Robert Wood Johnson Foundation

Published: June 24, 2012
Last Updated: August 12, 2013
Program Results Report
Grant ID: 63638

A Model for Addressing the Nursing Shortage in Oregon

Evaluating the outcomes of the Oregon Consortium for Nursing Education's model to address the nursing shortage in Oregon

SUMMARY

The Oregon Consortium for Nursing Education—composed of eight community colleges and five campuses of the Oregon Health and Science University (OHSU) School of Nursing—was launched in 2006 in response to the state's nursing shortage and the changing health care needs of an aging and culturally diverse population. The schools share a redesigned curriculum and an admissions process that allows community college students to transition directly to the university to complete a bachelor's of nursing degree.

From 2008 through 2011, the consortium led an effort to evaluate its new approach. The consortium subcontracted with the Regional Research Institute for Human Services at Portland State University to perform some of the evaluation; and with Barbara Gaines, RN, EdD, to analyze the intensive process used to create the consortium.

Key Findings

Researchers at the Regional Research Institute for Human Services cited the following findings in journal articles and summary reports on the project:

- Some 37 percent of nursing students enrolled in consortium schools chose to pursue a bachelor's degree—much lower than the 70 percent target the consortium had set for itself, but significantly higher than the 9.6 percent national average.
- Consortium graduates reported financial concerns—including the cost of tuition, existing debt, and work and family commitments—as primary reasons for discontinuing their education.
- Consortium graduates scored higher on a test of clinical skills than students who graduated before the new approach took effect.
- A majority of faculty members reported improved student outcomes and greater job satisfaction despite a heavier workload, and some said they delayed retirement as a result.

Funding

From May 2008 through December 2011, the Robert Wood Johnson Foundation (RWJF) funded this project with a grant of $701,781.

CONTEXT

The United States is facing a severe nursing shortage. According to the U.S. Health Resources and Services Administration (HSRA), demand for registered nurses will exceed the supply by more than 1 million in 2020.

What's more, according to HRSA, two-thirds of the nursing workface will need a baccalaureate or graduate degree, given the nation's changing demographics and the complex demands of today's health care system. Yet nursing schools turned away almost 43,000 applicants to baccalaureate and graduate programs in 2006 alone, according to the American Association of Colleges of Nursing.[1]

Reforming Nursing Education

To respond to these needs, the Oregon Consortium for Nursing Education launched a new approach to nursing education at eight community colleges and five campuses of the OHSU School of Nursing. The goals were to educate a "new nurse" and to create a seamless pathway for nursing students to attain baccalaureate degrees.

Nursing students are co-admitted to both community colleges and the university. The first five terms of the curriculum are identical across all schools, after which students can transfer to an OHSU campus to complete a bachelor's degree. They can also complete the final year of the program online—a critical option in a largely rural state.

Rather than emphasizing traditional medical specialties, the revised common curriculum focuses on managing chronic illness, providing acute and end-of-life care, and promoting health. Teachers spend less time giving lectures and more time discussing actual clinical cases.

To develop this approach, faculty and administrators from participating community colleges and university campuses—which historically did not cooperate—hammered out joint standards for admissions and academic progression, financial aid for students transferring among institutions, and shared resources. The intensive five-year process culminated in an agreement signed in 2006.

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[1] American Association of Colleges of Nursing, *2006–2007 Survey of Enrollment and Graduations in Baccalaureate and Graduate Degree Programs in Nursing*, Washington, 2007.

RWJF's Interest in This Area

RWJF has long had an interest in the nursing workforce. Among the many programs it has supported are the following:

- *Ladders in Nursing Careers.* It provided financial resources and support services to qualified low income and minority, entry- and mid-level hospital and nursing home employees to help them advance into licensed practical nurse (L.P.N.) and registered nurse (R.N.) positions. For more information, see the Program Results Report.
- *Colleagues in Caring: Regional Collaboratives for Nursing Work Force Development.* This national program to streamline the nursing education system and increase the capacity and attractiveness of the nursing profession supported 23 statewide and multi-county consortiums or collaboratives that worked on a regional basis to: (1) give nurses greater educational and career mobility; (2) align the supply of nurses more closely with marketplace demand; (3) develop programs to recruit and retain nurses; and (4) affect public policy on nursing education and workforce issues. For more information, see the Program Results Report.
- *Robert Wood Johnson Foundation Executive Nurse Fellows.* The leadership development program is designed to prepare a select cadre of registered nurses (RNs) who are in senior executive positions for influential roles in shaping the U.S. health care system of the future. See the Program Results Report.
- *Robert Wood Johnson Foundation Nurse Faculty Scholars*. The program aims to strengthen the academic productivity and overall excellence of nursing schools by providing mentorship, leadership training, and salary and research support to young faculty. For more information, see the Progress Report.
- In 2010, RWJF and the Institute of Medicine released *The Future of Nursing: Leading Change, Advancing Health*,[2] which called for ensuring that 80 percent of the U.S. nursing workforce had baccalaureate degrees by 2020—up from about half in 2012. To implement the report's recommendations, RWJF launched *The Future of Nursing: Campaign for Action*, a national program, in November 2010.

