

Tool Kit

# The Essentials of Master's Education in Nursing



#### Nurse Faculty Tool Kit for the Implementation of the Master's Essentials

December 18, 2017

#### Table of Contents

	Page
Table of Contents	1
Introduction	2
Integrative Learning Strategies	3-14
Crosswalk of the AACN Master's Essentials and the IOM's Future of Nursing:	15-20
Tips for Planning MSN curricular Changes	21-22
Program Development/Revision	23-25
Budget Template: Responsibility Cost Management Model	26-28
Master's Education in Nursing and Areas of Practice	29-33
Graduate Roles and Advanced Role Competencies	34-36
Curriculum Framework for Health Professions Education	37-39
Crosswalk of the Master's Essentials with the Baccalaureate and DNP Essentials	40-60

#### INTRODUCTION

#### NURSE FACULTY TOOL KIT FOR THE IMPLEMENTATION OF THE MASTER'S ESSENTIALS

Graduate nursing education advances innovation and strengthens the leadership needed to improve healthcare delivery. Education at this level incorporates the foundational knowledge, skills, and competencies needed to thrive in increasingly complex clinical environments. Nursing education is undergoing major change as the profession reconceptualizes master's education and transitions advanced practice education to the doctoral level via Doctor of Nursing Practice (DNP) programs. Calls to reduce healthcare costs, persistent concerns about patient safety and the quality of care, and dramatic increases in diagnostic, therapeutic, and educational technologies all demand new thinking around the nature of graduate nursing education.

Together with The Essentials of Doctoral Education for Advanced Nursing Practice (AACN, 2006) and the Research-Focused Doctoral Program in Nursing: Pathways to Excellence (AACN, 2010), the Essentials of Master's Education in Nursing (AACN, 2011) provides the foundation and guidance for facilitating this transition. Given the seamless learning experiences and professional growth called for by the Institute of Medicine's Future of Nursing report (2010), changing master's education in nursing must take into account the nature of baccalaureate and doctoral education and how students can transition easily from one degree program to the next. Nurse educators aim to design curricula so these transitions are logical, integrated, and provide accountability for specific competencies while stimulating intellectual creativity and scientific thinking while advancing career opportunities. Current challenges faced by schools of nursing, including faculty shortages and economic constraints, require groundbreaking and novel approaches to curricular design. New and evolving approaches to interprofessional education, academic-service partnerships, and clinical and scientific learning stimulate innovative thinking about turning these challenges into opportunities.

The goals of this tool kit are to:

1. Provide key resources that will assist schools as they engage in curricular redesign to incorporate the Master's Essentials;

2. Suggest integrative learning strategies that will strengthen clinical and scientific learning and leadership development in efficient and effective ways;

3. Stimulate development of strong academic-practice partnerships to improve clinical and scientific learning;

4. Provide a forum for sharing innovative curricular and program ideas across schools.

The Master's Essentials Tool Kit has been designed to be dynamic, using a Web-based platform that allows for additions and changes as new ideas are developed.

Integrative Learning Strategies/Resources	<b>Essential I</b> Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	Essential V Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Analyze a clinical case from the perspectives of two or more scientific foundations, such as nursing science and quality improvement science.	х	Х	Х		Х	x	Х	х	х
Debate with a group of student colleagues from multiple health professions how the ethical issues related to genetic/genomic information influence one's perspectives on clinical practice.	Х			Х	Х		Х		Х
Discuss with a panel of recognized nursing leaders representing various areas of practice or interview a recognized nursing leader.	X		X	X	Х				Х
Conduct a concept analysis of lateral integration and explain how a full understanding of the concept will help you engage most effectively in care coordination and lateral integration of care delivery principles.	Х	х	Х				Х		Х

Integrative Learning Strategies/Resources	Essential I Background for Practice from Sciences and Humanities	Essential II Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	Essential V Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Interview community leaders to obtain their perspectives on the major health and socioeconomic disparities in their area and approaches they recommend for eliminating those disparities.	х		X			x	х	X	X
Select a health disparity and plan a debate with students in multiple health and social service disciplines about how to modify the social determinants of health with the goal of eliminating this health disparity.	Х		Х			X	Х	Х	Х
Collect data from a clinical unit or practice setting about incidence trends for a clinical problem (e.g., falls, medication errors, STD rates) and recommend changes in practice based on scientific findings from nursing or other fields.	Х	Х	Х	Х	Х	Х	Х	Х	Х

Integrative Learning Strategies/Resources	Essential I Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	Essential V Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	Essential VIII Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
In a small group, select one theory, and design a teaching session for patients (can be face-to-face or electronic format).	Х			Х	X		Х	Х	Х
Conduct organizational assessment (at the micro-, meso-, and macrosystem levels) describing the relationship between organizational structure, leadership, and decision making.	Х	Х							X
Analyze a clinical/practice case study describing an organizational problem addressing communication and conflict within healthcare (educational) teams.		Х	Х				Х		Х
Interview 2-3 leaders in nursing or health care regarding a contemporary issue and present a summary to class.		Х	Х	Х			Х		Х

Integrative Learning Strategies/Resources	Essential I Background for Practice from Sciences and Humanities	Essential II Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	Essential V Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	Essential VIII Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Conduct a literature critique including a comprehensive summary and critical analysis of contemporary healthcare leadership.	х	Х		х					Х
Analyze an organizational conflict at the microsystem level and present a strategy to deal with the conflict.		Х	X				Х		Х
Develop a business plan including a budget for a proposed initiative to improve outcomes on the microsystem/unit.		Х	Х		Х				Х
Present to an interdisciplinary team a cost-saving idea that improves patient outcomes and improves efficiency.		Х	Х		X	X	Х		Х
Design a program or course proposal including needs assessment, implementation, and evaluation plan for health professions students or health care professionals.		Х		Х					Х
Participate in an interprofessional team that is performing a root cause analysis on a failure-to-rescue or FMEA scenario when the chain-of-command was not utilized.		Х	Х		X	X	Х	Х	Х

Integrative Learning Strategies/Resources	<b>Essential I</b> Background for Practice from Sciences and Humanities	Essential II Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	Essential V Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Mentor/Coach a student or new graduate who has made a medication error that resulted in an adverse patient outcome. This could be a simulation.		x	Х			X	Х	Х	
Participate in an interprofessional team that is trying to improve processes related to one CMS core measure, such as for heart failure.		x	Х		X	X	Х		Х
Participate in analysis and plan for improving for a patient safety related events (e.g.) back injuries, needle sticks.			Х		X			Х	X
Explore another industry (e.g. airline) and apply learning to proactive healthcare system changes (or assign different industries to different groups).			Х		X			Х	
Identify a real or virtual patient care error, perform an analysis of the causes of the error, and identify quality improvement strategies to address the identified cause(s).	X	X	Х		Х	Х		Х	Х

Integrative Learning Strategies/Resources	Essential I Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	Essential V Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population	Essential VIII Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Select one transition scenario, identify current processes, factors that facilitate or hinder the transition and impact outcomes. (e.g. prevent avoidable readmissions)		Х	Х	Х	Х	Х	Х	Х	х
Explore one's own cultural values and beliefs that will lend themselves to collaborative research among practitioners, educators, researchers.	Х			Х			Х	Х	
Translate research evidence that challenges a current policy or procedures into a practice plan	Х			Х		Х			Х
Create an educational experience for students and/or health team members using sample data and data mining techniques focused on a clinical issue that has evidence-based guidelines.				Х	Х		Х		Х
Disseminate clinical knowledge (e.g. a quality improvement strategy that one designed and implemented; present outcomes in grand rounds, case presentations, and journal clubs.			Х	Х	Х		Х		Х
Assist a clinical population with interpreting and evaluating the validity of health information available through multiple and varied sources and formats.				Х	Х		Х	Х	Х

Integrative Learning Strategies/Resources	Essential I Background for Practice from Sciences and Humanities	Essential II Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	Essential V Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	Essential VIII Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Use an existing database for an identified microsystem or unit of care to evaluate aggregate outcome data for a designated population or environment to improve interventions.			Х	Х	X			Х	X
Contribute to an interdisciplinary plan of care based on best practice guidelines and evidence-based practice.				X			Х	Х	X
Use a research article as the basis for explicating the many potential ethical concerns, from conceptualizing the research problem through initiating the project, and even in the reporting of the outcomes.	Х			х	х	X	х		Х
Analyze the Electronic Health Record at a practice site in regards to the use of language and standardized terminology that does or does not support nursing practice	Х				Х				X
In a small group, create and evaluate a simulation for nursing students, patients, families, or healthcare professionals.				X	Х		Х		Х

Integrative Learning Strategies/Resources	Essential I Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	<b>Essential V</b> Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	Essential VIII Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Complete a cost-benefit analysis for a proposed implementation of a new point of care technology, including impact on staff and patients.	Х	X	X		Х		X		Х
Present to the interdisciplinary team a proposal regarding a recommendation to implement or not a new patient care technology.	Х	Х	Х		Х		х		Х
Evaluate an institution's policy regarding the implementation of new point of care technology, including issues related to privacy, patient/provider risks, ethics, and costs.	Х	х	х		х	х			Х
Discuss how genetic information, including family history, should be documented, stored, shared or kept private within electronic health records.	Х	X	X		Х	Х	X		
Conduct an environmental scan of the prevalent issues affecting health care in an institution and provide a summary of key trends, risks and associated implications for planning and budgeting decisions.			х		X	Х	Х	X	Х

Integrative Learning Strategies/Resources	<b>Essential I</b> Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	<b>Essential V</b> Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Create a position paper on a policy issue that advocates for a solution that is politically feasible and economically viable.		Х	Х			X	Х		Х
Analyze the roles, empowerment, and values clarification needed to be an effective nurse advocate and policy player.		X				X	Х		Х
Develop a resolution on a health issue that can be presented to a local or state policy body. Include a timeline and specific strategies on submitting the resolution.		х			х	X			Х
Identify, conceptualize, and validate a problem, and its contributing factors, that are amenable to policy intervention and develop a plan to address this problem.		х				X			Х
Work with an elected official or staff member on a healthcare policy.		Х				Х	Х		Х
Participate in an interprofessional graduate student group to discuss and distinguish the unique contributions of one's own and other disciplines to patient-centered care.	Х			X			Х		Х

Integrative Learning Strategies/Resources	Essential I Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	<b>Essential V</b> Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	Essential VIII Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Participate in an interprofessional team practicum in a community setting that examines the barriers to health services for an underserved patient population with a chronic care condition and identify strategies to overcome those barriers.	X	х	Х				X	х	Х
Compare and contrast risk factors that compromise health outcomes between vulnerable populations living with chronic health conditions, e.g., local to global.	х		Х					X	X
Integrate evidence to address the health promotion and illness prevention needs of an identified clinical patient group or aggregate/clinical population.	Х	Х	Х	X				Х	Х
Examine a model of human health and apply this to an identified health outcome at the individual, family, community, aggregate/clinical population, and/or system levels.	Х	Х	Х					Х	Х

