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Editor's note: This is the first in a series of articles describing a public and private collaborative effort to redesign nursing education to prepare the future nursing workforce.

Forging Partnerships to Expand Nursing Education Capacity

State teams gather to share ways to educate more nurses.

After a decline in applications to entry-level nursing programs during the 1990s, interest in nursing careers among Americans has soared in recent years. With the growing complexities of health care and the aging of the U.S. population increasing the demand for nurses, the expansion of the nursing school applicant pool has been a welcome change. However, our nation's nursing education programs have a limited capacity to accommodate the sudden interest in nursing as a career. The National League for Nursing reported that 99,000 qualified applications to associate degree, diploma, and baccalaureate nursing programs were denied admission in 2006–2007.¹ An American Association of Colleges of Nursing fact sheet (available at <http://bit.ly/nezDB>) spotlights several recent surveys and reports reminding us that shortages of faculty and clinical teaching sites continue to be major barriers to accommodating enough students to meet future demands for RNs.²

The Center to Champion Nursing in America (CCNA) at AARP, the Robert Wood Johnson Foundation (RWJF), the U.S. Department of Labor's Employment and Training Administration, and the U.S. Department of Health and Human Services' Health Resources and Services Administration collaborated to



Ed O'Neil, professor and director of the Center for Health Professions at the University of California, San Francisco, urged participants to "rock the paradigm" during his opening keynote address at the "all country" summit held in February 2009.

address this growing crisis in nursing education. Within the past 18 months, these strategic partners cosponsored two national summits on nursing education capacity. These summits addressed the critical issues every state faces in trying to teach sufficient numbers of nurses the skills required in the 21st century.

In this article, the first in a series of seven, we discuss the major messages that emerged from these two national summits. The next article in the series will focus on the ongoing technical assistance provided to the state teams of stakeholders that attended the summits. The remaining articles will look at five states that are exemplars in redesigning

and expanding nursing education.

ABOUT THE SUMMITS

Both summits focused on four important ways to increase nursing education capacity:

- strategic partnerships and alignment of resources
- increased faculty capacity and diversity
- education redesign
- policy and regulation

The first, 18-state summit was held in June 2008. All states and U.S. territories were invited to apply to attend through their state nursing workforce centers, workforce investment boards, and state hospital associations. But first, each state had to assemble



"Speed mentoring" sessions offered summit participants the chance to speak with experienced state team members to share successful strategies to increase nursing education capacity.

a team of diverse stakeholders. Team members could include representatives of the state nursing education system, employers of nurses, state nursing workforce centers, the U.S. Department of Labor Workforce Investment System, regulatory bodies, government agencies, policymakers, consumer advocates, and philanthropic organizations. Representatives of the RWJF, CCNA, U.S. Department of Labor, and Health Resources and Services Administration reviewed the 49 applications and, based on the depth of their strategic partnerships, their goals and objectives for expanding education capacity, and demonstrated best practices, they selected 18 state teams: Alabama, California, Colorado, Florida, Hawaii, Illinois, Maryland, Massachusetts, Michigan, Mississippi, New Jersey, North Carolina, North Dakota, Oregon, South Carolina, Texas, Virginia, and Wisconsin. The 2008 summit provided a forum for these 18 teams to share best practices, network, learn about innovative strategies, and develop evidence-

based approaches to increasing nursing capacity.

In preparation for the summit, the RWJF, CCNA, and U.S. Department of Labor commissioned a white paper, *Blowing Open the Bottleneck: Designing New Approaches to Increase Nurse Education Capacity*.³ The purpose of this document was to stimulate innovative thinking and help teams of stakeholders begin to develop and implement creative solutions to the challenges of inadequate capacity in nursing education.

Following the summit, the CCNA provided the 18 states with ongoing technical assistance through webinars, conference calls, e-mail and discussion forums, and consultants.

The 18 states reported on their progress at a six-month postsummit evaluation conducted by the CCNA (see Table 1). All but one state had nurses in new leadership positions, and most had expanded their strategic partnerships by adding new members to the team or securing new sources of public or private funding. All

18 states had made the least progress in changing policies and regulations.