The initiative supports 48 state coalitions composed of health care professionals, business executives, academic and nonprofit leaders, policy-makers, and consumer advocates working to create a more highly educated nursing workforce. A second phase of the program will fund nine of the coalitions to ensure academic progression and employment opportunities for baccalaureate-level nurses.

Along with AARP and the AARP Foundation, RWJF also supports the Center to Champion Nursing in America®. Risa Lavizzo-Mourey, MD, MBA, president and CEO

[2] Available online at www.rwjf.org/en/research-publications/find-rwjf-research/2010/10/the-future-of-nursing.html.

of RWJF, contributed a guest editorial on the growing need for nurses educated at the baccalaureate level and beyond to the March 2012 issue of *Nursing Outlook*.[3]

THE PROJECT

From 2008 through 2011, the consortium led an effort to evaluate the new approach. It subcontracted with the Regional Research Institute for Human Services at Portland State University to conduct surveys and focus groups.

The evaluation sought to answer these questions:

- *Has the model increased the number of baccalaureate-prepared nurses in Oregon?* The researchers at the Regional Research Institute for Human Services developed a system to track student enrollment and graduation in 2006, 2007 and 2008. The team also used surveys and focus groups to assess students' experience with the program, and their reasons for choosing a bachelor's versus an associate degree in nursing.
- *Has the model improved the quality of baccalaureate education?* The research team at the institute adapted the Clinical Competency Scale, developed by the National Council of State Boards of Nursing, to evaluate students' performance just before they graduate. The team also tracked students' pass rates on the National Council Licensure Examination, and surveyed health care employers about their satisfaction with newly hired nurses who had completed the program.
- *Does the new curriculum use faculty more efficiently and improve their satisfaction?* The research team conducted telephone interviews with faculty members in 2009, a web survey in 2010, and focus groups in 2011.
- *Does the extent to which campuses adhere to the new approach affect its impact?* The research team created a three-part "fidelity scale" measuring each campus's adherence to the approach, and analyzed whether scores on that scale predicted the percentage of nursing students who graduated with a baccalaureate degree.
- *What aspects of the process used to develop the consortium model of nursing education are critical to its outcomes?* To answer that question, the researchers interviewed people involved in creating the consortium and examined related documents.

The institute also subcontracted with Barbara Gaines, RN, EdD, to analyze the intensive process used to create the consortium. She did so by interviewing key participants in that process, and examining documents produced during the process.

Christine A. Tanner, PhD, RN, Youmans Spaulding distinguished professor at OHSU School of Nursing, directed the project. A committee of representatives from each campus helped guide the evaluation. A national advisory group composed of

[3] Outline available online at www.nursingoutlook.org/article/S0029-6554%2811%2900392-7/fulltext.

representatives from three nursing organizations helped home in on the research questions and data needs.

Communications

The research team published one journal article and wrote four others, two of which are in press as of May 2012. They also produced a report, *Redesigning Nursing Education: Lessons Learned from the Oregon Experience*, and wrote nine other reports on results from the surveys and focus groups. (See the Bibliography for details.)

Consortium leaders also gave presentations on developing, implementing, and evaluating nursing education reform at 17 national and international conferences, and seven state and regional conferences and webinars.

FINDINGS

The researchers cited the following findings in journal articles, the *Redesigning Nursing Education* report, and a report to RWJF:

Students' Decisions to Pursue a Baccalaureate Degree

In "Factors Affecting the Academic Progression of Associate Degree Graduates,"[4] the research team reported:

- **From 2006 through 2008, 30 percent of nursing students who graduated from community colleges participating in the consortium pursued a bachelor's degree at OHSU, and another 7 percent did so at other institutions.**

  Although the early total of 37 percent fell well short of the 70 percent target the consortium had set for itself, it topped the national average of 9.6 percent. (The latter reflects students earning associate degrees from 2001 to 2004 who had earned a bachelor's degree in nursing by 2008.)

- **Students who completed an associate degree in 2010 cited financial barriers and time and energy constraints related to work and family as primary reasons for discontinuing their education**. Chief financial barriers included the cost of tuition (41%), the need to support a family (39%), and current debt (17%).

- **Employer support for nurses who continue their education—including salary increases for those with baccalaureate degrees and financial assistance for tuition—was limited.**

[4] Munkvold J, Tanner CA and Herinckx HA. "Factors Affecting the Academic Progression of Associate Degree Graduates." *Journal of Nursing Education*, 51(4): 232–235, 2012. Abstract available online at www.ncbi.nlm.nih.gov/pubmed/22356360.

- **Nearly 60 percent of students reported an intention to continue nursing education in the future**. Of these, 50 percent identified OHSU School of Nursing as their only choice.
- **More students transitioned into the OHSU baccalaureate program after the consortium hired a "transition advisor" serving all campuses.** As focus groups and surveys continued to show that students needed more information, the consortium decided to support part of the salaries of key faculty members on each campus to serve as the primary transition advisor for students on that campus.