Integrative Learning Strategies/Resources	Essential I Background for Practice from Sciences and Hummities	Essential II Organizational and Systems Leadership	Essential III Quality Improvement and Safety	Essential IV Translating and Integrating Scholarship into	Essential V Informatics and Health Care	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	Essential VIII Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Analyze a system management practice at the micro-, meso-, or macrolevels, from socio-economic, environmental, political, and cultural contexts, and assess the impact on the health outcomes of a vulnerable patient population.	Х	Х	Х			Х		Х	Х
Work in an interprofessional student team in partnership with a community-based organization serving a vulnerable population to evaluate their pandemic flu response and communication plan.	Х		Х			х	Х	Х	Х
Engage in a practicum experience with a complementary and alternative medicine provider.	Х			Х			Х	Х	Х
Identify a clinical prevention education issue and illustrate ways that an interprofessional team may work together to address the need.			Х				Х	Х	Х
Participate in a tabletop or simulated disaster response exercise with an interprofessional student group.		Х	Х				Х	Х	Х
Select a gap observed in one's role and setting and develop a practice/education protocol that is evidence-based.	Х			Х	Х				Х

Integrative Learning Strategies/Resources	Essential I Background for Practice from Sciences and Humanities	Essential II Organizational and Systems Leadership	Essential III Quality Improvement and Safety	Essential IV Translating and Integrating Scholarship into Practice	Essential V Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Participate in the development of or change in a policy within the healthcare organization based on evidence.	Х	X		Х		X	Х		Х
Analyze interdisciplinary patterns of communication and chain of command both internal and external to the unit that impact nursing education or care.	Х	Х					Х		Х
Design, implement and evaluate a learner centered pedagogical strategy on a specific topic and learner population using current technology that is evidence-based.	Х		Х		Х				х
Reflect on how one's personal philosophy of nursing has evolved over time and is now operationalized in an academic or practice setting.	Х								Х
Design, implement, and evaluate an educational class utilizing regulatory, professional, legal, and ethical standards for an academic or practice setting.	Х	Х		Х		Х			X
In a small group, develop a plan to implement quality improvement strategies, including targeted audience, relevant stakeholders, and needed resources for implementation.	Х	Х	Х		Х	х		Х	х

#### Crosswalk of the AACN Master's Essentials and the IOM's Future of Nursing: Leading Change, Advancing Health Recommendations

The Institute of Medicine's landmark report on the *Future of Nursing: Leading Change, Advancing Health* (2010) calls for radical transformation in how nurses are educated to meet contemporary practice expectations. The latest *Master's Essentials* reflects this theme with curricular threads emphasizing evidence-based practice, quality improvement, outcomes measurement, systems innovation, and leadership skills. The following Crosswalk document was developed to map the nine master's Essentials against key recommendations and themes contained in the IOM report to illustrate the synergy between these two documents.

IOM Key Recommendations	Essential I Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	<b>Essential V</b> Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and Population Outcome	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Ensure that nurses engage in lifelong learning.	X	X		X	Х		Х		Х
Prepare and enable nurses to lead change to advance health.	Х	Х	Х	Х	Х	Х		Х	Х
Expand opportunities for nurses to lead and diffuse collaborative improvement efforts.		X	Х		Х	X	Х	Х	Х

IOM Key Recommendations	<b>Essential I</b> Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	<b>Essential III</b> Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	<b>Essential V</b> Informatics and Health Care Technology	<b>Essential VI</b> Health Policy and Advocacy	<b>Essential VII</b> Interprofessional Collaboration and Improving Patient and Population Outcome	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	Essential IX Master's-Level Nursing Practice
Coordinate increasingly complex care for a wide range of patients.	Х		Х	Х	Х		Х	Х	Х
Ensure that nurses are ready to assume leadership roles with leadership competencies embedded throughout nursing education.	Х	Х			Х	Х			Х
Take responsibility for personal and professional growth by developing leadership competencies.	Х			Х					Х

IOM Key Recommendations	<b>Essential I</b> Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	<b>Essential III</b> Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	<b>Essential V</b> Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	<b>Essential VII</b> Interprofessional Collaboration and Improving Patient and Population Outcome	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	Essential IX Master's-Level Nursing Practice
Nursing education programs should integrate leadership theory and business practices across the curriculum.	Х			Х					Х
Nursing education at all levels needs to impart a better understanding of ways to work in the context of and lead change within health care delivery systems, methods for quality improvement and system redesign.		Х	X	Х	Х	Х	Х		X

IOM Key Recommendations	Essential I Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	<b>Essential V</b> Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Graduate-level nurses must develop even greater competencies and deeper understanding in areas of systems thinking, quality improvement, care management, health policy and research.	Х	Х	Х		Х	Х		Х	Х
Coordinate care and collaborate with a wide variety of health professionals who have masters or doctoral degrees across all settings.							Х	Х	Х

IOM Key Recommendations	<b>Essential I</b> Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	<b>Essential III</b> Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	<b>Essential V</b> Informatics and Health Care Technology	<b>Essential VI</b> Health Policy and Advocacy	<b>Essential VII</b> Interprofessional Collaboration and Improving Patient and Population Outcome	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
Reconceptualize roles as care coordinators, health coaches, and system innovators.	Х				Х		Х	Х	Х
Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.	Х			Х					Х
Expand competencies to practice in domains of health policy, systems improvement and change within curricula.		Х	X		Х	Х			Х

IOM Key Recommendations	Essential I Background for Practice from Sciences and Humanities	<b>Essential II</b> Organizational and Systems Leadership	Essential III Quality Improvement and Safety	<b>Essential IV</b> Translating and Integrating Scholarship into Practice	<b>Essential V</b> Informatics and Health Care Technology	Essential VI Health Policy and Advocacy	Essential VII Interprofessional Collaboration and Improving Patient and	<b>Essential VIII</b> Clinical Prevention and Population Health for Improving Health	<b>Essential IX</b> Master's-Level Nursing Practice
BSN-prepared nurses would achieve higher levels of education at the master's and doctoral levels, required for primary care providers, nurse researchers, and nurse faculty.	Х	Х		Х			Х		Х
The ADN-to-MSN program is establishing a significant pathway for educational progression, especially for community college graduates.	Х			Х					Х
Remove scope of practice barriers.		Х		Х			Х		Х

To assist schools looking to revamp their current programs and/or launch a new program that reflect the Master's Essentials, the following recommended steps have been developed to help faculty navigate this process. Key planning approaches are offered in the areas of market analysis, initiating change, identifying barriers and facilitators, approvals, marketing, faculty and staff development, program implementation, and evaluation.

TIPS FOR PLANNING MSN CURRICULAR CHANGES [PDF]

#### ESTIMATING COSTS FOR A NEW ACADEMIC PROGRAMS

Below are some of the expense categories to consider when estimating the costs for a new academic program. Some of these categories represent annual recurring costs and others represent one-time start up costs that will last some period of time before needing to be replaced or refreshed. For the one-time costs, for business planning purposes, the expense can be amortized across the number of years of expected useful life for the item.

Many of these expense categories (including department administration, financial and administrative support, dean's office, institutional support, etc.) represent expenses that the school already has, but it is important to consider whether there is an incremental cost associated with the development and launch of a new program or what approximate portion of the current cost should be allocated to the new program. For example, the school might already have a development and alumni relations team but with the launch of a new program, there might be additional support required to raise money to support scholarships for that program and to oversee alumni relations for the new program's graduates. Alternatively, the incremental cost might be able to be absorbed within the existing resource levels but a certain percentage of the existing resources should be allocated to the new program for purposes of determining the full cost of the program

#### **Annual Recurring Costs:**

Faculty salaries and benefits for course delivery, advising, and related responsibilities, including full-time faculty as well as part-time or adjunct faculty Tutorial/remedial costs for students, including teaching assistants, etc.

#### Program administration:

Academic Affairs Dean and Program Director salary and benefits Staff to the program director (salary and benefits) Clinical placement administration, including staff resources for identifying and evaluating placement sites as well as contract administration Supplies and services (copiers, phones, etc.) for the program administration staff Department administration to support and oversee the faculty required to teach in the program (if applicable): Department chair salary and benefits Department staff salary and benefits Supplies and services (copiers, phones, etc.) for the department staff and faculty IT and multimedia costs to support the faculty and students in the program Might include instructional design, online course support, and distance learning infrastructure needs as well as help desk support

Student services (staff salary and benefits, and supplies)

Admissions Financial aid Registrar Student accounts Advising, career services, and other student support services Funding for financial aid and scholarships

Marketing and promotion Staff salaries, benefits, and supplies Vendor costs for ad placement and related services Development and Alumni Relations (staff salary, benefits, and supplies)

Indirect cost for:

Space (square footage, utilities, maintenance and repair, custodial, insurance, security, etc.) Financial and administrative support (business services, human resources, payroll, purchasing, contract/legal services, etc.) School administration Institutional support Regulatory cost such as for government/commissioning body approvals, accreditation, etc.

Library, clinical lab, educational materials resources, and expenses

Development of the curriculum and courses

Faculty development

Special events (graduation, etc.) and extracurricular expenses to support student needs

Housing and auxiliary services such as food services, fitness, health services, etc. One-Time or Start-Up Costs:

Furniture and equipment for the program administration staff Furniture and equipment for the department staff (if applicable) Furniture and equipment for staff in student services, Distance learning infrastructure (equipment)

BUDGET TEMPLATE: RESPONSIBILITY COST MANAGEMENT MODEL [PDF]

### Program Development and Revision

#### Tips for Planning MSN Curricular Changes

Activities	Completion	Comments and
	Date	Factors to Consider
Market Analysis		
Engage a steering committee in planning the data to be collected, identifying the best data collection strategy, and planning how to analyze and report data to faculty as a whole.		
Survey key stakeholders about curricular elements, teaching strategies, class scheduling, student supports, availability of potential employment and needed knowledge, skills, and attributes.		
Develop one survey for potential students and another for potential employers with targeted questions for each group.		
Consider supplementing with focus groups with potential students and potential employers.		
Submit to human subjects committee.		
Pilot test survey instrument and recruitment methodology.		
Initiating Change		
Engage faculty leaders in determining nature and timing of curricular change and building support among faculty.		
Plan a strategy for the change process. Determine the types of meetings, groups, metrics for success, and celebrations of achievement of key indicators and milestones that best fit the organizational culture and goals for the change.		
Identify internal and external barriers and facilitators		
Will new resources be needed such as faculty, space, instructional supplies, and marketing materials?		
How will you obtain the necessary funds to support the resources identified above?		
Does resistance exist among key stakeholders? If so, how can their concerns be addressed?		
Determine organizational strengths and potential facilitators that can be deployed.		

