



## Leveraging a funding collaborative to develop more PhD prepared nurse scientists and leaders

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### ABSTRACT

**Background:** Over its almost 50 year history, The Robert Wood Johnson Foundation (RWJF) has provided about \$500M to nursing initiatives focused on education, practice, policy and leadership development. While RWJF was most often the sole funder of many of these initiatives, it has also joined with others to create a larger and more sustained impact on particularly challenging nursing, health, and health care issues.

**Purpose:** The purpose of this article was to describe the challenges and opportunities of a unique funding collaborative developed to engage new partners, increase the visibility of doctoral nursing education and increase funding of the RWJF Future of Nursing Scholars program to develop more PhD prepared nurses and nurse faculty.

**Methods:** Interviews were conducted with several members of the FNS Funders Collaborative as well as the scholars they supported. The perspectives of three funders, a regional philanthropy (IBC Foundation) and two health systems (Cedars Sinai and Sharp HealthCare) are presented here. Together they supported 13 nurses to complete their PhD through the RWJF Future of Nursing Scholars program.

**Findings:** RWJF contributed \$20 M and 13 other funders contributed an additional \$3M to the initiative. The additional funds supported 42 nurses to earn their PhD degree through the program. Six of the 13 funders are health systems, four are regional or health related philanthropies, and others include United Health Care, Johnson & Johnson, and the Care Institute.

**Discussion:** There were many lessons learned for RWJF and the other funders. Given the size of RWJF, some other philanthropies were concerned about how contributions would be represented, others wanted their funding to go directly to care improvement. Some health systems were not prepared for their nurses to decrease work time while pursuing further education. The nurse faculty and

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nurse PhD shortages have persisted now for over a decade. Although FNS made a significant contribution by developing over 200 new nurse PhDs (faculty and leaders), more funding collaborations that engage new and different partners must be developed so that nursing education does not have to focus on the same problems in the next decade.

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## Background

The Robert Wood Johnson Foundation (RWJF) ([rwjf.org](http://rwjf.org)) believes that nurses are critical to improving the health and well-being of all Americans and building a Culture of Health and health equity in the United States. RWJF has supported nursing practice, education, research, policy, and leadership development since its founding almost 50 years ago. To date, the Foundation has provided about \$500M in financial support through many programs. While RWJF was most often the sole funder of many of these programs, the Foundation has also joined with others, including regional and national philanthropy, the federal government, health systems and insurers, health related organizations, business, and private donors to create a larger and more sustained impact on particularly challenging nursing, health, and health care issues.

## The Value of Funding Collaborations

Funding collaborations have been very effective in supporting nursing and health professional education. In 2012, HRSA and three philanthropies, RWJF, the Josiah Macy Jr. Foundation, and the Gordon and Betty Moore Foundation, came together in a unique public-private funding collaboration to develop the National Center for Interprofessional Practice and Education (NCIPE; [nexusipe.org](http://nexusipe.org)). The National Center, housed at the University of Minnesota, provides the leadership, evidence and resources needed to guide the nation on the use of interprofessional education and collaborative practice to enhance the experience of health care, improve population health, and reduce the overall cost of care.

Funding collaborations not only increase the available financial support, they also engage and educate new partners about the importance of nurses to the health of the public, and may set the stage for future collaborations on nursing and other key health issues. For example, in 2011, RWJF engaged regional and national philanthropies in Partners Investing in Nursing's Future (PIN), a national program developed to facilitate implementation of the recommendations of the first Institute of Medicine (now National Academy of Medicine) report "The Future of Nursing

2020: Leading Change, Advancing Health" ([Institute of Medicine, 2011](#)).

The PIN Nurse Funders Collaborative believed that a key role of philanthropy is not just as a check writer, but as an influencer to bring nurses and nontraditional funders to the table. Following their funding collaborative experience, several local and regional foundation executives noted that their involvement in PIN represented their foundation's first foray into the health care sector and that, as a result of what they had learned and accomplished through PIN, they intended to support more work in nursing or other areas of health care ([Jellinek, et al., 2015](#)). Over the past decade, many of these funders have continued to do so.

## Challenges in Nursing Education: The Nurse Faculty and Nurse PhD Shortages

Funding collaborations are poised to take on big challenges. In 2010, both HRSA's National Advisory Council on Nursing Education and Practice ([National Advisory Council on Nursing Education and Practice. HRSA Bureau of Health Workforce, 2010](#). 10th Report to the Secretary of Health and Human Services and the US Congress. