Strict I and O with patients with Diarrhea

Promising Practice – Nurse Award – Staff Nurses working Daisy Awards Implementation
  - 70-90 monthly submissions; 15 primarily selected to finally 1 selected

Clinical Delivery

- Improving the patient experience of care (including quality and satisfaction)
- Structured Interdisciplinary Bedside Rounds (SIBR)
  1) Increase collaboration and satisfaction with the patient and family and the health care team
     - Interprofessional Rounds on all patients (Medical), everyday
     - Same time everyday
     - Ends only when plan of the day is verbalized to patients/family
  2) Facilitate communication among the healthcare team
     - All orders are entered in real time in CPOE
     - Do SIBR even when patient is at an appointment or indisposed
     - Care coordination has increased
     - Real time review of patient status
  3) Reduce errors
     - Goals clarification/review of care plan/appointments, quality indicators
     - Medical review by team, and pharmacist present
  4) Reduce length of stay
     - Review of catheter and central lines
     - Discharge Plan Progress discussed/acted upon
     - Patient teaching/reinforcement of self-care
     - Expediting discharge planning
     - Improved team decision making due to time spend on Rounds
  5) Improve patient flow
     - Nurse Manager coordinating patient care appointments
     - Review of f/u to test results/patient treatments
     - Pharmacist observing medication orders/impact to care
  6) Expedite smooth discharge teaching and planning (decrease chance of readmission)
     - Comprehensive planning in real time
     - Identification of patient/family need on the stop during daily rounds

Structure of SIBR Rounds
  - Bedside Location
- Time: Consistent Start time, less than 60 minutes
  - Charge Nurse Facilitates Rounds
  - Ground Rules – Every day / all orders written in real time in CPOE
- Content
  - Standard script and checklist
  - Order capture and plan for the day

- Reducing the per capita cost of health care.
  - Average Length of stay improvement
  - Decreasing the length of stay
  - Decreased the Readmission rates
  - Early preliminary data showing an impact to Decreasing Mortality Rates

  - Tables 1-4 Wake Med Oct 28, 2014, Handout During Visit

Table 1 Average Length of Stay
Table 2 Reducing LOS

Reducing ALOS

Trendline for all Geo Hospitalist Units FY 2014

Table 3

30 Day Readmissions
Table 4

Impact to the patient and family
- Reported themes included:
  - “Everyone is on the same page”
  - “Learned about the medication I have been placed on”

Impact to the Staff – “Patients actively involve in care/decisions; “better relationships with the hospitalist and team”

Point of Contact:

Cindy Boily, Sr. Vice President/CNO
WakeMed Health & Hospitals,
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Raleigh, NC
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www.wakemed.org
Attachment 4: WakeBrook Behavioral Health (Feb. 12, 2015)

WakeBrook Behavioral Health Center was opened by UNC Healthcare in Raleigh in the fall of 2013. It is located near both WakeMed Health & Hospitals, a large acute and trauma center, and Holly Hill Hospital, the only other licensed psychiatric hospital in Wake County.

The campus includes several inpatient care sites providing:

- Inpatient psychiatric care (16 beds): Serves those with acute, severe mental illness (general unit, ages 18+).
- Facility Based Crisis (16 beds): Residential unit serves those with chronic, persistent mental illness and substance issues/depression/anxiety/detox. Patients must have mental health as their primary issue for admission (if they are dual diagnosed). The length of stay is anywhere from 1 week - 2 months. The unit also functions as a step down unit for Central Regional Hospital, facilitating community integration for acute patients during the final days of their inpatient stay.
- Crisis and Assessment (8+ beds): This unit serves all patients who are brought in by police, EMS, or walk in themselves for triage. Patients may arrive via police on involuntary status paperwork, or they can come in voluntarily. If they have obvious medical issues they are sent to the ED (Wake Med or Rex). The unit hold 8 but may go higher, but if necessary will close to new admissions for patient safety. New patients are then diverted to the ED.
- Addictions Detox Unit (ADU): Residential unit, 16 beds, detox - length of stay 3-6 day

Other services include an Assertive Community Treatment Team, which offers transition support for those moving back into the community, and specialty clinics such as the Schizophrenia Treatment and Evaluation Program (STEP).

Role Discussions with the following:

Abigail Coffin, PMHNP-BC, ANP-BC
Dr. Ted Zarzar, Clerkship Site Director
Dr. Brian Robbins, Inpatient Unit Medical Director
Kari Bail, FNP
Jennifer Turner, FNP

Practice Identification:

- Emerging Practice – Integration of Primary and Behavioral health care services. Due to the chronic nature of many behavioral illnesses, a patient centered treatment model addressing all medical needs is being provided for patients with severe mental health
illness and concurrent chronic diseases. The Center also provides consultations on patients on inpatient and residential units, as well as Crisis and Assessment.

Point of Contact:
Abigail Coffin, PMHNP-BC, ANP-BC
UNC Behavioral Health at WakeBrook
107 Sunnybrook Road
Raleigh, NC 27610
(919) 250-1579
https://www.med.unc.edu/psych/patient-care/wakebrook-services
Optimizing Nurse Roles in Healthcare Delivery System Initiatives

Executive Summary

This North Carolina Hospital Association, North Carolina Nurses Association and North Carolina Organization for Nurse Leaders report will address regulations, policies and potential best practices related to nurses and advanced practice nurses as they work to the fullest extent of their education and regulatory authority. The value of implementing these improved practices in hospitals and healthcare systems will also be explored.