Approvals and regulations	
Determine the types of organizational approvals that are needed, and those at the state level, and plan for timely submissions and monitoring of progress.	
Submit substantive change to CCNE if needed and to regional accreditors if required by academic institution.	
Marketing and recruitment	
Develop a strategic marketing and recruitment plan that will communicate effectively with key stakeholders. Identify specific plans for recruiting students and the faculty and staff needed to implement the program.	
Include in the marketing plan a strategy for maintaining connections with potential employers and preceptors.	
Faculty and staff development	
Determine the types of faculty and staff development needed to incorporate new knowledge, skills, and attitudes into the program.	
Identify unique or new student support services that will be needed.	
Program implementation	
Plan times for progress reports and making improvements based on formative evaluation.	
Include times to celebrate successes and quickly identify problems and corrections.	
Program evaluation	
Implement evaluation plans developed during initial program planning.	
Ensure a feedback loop for data to be included in faculty deliberations and program improvements.	
Document examples of feedback and program improvements for sharing in reports to the academic unit and accreditors as needed.	

#### **References**

- Bland, C., Starnaman, S., Wersal, L., Moorhead-Rosenburg, L., Zonia, S., & Henry, R. (2000). Curricular change in medical schools: how to succeed. *Academic Medicine*, 75, 575-594.
- Hawkins-Walsh, E., Crowley, A., Mazurek Melnyk, B., Beauchesne, M., Brandt, P., & O'Haver, J. (2011). Improving health-care quality through an AFPNP National Nursing Education Collaborative to strengthen PNP curriculum in mental/behavioral health and EBP: lessons learned from academic faculty and clinical preceptors. *Journal of Professional Nursing*, 27, 10-18.
- Siepina, V., Bulik, R., Baldwin, C., Frenkel, M., Gerik, S., Walters, D., & Frye, A. (2007). Creating sustainable curricular change: lessons learned from an alternative therapies educational module. *Academic Medicine*, 82, 341-350.

#### **RESPONSIBILITY COST MANAGEMENT MODEL**

This model assumes that the nursing program receives all of its own revenue and is responsible for all expenses. If the school receives an allocation from the college or university each year, the tuition row should be replaced with the revenue allocation from the parent unit. Each institution has its own policies for monitoring budget variances, which might occur monthly or quarterly. This type of budget template is often established for individual program units, or "cost centers" providing a way for the dean or director to monitor and plan for program level needs and college or department level needs. Individual program or cost center budgets are then aggregated into an overall budget for the school.

REVENUES	<b>Budgeted</b>	<u>Actual</u>		Variance
Tuition				
Course fees				
Lab fees				
Testing fees				
Contract fees				
Grants				
Faculty practice				
income				
CE income				
			-	
Endowment			-	
income				

EXPENSE	S			
	Salaries			
	Benefits			
	Equipment			
	Supplies			
	Travel			
	ITavei			
	Computing &			
	instructional			
	technology			
	Marketing & recruitment			
	Operating			
	expenses			
	Facilities costs			
	(utilities, leases,			
	etc.)			
TOTALS				Gain (Loss)

F	EVENUES					<u>Total</u> <u>Budgeted</u>	<u>Total</u> <u>Actual</u>
		Charge per credit hour		Projected number of	Projected number of		
			_	students per year	credit hours per student		
	Tuition						
	Course fees						
	Lab fees		_				
	Testing fees						

## Master's Education in Nursing and Areas of Practice

Graduates with a master's degree in nursing are prepared for a variety of roles and areas of practice. Graduates may pursue new and innovative roles that result from health reform and changes in an evolving and global healthcare system. Some graduates will pursue direct care practice roles in a variety of settings (e.g., the Clinical Nurse Leader (CNL), nurse educator). Others may choose indirect care roles or areas of practice with an aggregate, systems, or organizational focus, (e.g. nursing or health program management, informatics, public health, or clinical research coordinator). In addition to developing competence in all nine of the Essential core areas delineated in The Essentials of Master's Education in Nursing, each graduate will have additional course work in an area of practice or functional role. This coursework may include more in-depth preparation and competence in one or two of the Essentials or in an additional/ supplementary area of practice. For select areas of practice, specialty nursing organizations have developed nationally recognized competencies and curricular recommendations, which are required for certification and practice in these identified areas. Information regarding these areas of practice and linkages to the appropriate documents or competencies are included in the table below. Brief descriptions are presented of the major areas of practice for which master's graduates are currently prepared.

#### **Direct Care Roles**

#### Clinical Nurse Leader

The Clinical Nurse Leader or CNL is a master's prepared nurse and clinical leader in the healthcare delivery system in all settings in which care is delivered. The role may vary depending upon the setting and patient population. The CNL is educated with a focus on improving quality of care delivered at the microsystem or unit level. The CNL applies advanced competencies in nursing leadership, interprofessional communication, care environment management, integration and coordination of care, risk assessment, implementation of evidence-based practice, and evaluation of clinical outcomes. Nationally recognized competencies for the Clinical Nurse Leader (CNL) are delineated in the <u>White Paper on the Education and Role of the Clinical Nurse Leader</u> (AACN, 2007).

Students in a CNL program are eligible to sit for CNL certification offered by the Commission on Nurse Certification (CNC) immediately prior to or after graduation from an approved CNL master's or post-master's program. Eligibility criteria and additional information regarding the certification process and resources can be found at <u>http://www.aacn.nche.edu/cnl/cnc.</u>

#### Nurse Educator

The AACN *Preferred Vision of the Professoriate in Baccalaureate and Graduate Nursing Programs* (2008) states that "courses in the nursing program will be taught by faculty with graduate-level academic preparation and advanced expertise in the areas of content they teach."

There is national recognition, however, of the growing shortage of nursing educators to fill faculty and other educator roles within the healthcare delivery system. Master's programs that prepare graduates for nurse educator roles are designed to meet these needs. Nurses with a master's degree may teach patients and their families and/or student nurses, staff nurses, and a variety of direct-care providers. As outlined in Essential IX, all master's-prepared nurses will develop competence in applying teaching/learning principles in work with patients and/or students across the continuum of care in a variety of settings. However, as recommended in the Carnegie Foundation report (2009), Educating Nurses: A Call for Radical Transformation, those individuals who choose a nurse educator role, as do all master's graduates, require preparation across all nine Essential areas, including graduate-level clinical practice content and experiences in an area of nursing practice.

A program preparing individuals for a nurse educator role, in addition to focusing on the competencies in all nine Essential areas, should include course work in curriculum design and development, teaching methodologies, educational needs assessment, and learner-centered theories and methods. The master's prepared nurse educator differs from the baccalaureate nurse in depth of his/her understanding of the nursing discipline and nursing practice in addition to the added pedagogical skills. Further, in order to teach students, patients, and caregivers regarding health promotion, disease prevention, or disease management, the master's curriculum for the nurse educator builds on baccalaureate knowledge with *graduate-level content in the areas of health assessment, physiology/pathophysiology, and pharmacology* to strengthen the graduate's scientific background and facilitate his/her understanding of nursing and health-related information. In addition, the master's student who is being prepared for the educator role needs additional content in an identified area of nursing practice and opportunities in the practice environment to integrate this new knowledge and skills into one's nursing practice. Those master's students who aspire to faculty roles in baccalaureate and higher degree programs will be advised that additional education at the doctoral level is needed (AACN, 2008).

The National League for Nursing (NLN) has identified specific competencies related to the educator role as well as tasks associated with each of these competencies. These competencies can be accessed at <u>http://www.nln.org/profdev/corecompetencies.pdf</u>. A certification for academic nursing educators is also available; additional information regarding the certification criteria can be found at <u>http://www.nln.org/certification/index.htm</u>.

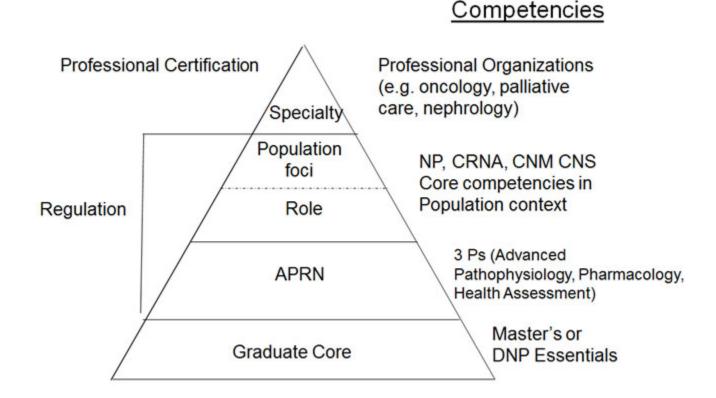
#### Advanced Practice Registered Nursing (APRN) Roles

In 2004, the member schools affiliated with the American Association of Colleges of Nursing (AACN) voted to endorse the *Position Statement on the Practice Doctorate in Nursing*. This decision called for moving the current level of preparation necessary for advanced nursing practice from the master's degree to the doctorate-level by the year 2015. This transition is moving forward rapidly. As of April 2011, 153 DNP programs were enrolling students at schools of nursing nationwide, and an additional 160 DNP programs were in the planning stages. DNP programs are available in 37 states plus the District of Columbia. Despite this rapid transition of APRN programs to the doctorate-level, it is recognized that for a variety of reasons not all programs will be transitioned by 2015. Master's degree nursing programs preparing graduates for any of the four APRN roles: certified registered nurse anesthetist (CRNA), certified nurse-

midwife (CNM), clinical nurse specialist (CNS), or nurse practitioner (NP), must include preparation in all nine Essential areas and must include three separate graduate-level courses in the following areas: advanced physiology/pathophysiology, advanced health assessment, and advanced pharmacology. These three courses, identified as the APRN Core, must meet the criteria delineated in the <u>2008 Consensus Model for APRN Regulation: Licensure,</u> <u>Accreditation, Certification, and Education</u>. In addition the expected outcomes for each of these three APRN core courses are delineated in <u>The Essentials of Doctoral Education for Advanced</u> <u>Nursing Practice</u>.