The second, "all country" summit. The 32 states that weren't selected to participate in the 2008 summit, including the District of Columbia, were invited to attend a second, "all country" summit in February 2009. A total of 48 states and the District of Columbia, including the original 18 states that served in a mentoring role, attended the second summit. The 32 states came in teams of up to five members that included a state team leader (commonly from the state's nursing workforce center), nurse educators, nursing leaders in health care delivery, and consumer representatives (preferably from an AARP state office). Ideally, to ensure a broad perspective, two members of each team represented non-nursing roles.

The two-day summit combined plenary and small-group sessions. This format enabled the exchange of both theoretical and practical lessons among states taking a leading role in expanding nursing education capacity.

Keynote addresses. Ed O'Neil, PhD, MPA, FAAN, a professor as well as director of the Center for the Health Professions at the University of California, San Francisco, gave the opening keynote address. He challenged summit participants with "rocking the paradigm," emphasizing that the time has come to challenge old ways of thinking about nursing and nursing education. Educational resources must be integrated with a shared vision and a focus on outcomes, he said, and services and regulation must be tied to education. To move forward, O'Neil challenged each state team to be

- boldly visionary, building on good ideas.

- recklessly inclusive, creating new communities or strategic partnerships.
- collaborative until it hurts.
- aware of the easy wins.
- in it for the long run.

On the second day, Beverly Malone, PhD, RN, FAAN, and chief executive officer of the National League for Nursing, delivered the keynote address, “The Future of Nursing Education.”

Focusing on the educational needs of nurses in the 21st century, Malone juxtaposed nursing’s core values with current realities. She discussed the potential effects of technology, an increasingly diverse population, and the health care reform debate on shaping nursing education. She concluded her remarks with a call for “transformative leadership.”

Small group sessions offered summit participants the opportunity to hear more from representatives of states that attended the initial summit and that conducted plenary sessions at the second, two-day event. Breakout sessions on the first day were geared to skill building to increase nursing education capacity. In these 45-minute sessions, summit participants focused on asset mapping, faculty development and diversity, and education redesign. Other breakout sessions looked at tracking of nursing school enrollment and graduation data and funding resources to support state and regional work.

During the second day’s speed-mentoring sessions, summit participants had the opportunity to ask experienced state team members all those “everything-you’ve-always-wanted-to-know-but-didn’t-know-whom-to-ask” questions. Speed mentoring creatively borrowed speed-dating methodologies, complete with a “dance card” that listed appointments with different state mentors. Through these small-group sessions, lead state teams shared the successful strategies that facilitated their ability to foster innovations and change policies at the state and organizational level to increase nursing education capacity. Speed-mentoring sessions included the following topics.

Diversity: race, ethnicity, and gender. Participants learned how Michigan increased workforce diversity by implementing strategies for recruitment and retention of a diverse student nurse population. For example, regional grants are available for faculty workshops to foster retention of underrepresented students.

Student retention. The North Carolina team provided findings on student attrition in community college nursing programs and proposed recommendations

Table 1. State Teams’ Progress Six Months After the First Summit

Major summit topics	Number (%) of teams reporting activity (N = 18)
Strategic partnerships and resource alignment	
Nurses in new leadership positions	17 (94)
New members added to the team	13 (72)
New public or private funding partnership sources	12 (67)
New sharing of resources	11 (61)
New partnerships among educational programs	9 (50)
Faculty development and diversity	
New faculty development programs	9 (50)
New diversity development plans	7 (39)
New faculty hired	4 (22)
Education redesign	
Clinical placement systems implemented	11 (61)
Curriculum development	9 (50)
Other clinical placement initiatives, such as underutilized clinical settings or evening or weekend schedules	8 (44)
Expanded distance learning	6 (33)
Policy and regulation	
Related legislation proposed	10 (56)
Advocacy plans to win funding	10 (56)
Advocacy plans to address budget cuts	8 (44)
Related legislation passed	5 (28)
Related regulatory changes or executive orders	3 (17)
Related legislation introduced	2 (11)
Private sector policy changes	1 (6)
Other innovations	7 (39)

to improve student retention gleaned from programs with high retention rates as well as high rates of students passing the RN licensing exam. These strategies include increasing graduate education among faculty, requiring orientation for clinical instructors, using standardized tests to rank applicants for admission, and requiring high science competency.

Clinical faculty development. Teams from California and North Dakota described innovative strategies to increase the number of clinical faculty and offset the shortage of nurses available to teach the next generation. Strategies include mentoring and increasing the effectiveness of teaching based on a learning needs assessment.