Quality of Nursing Education

In its report, *Redesigning Nursing Education: Lessons Learned from the Oregon Experience*, the research team reported these findings:

- **Consortium graduates scored an average of 161 on the Clinical Competency Scale in 2008, compared with an average of 157 among students before the reforms—a statistically significant improvement.**
- **Some 88 to 100 percent of consortium graduates from 2006 through 2008 passed the nursing license exam, although the redesigned curriculum included less test-focused content.**
- **Students showed similar levels of satisfaction with their programs before and after the reforms took effect.**
- **Employers were highly satisfied with both nurses who graduated after the reforms and nurses who graduated before the reforms.**

Implementing the Model

- **Faculty members strongly supported the new approach to nursing education:**
  - Of 28 interviewed in 2009, 82 percent reported a positive experience overall.
  - Of 84 surveyed in 2010, 89 percent reported "very great" to "great" faculty support for the model on their campuses.
  - A majority of faculty members reported improved student outcomes and greater satisfaction with their jobs despite a heavier workload, and some said they delayed retirement as a result.
- **Faculty identified collaboration among schools, updated nurse competencies, and new teaching practices as the most important components of the redesign.**
- **The researchers found no link between the degree to which a campus implemented the new approach to nursing education and students' graduation rates.** (Two schools showed "high fidelity" to the program, four schools showed moderate fidelity, and the remaining four showed partial fidelity.)

Creating the Consortium

In "Developing the Oregon Consortium for Nursing Education: The Back Story,"[5] Gaines reported these findings:

- **The process of creating the consortium spurred transformational change at both the system and personal level among participants.**
- **Participants viewed reforming nursing education as a "moral obligation" to Oregonians, and committed to it as a shared goal.** Participants were willing to endorse essential changes to the existing system.
- **Outside consultants helped participants identify and resolve barriers to reform**. Associate and baccalaureate educators were willing to consider each other's perspectives as they confronted longstanding rifts between their communities.
- **Participants developed communication skills that helped build and sustain trus**t. Formal ground rules included:
  - Frequent, respectful, supportive communication
  - Recognizing each other's strengths rather than limitations
  - Accepting risk and ambiguity in the collaborative process
  - A shift from organizational representative to transformative leadership, such as by taking positions that did not reflect those of their institutions.

For more on key lessons in reforming nursing education, see the Appendix.

LESSONS LEARNED

1. **Subcontract with an outside organization to evaluate your program.** External evaluators at the Regional Research Institute proved helpful in conducting faculty and student focus groups and interpreting data. (Project Director/Tanner)
2. **Nursing education lacks good measures of student outcomes.** Although the research team modified the Clinical Competency Scale to make it more useful, the nurses serving as clinical testers inflated the ratings of their students, so they varied little in their scores. Funders need to invest in better measures of the quality of nursing education. (Project Director/Tanner)
3. **Monitoring an integrated nursing curriculum is challenging because participating schools lack a unified database**. Because of wide variation and frequent changes to campus databases, creating a single electronic system to track the

[5] Gaines BC and Spencer AG. "Developing the Oregon Consortium for Nursing Education: The Back Story." *Journal of Professional Nursing*, 29(4):197–202, 2012. Available online at www.sciencedirect.com/science/article/pii/S8755722312001019.

admission, progression, and graduation of students across campuses proved difficult. The research team ended up creating standard spreadsheets for each campus. (Project Director/Tanner)

4. **Create advisory committees to guide an evaluation.** The consortium's Research and Evaluation Committee, composed of representatives from each campus, was critical in enabling the research team to gain access to data, and in creating a feedback loop to improve nursing education. (Project Director/Tanner)

AFTERWARD

Consortium researchers continue to monitor outcomes from the Oregon reforms to nursing education, and intend to analyze their long-term impact on local communities, including rehospitalization rates. The consortium is also working with clinical partners on creating incentives for nurses with associate degrees to work for bachelor's degrees.

The consortium continues to accept new community colleges as partners, to seek additional funding for its work, and to consult with states on implementing similar reforms. Massachusetts, Texas, rural North Carolina, and New York City have adopted components of the model. State or regional consortia have formed in California and Hawaii, and are being planned in, Minnesota, Maine, New Mexico, and Wyoming.

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Grant ID# 63638
Program area: Human Capital

APPENDIX

Key Steps in Creating a Consortium to Reform Nursing Education

In *Redesigning Nursing Education: Lessons Learned from the Oregon Experience*, the research team recommended these steps for community colleges and universities:

- Develop a shared vision and clear goals
- Develop a culture that supports the vision based on honesty, inclusivity, and transparent decision-making
- Develop a financial plan early, and seek funding partners
- Engage faculty early, and sustain their involvement in curriculum design and faculty development
- Develop strong student advising systems to support students' career decisions
- Work with clinical partners to promote academic progression through the bachelor of science degree
- Clinical education must be redesigned to accommodate substantial changes in the nursing curriculum and a limited number of faculty members available to teach it.
- Consider forming regional rather than statewide consortia to allow efficient collaboration among faculty members

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