Nationally recognized competencies for each of the APRN roles have been established by the profession and are listed in the table on Graduate Roles and Advanced Role Competencies (p. 44). In addition to the role competencies, the APRN graduate must be prepared with nationally recognized competencies in at least one of six population foci. The population-focused competencies for the family/across the lifespan, pediatric acute care and pediatric primary care, neonatal, women's health, and psychiatric/mental health NP are under revision and should be available by early 2012. The population-focused competencies for the Adult-Gerontology Primary Care NP, Adult-Gerontology Acute Care NP and the Adult-Gerontology CNS are available at <a href="http://www.aacn.nche.edu/education-resources/competencies-olc">http://www.aacn.nche.edu/education-resources/competencies-olc</a>.

The components of the APRN curriculum are shown here:



APRN Joint Dialogue Group (2008). Consensus Model for APRN Regulation: Licensure, Accreditation, Certification, & Education. Retrieved February 2, 2011, from http://www.aacn.nche.edu/education-resources/APRNReport.pdf(page 7)

### Indirect Care Roles or Areas of Practice that Focus on Aggregates, Systems, or Organizations

#### Public Health Nurse

Specialist level competencies in public health nursing reflect preparation at the graduate degree level, which traditionally has been recognized at the master's degree level. Graduate education for advanced public health nursing practice is in transition. In 2007, the Association of Community Health Nursing Educators (ACHNE) published a statement that supports the national movement toward the practice doctorate as a terminal degree for advanced nursing practice. The document also addresses titling, challenges to the public health nursing workforce, characteristics of graduate prepared public health nursing is recognized as the preferred title; this designation differentiates this area of population-focused nursing practice from other practices that are community-based but are not population-focused. ACHNE also recognizes that the transition to the DNP degree may require the development of a variety of collaborative education models and will require the development of specific competencies for the doctorally prepared advanced public health nurse.

Public health nursing competencies have been delineated by the Quad Council, which is an alliance of the four national nursing organizations that address public health nursing issues: the Association of Community Health Nurse Educators (ACHNE), the American Nurses Association's Congress on Nursing Practice and Economics (ANA), the American Public Health Association-Public Health Nursing Section (APHA), and the Association of State and Territorial Directors of Nursing (ASTDN). The approach utilized by the Quad Council builds on the core competencies for all public health professionals and differentiates those aspects that are unique to public health nursing practice. Public health nurses are population-focused; however, these nurses also practice at the individual and family level.

Public health nurse educated at the master's degree level are prepared across all of the nine Essential areas with more in-depth preparation in Essential VIII (Clinical Prevention and Population Health for Improving Health). The master's graduate in advanced public health nursing would also demonstrate achievement of the competencies delineated by the Quad Council (2003).

#### **Informaticist**

The TIGER or Technology Informatics Guiding Education Reform initiative represents a collaborative of leaders and organizational advocates focused on nursing's role and responsibility in informatics. In addition to developing a minimum set of informatics competencies that all nurses need to have to practice in the current health care system, the TIGER vision recognizes the need for developing leaders in management and informatics. The beginning-level for specialty education in nursing informatics is recognized as the master's degree level. In addition to preparation with the outcome competencies in all nine Essential areas, the graduate would receive more in-depth content and experiences in Essential V, Informatics and Health Care Technologies.

#### **Clinical Research Coordinator**

The clinical research coordinator is educated to work with the doctorally prepared nurse or health professional researcher. The clinical research coordinator is prepared to provide support on and coordinate a variety of types of nursing or other health related research. In addition to preparation in all nine Essential areas, more concentrated coursework or further development of the knowledge and skills embedded in Essential IV, Translational Scholarship for Evidence-Based Practice, are needed to prepare the nurse to manage research projects for nurse scientists and other healthcare researchers working in multi-professional research teams. As in all master's degree nursing education programs, students should have formal clinical/practice experiences within the program to further develop and integrate new knowledge and skills in an area of nursing practice. Currently, no nationally recognized competencies and curricular recommendations exist for this specific master's education track.

#### Nurse Administrator or Manager

Preparation of the nurse administrator or manager is at the graduate level, either the master's or doctoral level. Individuals with graduate level preparation in nursing management or administration are needed to fill a variety of roles across the healthcare delivery system. In addition to preparation in the nine Essential areas, more in-depth preparation in Essential II, Organizational and System Leadership, will provide knowledge useful for nursing management roles. The Council on Graduate Education for Administration in Nursing (CGEAN) and the American Organization of Nurse Executives (AONE) have developed nationally recognized competencies for the educational preparation of nurse executives. These competencies can be accessed at http://www.aone.org/resources/leadership. In addition, two separate certifications are offered by AONE for graduates with a focus on nursing administration or management: Certified in Executive Nursing Practice (CENP) and Certified Nurse Manager and Leader (CNML). Graduates with a master's or higher degree with a focus on nurse executive practice plus two years of experience are eligible for the CENP. Graduates of BSN or higher degree programs with two or more years of experience in a nurse manager role are eligible to sit for the CNML, offered in partnership with the American Association of Critical Care Nurses. Additional information regarding eligibility and certification in these two areas can be found at http://www.aone.org/resources/certification/about certifications.shtml.

#### Graduate Roles and Advanced Role Competencies

	Advanced Role Competencies
Direct Care Roles	
Clinical Nurse Leader	CNL Steering Committee, AACN CNL White Paper http://www.aacnnursing.org/News-Information/Position-Statements-White-Papers/CNL QSEN Website http://www.qsen.org/competencies.php Graduate QSEN KSAs http://www.qsen.org/ksas_graduate.php
Nurse Educator • Academia • Healthcare Organization	AACN Preferred Vision for the Professoriate http://www.aacnnursing.org/News-Information/Position-Statements-White-Papers/Professoriate CNL White Paper http://www.aacnnursing.org/News-Information/Position-Statements-White-Papers/CNL NLN Core Competencies of Nurse Educators: http://www.nln.org/profdev/corecompetencies.pdf
APRN	APRN Consensus Document, http://www.aacnnursing.org/Portals/42/AcademicNursing/pdf/APRNReport.pdf AACN Adult Gerontology APRN Competencies http://www.aacnnursing.org/Portals/42/AcademicNursing/pdf/Adult-Gero-NP-Comp-2016.pdf

	NONPF Core Competencies for Nurse Practitioners (2011) http://www.nonpf.com/associations/10789/files/IntegratedNPCoreCompsFINALApril2011.pdf NONPF National Criteria for Evaluation of NPs (NTF) http://www.nonpf.com/associations/10789/files/NTFEvalCriteria2008Final.pdf NACNS Clinical Nurse Specialist Core Competencies http://www.nacns.org/docs/CNSCoreCompetenciesBroch.pdf AANA Nurse Anesthetist Competencies http://www.aana.com/resources2/professionalpractice/Documents/PPM%20Scope%20of%20Nurse %20Anesthesia%20Practice.pdf ACNM Core Competencies for Basic Midwifery Practice http://www.midwife.org/siteFiles/descriptive/Core_Competencies_6_07.pdf
Indirect Care Roles Public Health Nurse	Quad Council Public Health Nursing Competencies http://www.astdn.org/publication_quad_council_phn_competencies.htm ACHNE Graduate Education for Advanced Practice Public Health Nursing: At the Crossroads http://www.achne.org/files/public/GraduateEducationDocument.pdf

Nurse Informaticist (beginning level)	Healthcare Leadership Alliance Competency Directory (HLA) <u>http://www.healthcareleadershipalliance.org/HLA_Competency_Directory_Guide.pdf</u> Technology Informatics Guiding Educational Reform: The Tiger Initiative: <u>http://www.tigersummit.com/uploads/TIGER_Collaborative_Exec_Summary_040509.pdf</u>
Clinical Research	AACN Position on the Research-Focused Doctorate
Coordinator	http://www.aacnnursing.org/Portals/42/Publications/PhDPosition.pdf
Nurse Administrator or Manager	CGEAN Position Statement on the Educational Preparation of Nurse Executives and Nurse Managers http://www.cgean.org/documents/2011/CGEAN_Positon_on_Educational_Preparation.pdf Council on Graduate Education for Administration in Nursing (CGEAN) http://www.cgean.org/ AONE Nurse Executive Competencies http://chhs.gmu.edu/pdf%20files/office_of_academic_outreach/pdf/2010-NAL-AONE.pdf



# Achieving the Triple Aim: A Curriculum Framework for Health Professions Education

Mary A. Paterson, PhD,<sup>1</sup> Malika Fair, MD, MPH,<sup>2,3</sup> Suzanne B. Cashman, ScD,<sup>4</sup> Clyde Evans, PhD,<sup>5</sup> David Garr, MD<sup>6</sup>

The 2014 Clinical Prevention and Population Health Curriculum Framework in this issue of the American Journal of Preventive Medicine<sup>1</sup> is described as a resource for preparing health professionals to achieve the Triple Aim: improving the patient experience of care, reducing the per capita cost of care, and improving the health of the population. The strengths of the Framework in guiding health professions education are described and the consensus-based process that included members from major health professional organizations to develop the Framework is discussed. Links are provided to examples illustrating the Framework's use in health professions educational settings.

### Introduction

The U.S. healthcare system is changing, stimulated by dissatisfaction with poor outcomes and high costs. The Triple Aim goals—improving the patient experience of care, reducing the per capita cost of care, and improving the health of the population<sup>2</sup>—define the direction of change. Achieving these goals will require significant change in health professions education. There is agreement that future healthcare providers will need excellent clinical knowledge, solid grounding in health promotion and disease prevention, the ability to use evidence-based guidelines, and the competencies required for practice in interprofessional teams. A curriculum is required that enables health professionals to use the knowledge and skills of public health to think in terms of populations

0749-3797/\$36.00

http://dx.doi.org/10.1016/j.amepre.2015.03.027

while using clinical skills, emphasize prevention while treating acute and chronic conditions, and understand the implications of health policy while dealing with its impact on current and future patients.

In 2004, the Association for Prevention Teaching and Research (APTR) Healthy People Curriculum Task Force (HPCTF) created a framework for just such a curriculum: the Clinical Prevention and Population Health Curriculum Framework. The HPCTF, established in 2002 by the APTR, has members who represent the disciplines of allied health, allopathic and osteopathic medicine, dental medicine, pharmacy, physician assistant studies, public health, and undergraduate and advanced practice nursing.<sup>a</sup> The work has focused first on defining health promotion and disease prevention and then on increasing the proportion of health professional schools that incorporate this educational content into their curricula. Since the release of the original Framework, a majority of the health professional schools have included Framework elements in their accreditation structure, didactic curricula, and experiential learning opportunities.<sup>b</sup>

Changes in our health system nationally have resulted in updates to the HPCTF Curriculum Framework that enable health professions educators to look forward and keep pace with these system changes. The first update was completed in 2009; now, a new update is ready for use. This paper describes the 2014 Framework's purpose: to function as a guide for strengthening the focus of health professions education and accrediting bodies on prevention and population health, essential components of the Triple Aim.