Statewide coordination of simulation. Healthcare Simulation South Carolina is a planned statewide network of seven simulation centers, which ultimately will be able to feed data to a centralized database. This will provide unprecedented opportunities to evaluate outcomes related to simulation with large populations of students and faculty.

Dedicated education units. Oregon introduced the concept of patient care units developed through partnerships with academic and clinical agencies. These dedicated educational units offer an optimal teaching and learning environment while providing excellent patient care.

Clinical placement systems. Teams from Alabama and Colorado provided guidance in using computer technology to effectively match students with clinical learning opportunities in patient care settings.

Nurse residencies. Colorado and Wisconsin offered residencies for new nurse graduates to help them make the transition into practice. These residencies

integrate the new nurses into the realities of health care delivery and result in increased retention.

Developing a business case. Maryland and New Jersey teams described the process of developing a business case for expanding nursing education capacity. A business case stresses return on investment in the health care industry as well as the improved health of the community.

Advocacy and messaging. Teams from Massachusetts and Virginia provided messaging and advocacy frameworks that include identifying spheres of influence, assuring effective communication, and building relationships with various constituencies.

MAJOR SUMMIT TOPICS

The plenary, breakout, and speedmentoring sessions at the “all-country” summit explored the four main topics in depth. Table 2 outlines the content of these sessions as well as the actions the summit participants hoped to take and the challenges they were likely to face.

Strategic partnerships and resource alignment. Strategic partnerships form powerful alliances and engender creativity by bringing together organizations or groups of people that might not normally communicate or work together. Nurse-sponsored initiatives typically include nursing service, nursing education, professional nurses associations, regulatory boards, and representatives of health care organizations. Partners from outside the nursing and allied health professions that can add value to discussions about nursing education capacity and become key stakeholders include:

- the public workforce system (that is, federal, state, and local offices that support economic expansion and development of the workforce)

- businesses and chambers of commerce
- government agencies
- policymakers
- consumer advocates
- philanthropic organizations

At the second summit, state teams learned how to develop partnerships and explore resources. Ed O’Neil’s keynote address set the tone with its focus on developing strategic collaborations with new partners and aligning resources to increase nursing education capacity.

Asset mapping is one strategic approach for forming partnerships with stakeholder groups beyond existing professional, clinical, and academic networks and for facilitating the alignment of large, complex systems.⁴ By compiling a list of tangible resources (people, places, and things) in a region or state, nursing teams can effectively engage business leaders, the public workforce system, and civic power brokers in addressing inadequate nurse education capacity. For one state’s experience with asset mapping, see *North Dakota’s Education Capacity Asset Mapping Experience*.

A comprehensive asset map, based on economic development data and scholarly research reports, can inspire regional leaders to agree upon a strategy to strengthen community assets, such as nursing capacity, and provide clear ways to measure progress in achieving shared objectives over time. For example, the state of New Jersey formed a unique partnership for addressing the nursing shortage, in which the New Jersey Chamber of Commerce takes a lead role. This partnership, called the New Jersey Nursing Initiative, helps to support nurses who wish to become nurse faculty, thereby increasing the number of teachers in the state to educate the next generation of nurses.