Purpose:
1. Identify and describe situations where nurses and especially advanced practice nurses are functioning at the fullest extent of their education and capabilities.
2. Demonstrate how these nurses are improving hospital performance in meeting the triple aim goals of improved patient care experience, improved population health, and reducing per capita cost of health care.
3. Demonstrate how team-based approaches to care and interprofessional collaborative practice can facilitate meeting those goals.
4. Identify situations where nurses and APRNs are involved in value-added care methods including innovative care models, integrated care, and the research and development of best practices in hospital based care settings.

Site Visits:

<table>
<thead>
<tr>
<th>Location</th>
<th>Areas of Focus</th>
<th>Nursing Specialties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeastern Regional Medical Center</td>
<td>In-patient care settings, Emergency Department, Anesthesia, Family Practice Clinic, Maternal Child (Labor and Delivery), Wound Care, Care Coordination</td>
<td>Certified Nurse Midwife, Nurse Practitioner, Certified Registered Nurse Anesthetist, Case Manager, Nurse Administrators, Nurse Managers, Chief Nurse Officer (CNO)</td>
</tr>
<tr>
<td>Carolinas Medical Center</td>
<td>CHS Center for Advanced Practice, DNP implementation of evidence based practice</td>
<td>Doctoral Nurse Practitioner, Clinical Nurse Specialist, VP and Chief Nurse Executive</td>
</tr>
<tr>
<td>WakeMed Health &amp; Hospitals</td>
<td>Interprofessional Clinical Rounding On patients, patient safety &amp; quality improvement</td>
<td>BSN, MSN, Nurse Practitioner, Nurse Manager, VP/Chief Nurse Officer</td>
</tr>
<tr>
<td>WakeBrook Behavioral Health</td>
<td>Integrated Care, Interprofessional practice</td>
<td>Psychiatric, Family and Adult Nurse Practitioner</td>
</tr>
</tbody>
</table>
**Best Practice Results (4 Key Areas):**

- Improved patient-centered care impact based on evolving nurse roles: APRNs, CNS, Nurse Administrators, and Staff Nurses in the clinical setting.
- Southeastern Regional Medical Center (APRNs (Midwifery, CRNA, NPs) & CEO, COO, CNO Nurse Administrators, Staff Nurses (Wound Care, Case Management))
- Importance of Collaborative Interprofessional Teams in Quality Care Delivery at Microsystem level (Patient Care level), Mesosystem (Clinical Product Line), Macrosystems (Hospital Executive Level)
- WakeMed – Structured Interprofessional Bedside Rounds (SIBR)
- Increased Nursing Education (BSN, MSN, DNP) observed to contribute to positive clinical outcomes
  - Carolinas Medical Center (DNP- ICU Sepsis)
  - Southeastern Regional Medical Center (MSN, APRNs)
  - WakeBrook Behavioral Health (Psychiatric, Adult and Family NPs)
  - WakeMed Health and Hospitals (Clinical Nurses (BSN, MSN, NP), VP Nursing MSN)
- Nurse Administrators leadership/partnership within interprofessional teams illustrated, enhanced communication, collaboration, and improved clinical outcomes
  - Carolinas Medical Center (DNP- ICU Sepsis)
  - Southeastern Regional Medical Center (MSN, APRNs)
  - WakeMed Health and Hospitals (Clinical Nurses (BSN, MSN, NP), VP Nursing MSN)

**Lessons Learned**

- Nurses in leadership roles effectuate changes; permit RNs/APRNs to practice to the full scope of their capabilities.
- Doctorate in Nursing Practice Nurses can contribute directly to positive patient outcomes in the clinical setting
- Mental Health APRN & Interprofessional Teams providing integrated MH and Primary Care represent a targeted improvement to caring for a fragile and chronic population.
- Nurse driven Care Coordination and Case Management can provide population health, improved decrease in readmission rates, hospital admissions, emergency department visits
- Chief Nurse Officer role is critical to excellent relationships with nurse managers and clinical directors in the area of fostering innovative practices (Care Coordination, SIBR Rounds, etc.)

**Recommendations:** Recommendations for fostering innovation:

1. Review institutional policies to ensure they do not impede nurses from performing to the fullest extent of their capabilities.
2. Utilize APRNs in clinical settings to ensure positive clinical outcomes.
3. Encourage continuing education preparation for all nurses to the BSN level and beyond to include Master’s preparation for administrative roles and doctoral preparation for educators and facility/system leaders.
4. Embrace and lead collaborative interprofessional education and practice within health teams
5. Continue efforts to identify, define, and share the economic and clinical value of nursing.
6. Support models of healthcare reform that do not exclude advanced practice nurses from serving as primary care providers or medical homes.
7. Call to Action: Increase Mental Health APRNs in clinical settings to include ED, Primary Care, hospital-based programs where there is a need for mental health providers.
8. Disseminate these findings and champion leaders mentioned in this report to stakeholders (Hospitals, Professional Organizations, other health care organizations) about the value of nursing to inspire other initiatives improving patient safety and quality health care delivery.

**Long Term Strategy:**
1. Modernization of the Nurse Practice Act in North Carolina to ensure all levels of nursing have the capability and opportunity to practice at the fullest extent of their education and regulatory authority.
2. NCHA, NCNA and NCONL continue to work together toward a common vision of optimizing nursing roles in North Carolina.
3. Improve the understanding of all health professionals about the various roles of RNs/APRNs, and based on these roles implement innovative, interprofessional practice changes to enhance quality patient care delivery, health outcomes, and value-based purchasing strategies.