From the <sup>1</sup>School of Nursing, Catholic University of America, Washington, District of Columbia; <sup>2</sup>Public Health Initiatives, Washington, District of Columbia; <sup>3</sup>Association of American Medical Colleges, Washington, District of Columbia; <sup>4</sup>Department of Family Medicine and Community Health, University of Massachusetts Medical School, Worcester, Massachusetts; <sup>5</sup>CE Consulting, Needham, Massachusetts; and the <sup>6</sup>Department of Family Medicine, Medical University of South Carolina, Charleston, South Carolina

Address correspondence to: Mary A. Paterson, PhD, The Catholic University of America, 600 Michigan Ave. NE, Washington DC 20064. E-mail: paterson@cua.edu.

<sup>&</sup>lt;sup>a</sup>The member organizations of the APTR HPCTF are: American Association of Colleges of Nursing, American Association of Colleges of Osteopathic Medicine, American Association of Colleges of Pharmacy, American Dental Education Association, Association of American Medical Colleges, Association of Schools of Allied Health Professions, National Organization of Nurse Practitioner Faculties, Physician Assistant Education Association. Resource organizations: Community–Campus Partnerships for Health, Association of Schools and Programs of Public Health.

<sup>&</sup>lt;sup>b</sup>Examples of these curriculum innovations are provided on the APTR website: www.aptrweb.org/?SuccessfulPractices.

#### Background

The healthcare landscape has changed during the 10 years since the initial version of the Curriculum Framework as evidenced by

- 1. increased focus on population health through the publication of the Triple Aim in 2008<sup>2</sup> and the passage of the Patient Protection and Affordable Care Act in 2010;
- 2. proliferation of patient-centered medical homes and accountable care organizations that require health workers who understand how to use these delivery strategies to improve population health;
- 3. release in 2011 of the Core Competencies for Interprofessional Collaborative Practice<sup>3</sup> from the Interprofessional Education Collaborative, which further emphasized the importance of interprofessional training opportunities and acknowledged a need for a population-oriented focus for healthcare teams;
- 4. federal advisory committee recommendations to the Secretary of the DHHS urging health professions licensing bodies to "…measure entering health professionals' understanding of population health and their ability to integrate population health strategies into practice."<sup>4</sup> This same document encourages the Health Resources and Services Administration in the DHHS to support funding to increase a population health focus in the curricula of health professions education programs; and
- 5. the challenge to academic health centers to embrace disruptive change and assume a leadership role in increasing curricula's population health content.<sup>5</sup>

In recognition of these trends, the 2014 version of the Curriculum Framework expands to include more significant educational content in population health. This version incorporates input not only from HPCTF members but also from members of the Framing the Future– Population Health in All Professions Expert Panel, a group convened in 2014 by the Association of Schools and Programs in Public Health as part of its Framing the Future Task Force. Both groups share the goal of improved health outcomes through attention to prevention and population health in clinical education and practice.

# Educational Impact of the Framework and Task Force Contributions

Since its release in 2004, the Framework has been used by programs to guide curriculum design. Another significant accomplishment of the HPCTF has been the sustained, ongoing dialogue among multiple health

professions' educators. This dialogue has been essential to development of a quality Framework suitable for health professions. In addition, the unique nature of this collaboration has been critical to the Framework's adoption in accreditation standards, licensure exams, and certification requirements, as well as to an increased emphasis on these important areas of focus in the work of interprofessional teams. For example, the American Association of Medical Colleges identified the Framework as one of the references to guide improvement of population health education in medical schools and residency programs. The American Association of Colleges of Osteopathic Medicine reflects Healthy People 2020 curriculum objectives in the osteopathic medical core competencies. The American Association of Colleges of Nursing, the Center for Advancement of Pharmaceutical Education, and the Accreditation Standards for Physician Assistant Programs all include training in population health as a key component for educational programs in their disciplines. Additional specific examples are provided in the Curriculum Framework appendices available at the APTR website (www.aptrweb.org/? page=CPPH\_Framework). Specific references to the Framework and incorporation of population health objectives in accreditation standards attest to the importance of the topic and the Framework in health professions education.

# The 2014 Revision of the Curriculum Framework

The Task Force felt that the Framework's Clinical Preventive Services and Health Promotion as well as the Health System and Health Policy components had stood up well with time and warranted only modest revision; thus, they are largely unchanged. More substantive changes, including a change in title, were made in the remaining two components. Regarding the title change, no longer is one entire section devoted to a topic titled Evidence-Based Practice. Cognizant of the potential for this to be viewed as limited to the level of one-on-one clinical interaction, the Task Force changed the title to Foundations of Population Health, with the topic of Descriptive Epidemiology: the Health of Populations subsumed under it. Also newly specified within this component are references to social determinants of health and improving the health of populations, with the result clearly being that healthcare professionals begin to consider how they will contribute to both identifying and helping to effect change in the determinants of health. Additionally, in this revision, Evaluation has become a full topic itself as opposed to being included under a category and Population Health Informatics is a

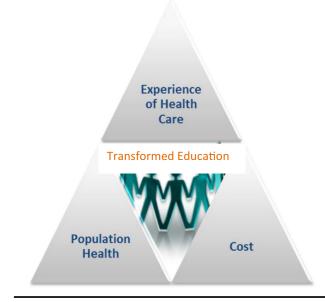


Figure 1. Transformed education and the Triple Aim.

new addition. Although the 2009 version included the idea of Population Health, it had been paired with Community Aspects of Practice. The 2014 revisions results in that segment being retitled as Incorporating Population Health into Clinical Care. The Task Force saw this change as explicitly strengthening the learners' need to understand how populations and individuals are linked. Additionally, within this category, a newly named topic, Partnering with the Public to Improve Health, captures recent landscape changes that call for increased collaboration across boundaries. The Task Force expanded this newly named topic to include areas such as understanding community-engaged research and engaging patients in reviewing health information. Finally, reflecting a continued national focus on preparedness, newly added to this category is the topic of Emergency Preparedness and Response Systems.

Overall, the revised version also includes numerous resources and examples of how the Curriculum Framework has been used in developing accreditation standards, curricula, and practical experiences for health professional programs (Figure 1).

#### Conclusions

The 2014 Clinical Prevention and Population Health Curriculum Framework is a resource to equip future health professionals with the knowledge and skills needed to achieve the Triple Aim. The Framework can also be used to facilitate collaboration between campusbased faculty and community-based clinicians to increase their population health skills and their contributions to the achievement of the Triple Aim.

The Curriculum Framework is the result of a longstanding, consensus-based partnership of health professions educators who collaborate in preparing the Framework as well as in outlining its importance to the health professions.<sup>c</sup> The result of this collaborative work is a Curriculum Framework that can support transformative change in health professions education and healthcare delivery in the U.S. through shared curriculum standards that build a common platform for the education of health professionals. In the future, the Framework can form the basis for shared evaluation of educational outcomes and the impact of interdisciplinary healthcare teams.

No financial disclosures were reported by the authors of this paper.

#### References

- American College of Preventive Medicine. Clinical prevention and population health curriculum framework. *Am J Prev Med.* 2015;49(2): A5–A13.
- Berwick D, Nolan T, Wittington J. The triple aim: care, health and cost. *Health Aff (Millwood)*. 2008;27(3):759–769. http://dx.doi.org/10.1377/ hlthaff.27.3.759.
- Interprofessional Education Collaborative. Core competencies for interprofessional collaborative practice. 2011. www.aacn.nche.edu/edu cation-resources/ipecreport.pdf.
- 4. Advisory Committee on Interdisciplinary, Community-Based Linkages (ACICBL). Redesigning health professions education and practice to prepare the interprofessional team to care for populations. August 2013. Twelfth annual report to the Secretary of the U.S. DHHS and the Congress of the U.S. www.hrsa.gov/advisorycommittees/bhpradvisory/ acicbl/Reports/twelfthreport\_.pdf.
- Gourevitch M. Population health and the academic medical center: the time is right. *Acad Med.* 2014;89(4):544–549. http://dx.doi.org/10.1097/ ACM.000000000000171.

<sup>&</sup>lt;sup>c</sup>For example, the members of the HPCTF Curriculum Taskforce provided important review and comments on this manuscript during its preparation and prepared the curriculum examples.

# Crosswalk of the Master's Essentials with the Baccalaureate and DNP Essentials

### **Essential 1: Background for Practice from Sciences and Humanities**

Baccalaureate: Liberal Education for	Master's: Background for Practice from	DNP: Scientific Underpinnings for Practice
Baccalaureate Generalist Nursing Practice	Sciences and Humanities	
1. Integrate theories and concepts from liberal education into nursing practice.	1. Integrate nursing and related sciences into the delivery of advanced nursing care to diverse populations.	1. Integrate nursing science with knowledge from ethics, the biophysical, psychosocial, analytical, and organizational sciences as the
2. Synthesize theories and concepts from liberal education to build an understanding of the human experience.	2. Incorporate current and emerging genetic/genomic evidence in providing advanced nursing care to individuals, families, and communities while accounting for patient values and clinical judgment.	<ul><li>basis for the highest level of nursing practice.</li><li>2. Use science-based theories and concepts to:</li><li>determine the nature and significance of health and health care delivery phenomena;</li></ul>
3. Use skills of inquiry, analysis, and information literacy to address practice issues.	3. Design nursing care for a clinical or community-focused population based on	• describe the actions and advanced strategies to enhance, alleviate, and ameliorate health and health care delivery phenomena as appropriate; and
4. Use written, verbal, nonverbal, and emerging technology methods to communicate effectively.	<ul><li>biopsychosocial, public health, nursing, and organizational sciences.</li><li>4. Apply ethical analysis and clinical reasoning</li></ul>	• evaluate outcomes.
5. Apply knowledge of social and cultural factors to the care of diverse populations.	to assess, intervene, and evaluate advanced nursing care delivery.	3. Develop and evaluate new practice approaches based on nursing theories and theories from other disciplines.
6. Engage in ethical reasoning and actions to provide leadership in promoting advocacy, collaboration, and social justice as a socially	5. Synthesize evidence for practice to determine appropriate application of interventions across diverse populations.	
	6. Use quality processes and improvement	

responsible citizen.	science to evaluate care and ensure patient safety	
7. Integrate the knowledge and methods of a variety of disciplines to inform decision making.	for individuals and communities. 7. Integrate organizational science and informatics to make changes in the care	
8. Demonstrate tolerance for the ambiguity and unpredictability of the world and its effect on the	environment to improve health outcomes.	
healthcare system.	8. Analyze nursing history to expand thinking and provide a sense of professional heritage and	
9. Value the ideal of lifelong learning to support excellence in nursing practice.	identity.	