Table 2. Take-Home Messages from the Second Summit

Topic	Lessons learned	Actions to take	Challenges
Strategic partnerships	<ul style="list-style-type: none"> Partnerships are imperative The time is right Need to expand the "tent" to include important stakeholders Usefulness of asset mapping Learn from successes Resources and technical assistance are available Networking and sharing with those who have gone before Rely on "critical mass" to reach decisions; can't always satisfy everyone Importance of buy-in, collaboration of all parties Create a mutual vision focused on the health of the state 	<ul style="list-style-type: none"> Invite others missing from the team into the "tent" (for example, employers of nurses, business representatives) Create a visible coalition Increase interface and improve working relationship with state AARP Apply for technical assistance from the CCNA Hold two-to-three planning meetings Develop objectives for the four core issue areas, including performance measures Develop an action plan Plan a state summit to map assets, build strategic partnerships, and create a unified vision Plan for sustainability 	<ul style="list-style-type: none"> Regionalism within state may impede consensus Attitudes and lack of consensus on key issues
Faculty development	<ul style="list-style-type: none"> Leverage public and private resources to develop innovative strategies to increase faculty capacity 	<ul style="list-style-type: none"> Follow up with other states for help with faculty issues Develop statewide plan for faculty pipeline and retention Develop innovative ways to use current faculty 	<ul style="list-style-type: none"> Effect of state budget on faculty recruitment Faculty salaries
Education redesign	<ul style="list-style-type: none"> Break all the rules! Be daring! Share with and learn from the 18 lead states 	<ul style="list-style-type: none"> Implement dedicated education units Create simulation alliance based on a feasibility study Pursue statewide core curricula Reconfigure education and practice to maximize individual nurse's capacity to make a difference Encourage nurse educators to be proactive on a seamless transition from AD to BSN 	<ul style="list-style-type: none"> Lack of funding State budget deficits
Influencing policy	<ul style="list-style-type: none"> Art of advocacy Need workforce data center to collect supply-and-demand data 	<ul style="list-style-type: none"> Advocacy training Connect with a state legislator Advocate for stimulus money Identify recommendations for states to leverage stimulus dollars Advocate through the governor's office 	<ul style="list-style-type: none"> Possible restrictions from regulatory agencies State budget deficits Uncertainties of health care reform
Messaging	<ul style="list-style-type: none"> Create one unified message Reframe message as the business case is developed for a wider audience 	<ul style="list-style-type: none"> Craft messages for public, media, legislators, funders Develop a "communication toolbox" of effective messaging techniques Package nursing education capacity as a workforce issue, not just an educational issue Collect data to support messages Create a one-page strategic plan Draft "state of nursing" white paper 	<ul style="list-style-type: none"> Difficulty speaking with one voice

AD = associate degree; BSN = bachelor of science in nursing; CCNA = Center to Champion Nursing in America

Nurses and their strategic partners can develop and implement asset mapping toolkits similar to the best practice model created by the U.S. Department of Labor's Employment and Training Administration.⁴

Faculty development and diversity. Schools of nursing cite a shortage of faculty as the primary reason for limiting the number of qualified applicants they accept.² The reasons for faculty shortages are numerous and complex. According to the National League for Nursing, 84% of U.S. nursing education programs attempted to hire new faculty in 2007–2008.¹ More than three-fourths of these schools reported finding recruitment difficult, and almost one in three schools found faculty recruitment “very difficult.” The two most common reasons for recruitment difficulties were “not enough qualified candidates” (46% of schools) and an “inability to offer competitive salaries” (38%).

Except for age, nursing faculty demographics mirror nursing demographics overall. A salient feature is the lack of ethnic and gender diversity. The average age of a nursing faculty member is 53.5 years, and the average age at retirement is 62.5.⁵ The National League for Nursing's projections for the impending retirement of nursing faculty spell dire consequences for the future of patient care.⁶ The current economic environment may lead some faculty to postpone planned retirement, but this delay offers only temporary respite from the shortage of nurse educators.

One current method of addressing faculty shortages is to hire nurses enrolled in Master's in nursing programs to teach. North Dakota's faculty intern pilot study assessed this practice. The pilot project was designed to

- provide an avenue for graduate nursing students to gain teaching experience while working closely with seasoned mentors.
- offer North Dakota nursing programs a way to recruit faculty.
- define boundaries for nurse faculty interns to ensure effective teaching and student learning, adequate supervision of faculty interns, and maintenance of high education standards.
- study faculty role development, faculty retention, career satisfaction, and student satisfaction with the nurse faculty interns.

Half of the nurse faculty interns who completed the pilot program and graduated from a master's in nursing program were employed as faculty by North Dakota nursing education programs six months after participation in the program. The others were in programs preparing them for advanced practice nursing rather than nursing education.

Education redesign. The goals of education redesign are to improve students' learning experiences and increase their competency while more effectively using scarce resources, including faculty. State teams are accomplishing nursing education redesign in a variety of ways:

- revising core curricula to be based on nursing competencies
 - implementing new methods of teaching and learning in the clinical arena, such as concept-based, focused, and integrative clinical education, including case-based simulated experiences
 - sharing resources across nursing programs
 - establishing partnerships between universities and community colleges to educate the nursing workforce
- For example, Massachusetts

team members are working with the state's department of higher education to create a seamless progression through all levels of nursing education. They're achieving consensus on competencies, which will serve as a framework for curriculum development statewide. In addition, Massachusetts stakeholders are developing a statewide nurse internship and preceptor program.