# Essential 2: Organizational and Systems Leadership

Baccalaureate: Basic Organizational and	Master's: Organizational and Systems	DNP: Organizational and Systems Leadership
Systems Leadership for Quality Care and Patient Safety	Leadership	for Quality Improvement and Systems Thinking
<ol> <li>Apply leadership concepts, skills, and decision making in the provision of high quality nursing care, healthcare team coordination, and the oversight and accountability for care delivery in a variety of settings.</li> <li>Demonstrate leadership and communication skills to effectively implement patient safety and quality improvement initiatives within the context of the interprofessional team.</li> <li>Demonstrate an awareness of complex organizational systems.</li> <li>Demonstrate a basic understanding of organizational structure, mission, vision, philosophy, and values.</li> <li>Participate in the development and implementation of imaginative and creative strategies to enable systems to change.</li> </ol>	<ol> <li>Apply leadership skills and decision making in the provision of culturally responsive, high- quality nursing care, healthcare team coordination, and the oversight and accountability for care delivery and outcomes.</li> <li>Assume a leadership role in effectively implementing patient safety and quality improvement initiatives within the context of the interprofessional team using effective communication (scholarly writing, speaking, and group interaction) skills.</li> <li>Develop an understanding of how healthcare delivery systems are organized and financed (and how this affects patient care) and identify the economic, legal, and political factors that influence health care.</li> <li>Demonstrate the ability to use complexity science and systems theory in the design, delivery, and evaluation of health care.</li> <li>Apply business and economic principles and practices, including budgeting, cost/benefit</li> </ol>	<ol> <li>Develop and evaluate care delivery approaches that meet current and future needs of patient populations based on scientific findings in nursing and other clinical sciences, as well as organizational, political, and economic sciences.</li> <li>Develop and/or evaluate effective strategies for managing the ethical dilemmas inherent in patient care, the health care organization, and research.</li> </ol>
	analysis, and marketing, to develop a business plan.	

6. Design and implement systems change	
strategies that improve the care environment.	
7. Participate in the design and implementation of new models of care delivery and coordination.	

## **Essential 3: Quality Improvement and Safety**

Baccalaureate: Basic Organizational and Systems Leadership for Quality Care and Patient Safety	Master's: Quality Improvement and Safety	DNP: Organizational and Systems Leadership for Quality Improvement and Systems Thinking
<ul> <li>5. Participate in quality and patient safety initiatives, recognizing that these are complex system issues, which involve individuals, families, groups, communities, populations, and other members of the healthcare team.</li> <li>6. Apply concepts of quality and safety using structure, process, and outcome measures to identify clinical questions and describe the process of changing current practice.</li> <li>7. Promote factors that create a culture of safety and caring.</li> </ul>	<ol> <li>Analyze information about quality initiatives recognizing the contributions of individuals and inter-professional healthcare teams to improve health outcomes across the continuum of care.</li> <li>Implement evidence-based plans based on trend analysis and quantify the impact on quality and safety.</li> <li>Analyze information and design systems to sustain improvements and promote transparency using high reliability and just culture principles.</li> </ol>	<ul> <li>2. Ensure accountability for quality of health care and patient safety for populations with whom they work.</li> <li>a. Use advanced communication skills/processes to lead quality improvement and patient safety initiatives in health care systems.</li> <li>b. Employ principles of business, finance, economics, and health policy to develop and implement effective plans for practice-level and/or system-wide practice initiatives that will improve the quality of care delivery.</li> </ul>
<ul> <li>8. Promote achievement of safe and quality outcomes of care for diverse populations.</li> <li>9. Apply quality improvement processes to effectively implement patient safety initiatives and monitor performance measures, including nurse sensitive indicators in the microsystem of care.</li> <li>10. Use improvement methods, based on data from the outcomes of care processes, to design and test changes to continuously improve the</li> </ul>	<ul> <li>4. Compare and contrast several appropriate quality improvement models.</li> <li>5. Promote a professional environment that includes accountability and high-level communication skills when involved in peer review, advocacy for patients and families, reporting of errors, and professional writing.</li> <li>6. Contribute to the integration of healthcare services within systems to affect safety and</li> </ul>	<ul> <li>c. Develop and/or monitor budgets for practice initiatives.</li> <li>d. Analyze the cost-effectiveness of practice initiatives accounting for risk and improvement of health care outcomes.</li> <li>e. Demonstrate sensitivity to diverse organizational cultures and populations, including patients and providers.</li> </ul>

quality and safety of health care.	quality of care to improve patient outcomes and	
11. Employ principles of quality improvement,	reduce fragmentation of care.	
healthcare policy, and cost effectiveness to assist in the development and initiation of effective	7. Direct quality improvement methods to promote culturally responsive, safe, timely,	
plans for the microsystem and/or system wide practice improvements that will improve the	effective, efficient, equitable, and patient- centered care.	
quality of healthcare delivery.	8. Lead quality improvement initiatives that integrate socio-cultural factors affecting the	
	delivery of nursing and healthcare services.	

# Essential 4: Translating and Integrating Scholarship into Practice

Baccalaureate: Scholarship for Evidence-Based	Master's: Translating and Integrating	DNP: Clinical Scholarship and Analytical
Practice	Scholarship into Practice	Methods for Evidence-Based Practice
<ul> <li>Practice</li> <li>1. Explain the interrelationships among theory, practice, and research.</li> <li>2. Demonstrate an understanding of the basic elements of the research process and models for applying evidence to clinical practice.</li> <li>3. Advocate for the protection of human subjects in the conduct of research.</li> <li>4. Evaluate the credibility of sources of information, including but not limited to databases and Internet resources.</li> <li>5. Participate in the process of retrieval, appraisal, and synthesis of evidence in collaboration with other members of the healthcare team to improve patient outcomes.</li> <li>6. Integrate evidence, clinical judgment, interprofessional perspectives, and patient preferences in planning, implementing, and evaluating outcomes of care.</li> <li>7. Collaborate in the collection, documentation, and dissemination of evidence.</li> </ul>	<ol> <li>Scholarship into Practice</li> <li>Integrate theory, evidence, clinical judgment, research, and interprofessional perspectives using translational processes to improve practice and associated health outcomes for patient aggregates.</li> <li>Advocate for the ethical conduct of research and translational scholarship (with particular attention to the protection of the patient as a research participant).</li> <li>Articulate to a variety of audiences the evidence base for practice decisions, including the credibility of sources of information and the relevance to the practice problem confronted.</li> <li>Participate, leading when appropriate, in collaborative teams to improve care outcomes and support policy changes through knowledge generation, knowledge dissemination, and planning and evaluating knowledge implementation.</li> <li>Apply practice guidelines to improve practice and the care environment.</li> </ol>	<ul> <li>Methods for Evidence-Based Practice</li> <li>1. Use analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice.</li> <li>2. Design and implement processes to evaluate outcomes of practice, practice patterns, and systems of care within a practice setting, health care organization, or community against national benchmarks to determine variances in practice outcomes and population trends.</li> <li>3. Design, direct, and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable, and patient-centered care.</li> <li>4. Apply relevant findings to develop practice guidelines and improve practice and the practice environment.</li> <li>5. Use information technology and research methods appropriately to:</li> <li>• collect appropriate and accurate data to generate evidence for nursing practice</li> </ul>
8. Acquire an understanding of the process for how nursing and related healthcare quality and	6. Perform rigorous critique of evidence derived from databases to generate meaningful evidence	• inform and guide the design of databases that

safety measures are developed, validated, and	for nursing practice.	generate meaningful
<ul> <li>9. Describe mechanisms to resolve identified practice discrepancies between identified standards and practice that may adversely impact patient outcomes.</li> </ul>		<ul> <li>evidence for nursing practice</li> <li>analyze data from practice</li> <li>design evidence-based interventions</li> <li>predict and analyze outcomes</li> <li>examine patterns of behavior and outcomes</li> <li>identify gaps in evidence for practice</li> </ul>
		<ul><li>6. Function as a practice specialist/consultant in collaborative knowledge-generating research.</li><li>7. Disseminate findings from evidence-based practice and research to improve healthcare outcomes</li></ul>

## **Essential 5: Informatics and Healthcare Technologies**

7. Recognize the role of information technology
in improving patient care outcomes and creating a safe care environment.
8. Uphold ethical standards related to data security, regulatory requirements, confidentiality, and clients' right to privacy.
9. Apply patient care technologies as appropriate to address the needs of a diverse patient population.
10. Advocate for the use of new patient care technologies for safe, quality care.
11. Recognize that redesign of workflow and care processes should precede implementation of care technology to facilitate nursing practice.
12. Participate in evaluation of information systems in practice settings through policy and procedure development.

## **Essential 6: Health Policy and Advocacy**

Regulatory EnvironmentsCareDemonstrate basic knowledge of healthcare policy, finance, and regulatory environments, including local, state, national, and global healthcare trends.1. Analyze how policies influence the structure and financing of health care, practice, and health outcomes.1. Critically analyze health policy proposa health policies, and related issues from the perspective of consumers, nursing, other h professions, and other stakeholders in poli public forums.2. Describe how health care is organized and financed, including the implications of business principles, such as patient and system cost factors.2. Participate in the development and implementation of institutional, local, and state and federal policy.1. Critically analyze health policy proposa health care is organized and implementation of institutional, local, and state and federal policy.3. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.3. Examine the effect of legal and regulatory processes on nursing practice, healthcare delivery, and outcomes.3. Influence policy makers through active participation on committees, boards, or tat forces at the institutional, local, state, regi national, and/or international levels to imp health care delivery and outcomes.4. Examine legislative and regulatory processes5. Adveceta for genelicies that imprevent the health	
<ul> <li>policy, finance, and regulatory environments, including local, state, national, and global healthcare trends.</li> <li>2. Describe how health care is organized and financed, including the implications of business principles, such as patient and system cost factors.</li> <li>3. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.</li> <li>4. Examine legislative and regulatory processes</li> <li>and financing of health care, practice, and health outcomes.</li> <li>and financing of health care, practice, and health outcomes.</li> <li>bealth care is organized and implementation of institutional, local, and state and federal policy.</li> <li>3. Examine the effect of legal and regulatory processes on nursing practice, healthcare delivery, and outcomes.</li> <li>4. Examine legislative and regulatory processes</li> </ul>	
<ul> <li>policy, finance, and regulatory environments, including local, state, national, and global healthcare trends.</li> <li>2. Describe how health care is organized and financed, including the implications of business principles, such as patient and system cost factors.</li> <li>3. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.</li> <li>4. Examine legislative and regulatory processes</li> </ul>	0
<ul> <li>including local, state, national, and global healthcare trends.</li> <li>2. Describe how health care is organized and financed, including the implications of business principles, such as patient and system cost factors.</li> <li>3. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.</li> <li>4. Examine legislative and regulatory processes</li> <li>4. Examine legislative and regulatory processes</li> <li>5. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.</li> <li>6. Examine legislative and regulatory processes</li> <li>7. Participate in the development and implementation of institutional, local, and state and federal policy.</li> <li>7. Participate in the development and implementation of institutional, local, and regulatory processes on nursing practice, healthcare delivery, and outcomes.</li> <li>8. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>9. Demonstrate leadership in the developm and implementation of institutional, local, forces at the institutional, local, state, regin national, and/or international levels to implementational levels to implementati</li></ul>	8,
<ul> <li>healthcare trends.</li> <li>2. Describe how health care is organized and financed, including the implications of business principles, such as patient and system cost factors.</li> <li>3. Examine the effect of legal and regulatory processes on nursing practice, healthcare delivery, and outcomes.</li> <li>4. Examine legislative and regulatory processes</li> </ul>	alth
<ul> <li>2. Describe how health care is organized and financed, including the implications of business principles, such as patient and system cost factors.</li> <li>3. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.</li> <li>4. Examine legislative and regulatory processes</li> <li>4. Examine legislative and regulatory processes</li> <li>2. Participate in the development and implementation of institutional, local, and state and federal policy.</li> <li>3. Examine the effect of legal and regulatory processes on nursing practice, healthcare delivery, and outcomes.</li> <li>4. Examine legislative and regulatory processes</li> </ul>	
<ul> <li>2. Describe how health care is organized and financed, including the implications of business principles, such as patient and system cost factors.</li> <li>3. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.</li> <li>4. Examine legislative and regulatory processes</li> </ul>	5
<ul> <li>principles, such as patient and system cost factors.</li> <li>3. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.</li> <li>4. Examine legislative and regulatory processes</li> <li>5. Examine the effect of legal and regulatory processes</li> <li>6. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>7. Examine legislative and regulatory processes</li> <li>8. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> <li>9. Examine the effect of legal and regulatory processes</li> </ul>	
factors.3. Examine the effect of legal and regulatory processes on nursing practice, healthcare delivery, and outcomes.federal, and/or international health policy.3. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.3. Examine the effect of legal and regulatory processes on nursing practice, healthcare delivery, and outcomes.3. Influence policy makers through active participation on committees, boards, or tas forces at the institutional, local, state, regi national, and/or international levels to imp health care delivery or delivery or delivery.	
<ul> <li>a. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.</li> <li>4. Examine legislative and regulatory processes</li> <li>b. Examine legislative and regulatory processes</li> <li>c. The processes on nursing practice, healthcare delivery, and outcomes.</li> <li>d. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>d. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>d. Examine legislative and regulatory processes</li> </ul>	state,
<ul> <li>3. Compare the benefits and limitations of the major forms of reimbursement on the delivery of health care services.</li> <li>4. Examine legislative and regulatory processes</li> <li>4. Examine legislative and regulatory processes</li> <li>4. Examine legislative and regulatory processes</li> <li>5. Compare the benefits and limitations of the delivery and outcomes.</li> <li>6. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>6. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>7. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>8. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>9. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>9. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> </ul>	
<ul> <li>major forms of reimbursement on the delivery of health care services.</li> <li>4. Examine legislative and regulatory processes</li> <li>4. Examine legislative and regulatory processes</li> <li>4. Examine legislative and regulatory processes</li> <li>5. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>6. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>6. Interpret research, bringing the nursing perspective, for policy makers and stakeholders.</li> <li>7. Examine legislative and regulatory processes</li> </ul>	
4. Examine legislative and regulatory processes	K
4. Examine legislative and regulatory processes	nal,
4. Examine legislative and regulatory processes because the second secon	ove
relevant to the provision of health care. 5. Advocate for policies that improve the health	
of the public and the profession of nursing. 4. Educate others, including policy makers	at all
5. Describe state and national statutes, rules, and levels, regarding nursing, health policy, and	
regulations that authorize and define patient care outcomes.	
professional nursing practice.	
6. Explore the impact of sociocultural, 5. Advocate for the nursing profession with policy and healthcare communities	in the
b. Explore the impact of sociocultural, economic, legal, and political factors influencing	
healthcare delivery and practice. 6. Develop, evaluate, and provide leadersh	ip for
health care policy that shapes health care	T 101
7. Examine the roles and responsibilities of the financing, regulation, and delivery.	
regulatory agencies and their effect on patient	
care quality, workplace safety, and the scope of	

nursing and other health professionals' practice.8. Discuss the implications of healthcare policy on issues of access, equity, affordability, and social justice in healthcare delivery.	7. Advocate for social justice, equity, and ethical policies within all healthcare arenas.
9. Use an ethical framework to evaluate the impact of social policies on health care, especially for vulnerable populations.	
10. Articulate, through a nursing perspective, issues concerning healthcare delivery to decision makers within healthcare organizations and other policy arenas.	
11. Participate as a nursing professional in political processes and grassroots legislative efforts to influence healthcare policy.	
12. Advocate for consumers and the nursing profession.	

## **Essential 7: Interprofessional Collaboration for Improving Patient and Population Health Outcomes**

Baccalaureate: Interprofessional Communication	Master's: Interprofessional Collaboration for	DNP: Interprofessional Collaboration for
and Collaboration for Improving Patient Health	Improving Patient and Population Health	Improving Patient and Population Health
Outcomes	Outcomes	Outcomes
<ol> <li>Compare/contrast the roles and perspectives of the nursing profession with other care professionals on the healthcare team (i.e., scope of discipline, education and licensure requirements).</li> <li>Use inter- and intraprofessional communication and collaborative skills to</li> </ol>	<ol> <li>Advocate for the value and role of the professional nurse as member and leader of interprofessional healthcare teams.</li> <li>Understand other health professions' scopes of practice to maximize contributions within the healthcare team.</li> </ol>	<ol> <li>Employ effective communication and collaborative skills in the development and implementation of practice models, peer review, practice guidelines, health policy, standards of care, and/or other scholarly products.</li> <li>Lead interprofessional teams in the analysis of complex practice and organizational issues.</li> </ol>
deliver evidence based, patient centered care.	3. Employ collaborative strategies in the design, coordination, and evaluation of patient-centered	3. Employ consultative and leadership skills
3. Incorporate effective communication techniques, including negotiation and conflict resolution to produce positive professional working relationships.	<ul><li>care.</li><li>4. Use effective communication strategies to develop, participate, and lead interprofessional teams and partnerships.</li></ul>	with intraprofessional and interprofessional teams to create change in health care and complex healthcare delivery systems.
4. Contribute the unique nursing perspective to interprofessional teams to optimize patient outcomes.	5. Mentor and coach new and experienced nurses and other members of the healthcare team.	
5. Demonstrate appropriate teambuilding and collaborative strategies when working with interprofessional teams.	6. Functions as an effective group leader or member based on an in-depth understanding of team dynamics and group processes.	
6. Advocate for high quality and safe patient care as a member of the interprofessional team.		

<b>Essential 8: Clinical</b>	Prevention an	d Population	Health for	Improving Health
Losennar or enniea	I I C Chillon an	a i opulation	incurvit for	mproving neuron

	Master's: Clinical Prevention and Population	DNP: Clinical Prevention and Population Health
Population Health H	Health for Improving Health	for Improving the Nation's Health
1. Assess protective and predictive factors, including genetics, which influence the health of individuals, families, groups, communities, and populations.12. Conduct a health history, including environmental exposure and a family history that recognizes genetic risks, to identify current and future health problems.23. Assess health/illness beliefs, values, attitudes, and practices of individuals, families, groups, communities, and populations.34. Use behavioral change techniques to promote health and manage illness.p5. Use evidence based practices to guide health teaching, health counseling, screening, outreach, disease and outbreak investigation, referral, and follow up throughout the lifespan.96. Use information and communication technologies in preventive care.57. Collaborate with other healthcare professionals and patients to provide spiritually10	<ul> <li>Health for Improving Health</li> <li>1. Synthesize broad ecological, global and social determinants of health; principles of genetics and genomics; and epidemiologic data to design and deliver evidence based, culturally relevant clinical prevention interventions and strategies.</li> <li>2. Evaluate the effectiveness of clinical prevention interventions that affect individual and population-based health outcomes using health information technology and data sources.</li> <li>3. Design patient-centered and culturally responsive strategies in the delivery of clinical prevention and health promotion interventions and/or services to individuals, families, communities, and aggregates/clinical populations.</li> <li>4. Advance equitable and efficient prevention services, and promote effective population-based health policy through the application of nursing science and other scientific concepts.</li> <li>5. Integrate clinical prevention and population health concepts in the development of culturally relevant and linguistically appropriate health education, communication strategies, and</li> </ul>	<ol> <li>Improving the Nation's Health</li> <li>Analyze epidemiological, biostatistical, environmental, and other appropriate scientific data related to individual, aggregate, and population health.</li> <li>Synthesize concepts, including psychosocial dimensions and cultural diversity, related to clinical prevention and population health in developing, implementing, and evaluating interventions to address health promotion/disease prevention efforts, improve health status/access patterns, and/or address gaps in care of individuals, aggregates, or populations.</li> <li>Evaluate care delivery models and/or strategies using concepts related to community, environmental and occupational health, and cultural and socioeconomic dimensions of health.</li> </ol>

disease and injury prevention interventions.	
8. Assess the health, healthcare, and emergency	
preparedness needs of a defined population.	
9. Use clinical judgment and decision making	
skills in appropriate, timely nursing care during	
disaster, mass casualty, and other emergency	
situations.	
10. Collaborate with others to develop an	
intervention plan that takes into account	
determinants of health, available resources, and the range of activities that contribute to health	
and the prevention of illness, injury, disability,	
and premature death.	
11. Participate in clinical prevention and	
population focused interventions with attention	
to effectiveness, efficiency, cost effectiveness, and equity.	
12. Advocate for social justice, including a commitment to the health of vulnerable	
populations and the elimination of health	
disparities.	
13. Use evaluation results to influence the	
delivery of care, deployment of resources, and to	
provide input into the development of policies to	
promote health and prevent disease.	