The Oregon Consortium for Nursing Education (OCNE) model is perhaps the most proactive strategy for increasing the pool of well-educated RNs. In a plenary session at the “all-country” summit, Christine Tanner, PhD, RN, FAAN, a professor at Oregon Health Sciences University (OHSU), described OCNE's work. This statewide coalition involves a formal partnership between nine community colleges and five campuses of the OHSU School of Nursing. Together they designed a common, competency-based curriculum to efficiently and cost-effectively achieve increased educational capacity. Through a dual-admission process, community college students can be part of the baccalaureate program in nursing from their initial enrollment. At the end of the third year, after completing requirements for the associate degree, nursing students are eligible to sit for the RN licensure examination but are encouraged to continue the program, taking courses offered by OHSU faculty at their community colleges and completing the baccalaureate in one more year of full-time study. Early OCNE evaluation data revealed that more than 40% of community college students chose the fourth-year option.

California, Hawaii, New York, and North Carolina are all implementing education redesign based on the OCNE model. Their work also involves partnerships

North Dakota's Education Capacity Asset Mapping Experience

Developing a realistic strategic plan for the future of nursing education

To develop a complete picture of ongoing activities and future needs related to nursing education capacity, the team from North Dakota created an asset map.

The first step was to identify existing assets. These fit into four categories and are shown at the top of the asset map: organizations engaged in nursing education, current nursing education programs, data available through the 10-year statewide Nursing Needs Study (begun in 2002 to address issues of recruitment, retention, and utilization of nurses), and leaders on the North Dakota summit team.

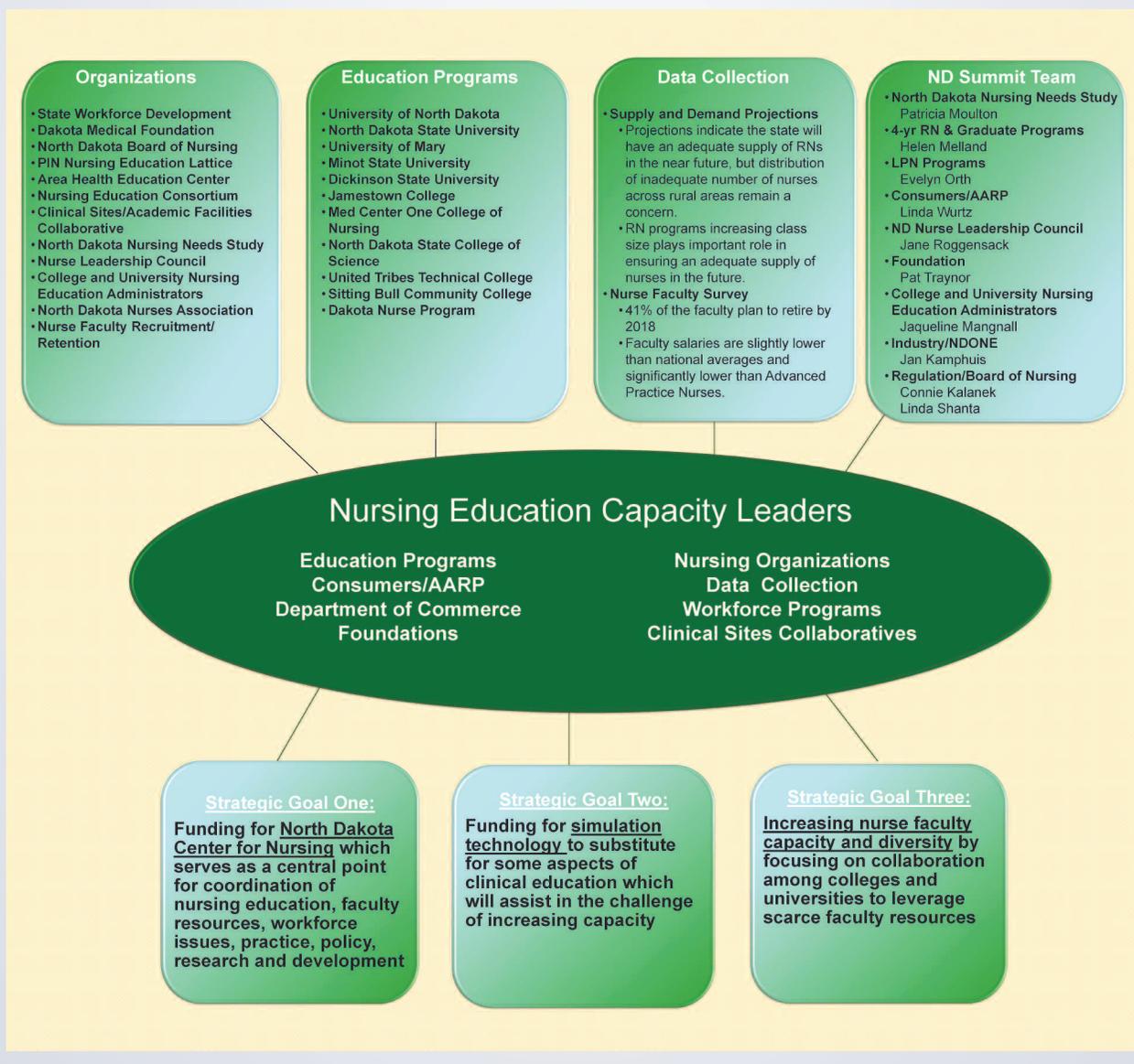
After identifying these assets, the team brought all of them together. Nearly 30 leaders involved in nursing

workforce and education capacity developed the complete asset map. Several work groups were formed at a retreat, and they began developing a statewide strategic plan to increase nursing education capacity.

The strategic plan identified three major goals, shown at the bottom of the asset map. These were to:

- secure funding for the North Dakota Center for Nursing
- obtain funding for simulation technology
- increase nurse faculty capacity and diversity

In addition, the strategic plan identified issues and obstacles affecting nursing workforce and education in North Dakota. The plan specified what must be done, who will do it, and when action will be taken.



with universities and community colleges to increase the number of nurses with bachelor of science in nursing degrees through shared admissions, curricula, facilities, and faculty.

Using policy and regulation to increase capacity. State and federal policies that provide resources to support innovations in nursing education are key elements in increasing education capacity. Three streams of policy development converge to make new policies possible: a policy problem (in this case, nursing workforce shortages), a policy solution at the ready (such as funding that expands nursing education capacity), and politics (for example, the nursing shortage issue has reached the top of the political agenda). When all three streams converge, a policy window opens at the federal or state level or both.⁷

AARP's efforts to increase federal funding for nursing education in the American Recovery and Reinvestment Act of 2009, illustrate that policy influences are often under intense time pressures. In addition, AARP and national nursing organizations attempted to ensure permanent funding sources for nursing education in the 2009 health reform package, pushing to modernize Medicare education funding to prepare advanced practice nurses. Another approach was for the health reform bill to include funding for workforce development that wouldn't require annual authorization and appropriation.

At the state level, the 2008 Michigan legislature approved, and the governor signed into law, a bill allocating \$5 million to create more nurse educators. Half of this money supports dissertation-ready doctoral students with \$100,000 stipends each and students close to finishing expedited

master's programs with smaller stipends.

CONTINUING EFFORTS

At the conclusion of the second nursing education capacity summit, participants were challenged to

- share what they learned with other team members who didn't attend the summit.
- begin to develop action plans or reexamine existing action plans.
- identify the team's greatest strength and offer to mentor other state teams.
- define their technical assistance needs.
- follow up with reports about their activities.
- create partnerships with others who can provide advice on statistics, minimum data sets, and operational definitions for measures that will be examined as efforts to build nursing education capacity move forward.
- identify existing sources of grant money and work to redirect them to nursing education.

The CCNA offered a second application process for state teams (excluding the original 18 lead states) seeking ongoing technical assistance to help increase nursing education capacity. Within a few months of the summit, 12 additional state teams were selected: Georgia, Idaho, Indiana, Kentucky, Louisiana, Nebraska, New Mexico, New York, Ohio, Rhode Island, Washington, and West Virginia. This brings the total number of state teams receiving formal technical assistance from CCNA to 30. A second round of outcome evaluations was scheduled to begin in December 2009. ▼

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