## **Essential 9: Advancing Professionalism and Professional Values**

Baccalaureate: Professionalism and Professional	Master's	DNP
Values		
1. Demonstrate the professional standards of		
moral, ethical, and legal conduct.		
2. Assume accountability for personal and		
professional behaviors.		
^		
3. Promote the image of nursing by modeling the		
values and articulating the knowledge, skills, and attitudes of the nursing profession.		
and attitudes of the nursing profession.		
4. Demonstrate professionalism, including		
attention to appearance, demeanor, respect for		
self and others, and attention to professional		
boundaries with patients and families as well as among caregivers.		
among caregivers.		
5. Demonstrate an appreciation of the history of		
and contemporary issues in nursing and their		
impact on current nursing practice.		
6. Reflect on one's own beliefs and values as		
they relate to professional practice.		
7. Identify personal, professional, and		
environmental risks that impact personal and		
professional choices and behaviors.		
	I	1

personal bias on difficult healthcare decisions that impact one's ability to provide care.9. Recognize the impact of attitudes, values, and expectations on the care of the very young, frail older adults, and other vulnerable populations.10. Protect patient privacy and confidentiality of patient records and other privileged communications.11. Access interprofessional and intraprofessional resources to resolve ethical and other practice dilemmas.12. Act to prevent unsafe, illegal, or unethical care practices.13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.14. Recognize the relationship between personal	8. Communicate to the healthcare team one's	
<ul> <li>9. Recognize the impact of attitudes, values, and expectations on the care of the very young, frail older adults, and other vulnerable populations.</li> <li>10. Protect patient privacy and confidentiality of patient records and other privileged communications.</li> <li>11. Access interprofessional and intraprofessional resources to resolve ethical and other practice dilemmas.</li> <li>12. Act to prevent unsafe, illegal, or unethical care practices.</li> <li>13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.</li> </ul>	personal bias on difficult healthcare decisions	
expectations on the care of the very young, frail older adults, and other vulnerable populations. 10. Protect patient privacy and confidentiality of patient records and other privileged communications. 11. Access interprofessional and intraprofessional resources to resolve ethical and other practice dilemmas. 12. Act to prevent unsafe, illegal, or unethical care practices. 13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.	that impact one's ability to provide care.	
older adults, and other vulnerable populations.         10. Protect patient privacy and confidentiality of patient records and other privileged communications.         11. Access interprofessional and intraprofessional resources to resolve ethical and other practice dilemmas.         12. Act to prevent unsafe, illegal, or unethical care practices.         13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.	9. Recognize the impact of attitudes, values, and	
<ul> <li>10. Protect patient privacy and confidentiality of patient records and other privileged communications.</li> <li>11. Access interprofessional and intraprofessional resources to resolve ethical and other practice dilemmas.</li> <li>12. Act to prevent unsafe, illegal, or unethical care practices.</li> <li>13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.</li> </ul>	expectations on the care of the very young, frail	
patient records and other privileged communications.11. Access interprofessional and intraprofessional resources to resolve ethical and other practice dilemmas.12. Act to prevent unsafe, illegal, or unethical care practices.13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.	older adults, and other vulnerable populations.	
communications.11. Access interprofessional and intraprofessional resources to resolve ethical and other practice dilemmas.12. Act to prevent unsafe, illegal, or unethical care practices.13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.	10. Protect patient privacy and confidentiality of	
11. Access interprofessional and intraprofessional resources to resolve ethical and other practice dilemmas.12. Act to prevent unsafe, illegal, or unethical care practices.13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.	patient records and other privileged	
<ul> <li>intraprofessional resources to resolve ethical and other practice dilemmas.</li> <li>12. Act to prevent unsafe, illegal, or unethical care practices.</li> <li>13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.</li> </ul>	communications.	
other practice dilemmas.         12. Act to prevent unsafe, illegal, or unethical care practices.         13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.	11. Access interprofessional and	
<ul> <li>12. Act to prevent unsafe, illegal, or unethical care practices.</li> <li>13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.</li> </ul>	intraprofessional resources to resolve ethical and	
care practices. 13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.	other practice dilemmas.	
care practices. 13. Articulate the value of pursuing practice excellence, lifelong learning, and professional engagement to foster professional growth and development.	12. Act to prevent unsafe, illegal, or unethical	
excellence, lifelong learning, and professional engagement to foster professional growth and development.		
excellence, lifelong learning, and professional engagement to foster professional growth and development.		
engagement to foster professional growth and development.		
development.		
14. Recognize the relationship between personal		
	14. Recognize the relationship between personal	
health, self-renewal, and the ability to deliver		
sustained quality care.	sustained quality care.	

# Essential 10: Master's-Level Nursing Practice

Baccalaureate: Baccalaureate Generalist Nursing Practice	Master's: Advanced Generalist Nursing Practice	DNP: Advanced Nursing Practice
<ol> <li>Conduct comprehensive and focused physical, behavioral, psychological, spiritual, socioeconomic, and environmental assessments of health and illness parameters in patients, using developmentally and culturally appropriate approaches.</li> <li>Recognize the relationship of genetics and genomics to health, prevention, screening, diagnostics, prognostics, selection of treatment, and monitoring of treatment effectiveness, using a constructed pedigree from collected family history information as well as standardized symbols and terminology.</li> <li>Implement holistic, patient centered care that reflects an understanding of human growth and development, pathophysiology, pharmacology, medical management, and nursing management across the health illness continuum, across the lifespan, and in all healthcare settings.</li> <li>Communicate effectively with all members of the healthcare team, including the patient and the patient's support network.</li> </ol>	<ol> <li>Conduct a comprehensive and systematic assessment as a foundation for decision making.</li> <li>Apply the best available evidence from nursing and other sciences as the foundation for practice.</li> <li>Advocate for patients, families, caregivers, communities and members of the healthcare team.</li> <li>Use information and communication technologies to advance patient education, enhance accessibility of care, analyze practice patterns, and improve health care outcomes, including nurse sensitive outcomes.</li> <li>Use leadership skills to teach, coach, and mentor other members of the healthcare team.</li> <li>Use epidemiological, social, and environmental data in drawing inferences regarding the health status of patient populations and interventions to promote and preserve health and healthy lifestyles.</li> <li>Use knowledge of illness and disease management to provide evidence-based care to</li> </ol>	<ol> <li>Conduct a comprehensive and systematic assessment of health and illness parameters in complex situations, incorporating diverse and culturally sensitive approaches.</li> <li>Design, implement, and evaluate therapeutic interventions based on nursing science and other sciences.</li> <li>Develop and sustain therapeutic relationships and partnerships with patients (individual, family or group) and other professionals to facilitate optimal care and patient outcomes.</li> <li>Demonstrate advanced levels of clinical judgment, systems thinking, and accountability in designing, delivering, and evaluating evidence-based care to improve patient outcomes.</li> <li>Guide, mentor, and support other nurses to achieve excellence in nursing practice.</li> <li>Educate and guide individuals and groups through complex health and situational transitions.</li> </ol>

5. Deliver compassionate, patient centered,	populations, perform risk assessments, and	7. Use conceptual and analytical skills in
evidence based care that respects patient and	design plans or programs of care.	evaluating the links among practice,
family preferences.		organizational, population, fiscal, and policy
	8. Incorporate core scientific and ethical	issues.
6. Implement patient and family care around	principles in identifying potential and actual	
resolution of end of life and palliative care	ethical issues arising from practice, including the	
issues, such as symptom management, support	use of technologies, and in assisting patients and	
of rituals, and respect for patient and family	other healthcare providers to address such	
preferences.	issues.	
7 Describe an annual description of the state of the stat		
7. Provide appropriate patient teaching that	9. Apply advanced knowledge of the effects of	
reflects developmental stage, age, culture,	global environmental, individual and population	
spirituality, patient preferences, and health	characteristics to the design, implementation,	
literacy considerations to foster patient	and evaluation of care.	
engagement in their care.	10. Employ knowledge and skills in economics,	
8. Implement evidence based nursing	business principles, and systems in the design,	
interventions as appropriate for managing the	delivery, and evaluation of care.	
acute and chronic care of patients and promoting	derivery, and evaluation of care.	
health across the lifespan.	11. Apply theories and evidence-based	
neatur across the mespan.	knowledge in leading, as appropriate, the	
9. Monitor client outcomes to evaluate the	healthcare team to design, coordinate, and	
effectiveness of psychobiological interventions.	evaluate the delivery of care.	
I J I J I J I J J I J J I J J I J J I J J I J J I	, , , , , , , , , , , , , , , , , , ,	
10. Facilitate patient centered transitions of care,	12. Apply learning, and teaching principles to	
including discharge planning and ensuring the	the design, implementation, and evaluation of	
caregiver's knowledge of care requirements to	health education programs for individuals or	
promote safe care.	groups in a variety of settings.	
11. Provide nursing care based on evidence that	13. Establish therapeutic relationships to	
contributes to safe and high quality patient	negotiate patient-centered, culturally	
outcomes within healthcare microsystems.	appropriate, evidence-based goals and	
	modalities of care.	

12. Create a safe care environment that results in	14. Design strategies that promote lifelong	
high quality patient outcomes.	learning of self and peers and that incorporate professional nursing standards and	
13. Revise the plan of care based on an ongoing evaluation of patient outcomes.	accountability for practice. 15. Integrate an evolving personal philosophy of	
14. Demonstrate clinical judgment and accountability for patient outcomes when delegating to and supervising other members of the healthcare team.	nursing and healthcare into one's nursing practice.	
15. Manage care to maximize health, independence, and quality of life for a group of individuals that approximates a beginning practitioner's workload		
16. Demonstrate the application of psychomotor skills for the efficient, safe, and compassionate delivery of patient care.		
17. Develop a beginning understanding of complementary and alternative modalities and their role in health care.		
18. Develop an awareness of patients as well as healthcare professionals' spiritual beliefs and values and how those beliefs and values impact health care.		
19. Manage the interaction of multiple functional problems affecting patients across the		

lifespan, including common geriatric syndromes.	
20. Understand one's role and participation in emergency preparedness and disaster response with an awareness of environmental factors and the risks they pose to self and patients.	
21. Engage in caring and healing techniques that promote a therapeutic nurse-patient relationship.	
22. Demonstrate tolerance for the ambiguity and unpredictability of the world and its effect on the healthcare system as related to nursing practice.	

### **References**

American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice*. Retrieved January 6, 2012, from http://www.aacn.nche.edu/publications/position/DNPEssentials.pdf

American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate* education for professional nursing practice. Washington, DC: Author.

American Association of Colleges of Nursing. (2011). The essentials of master's education in nursing. Washington, DC: Author.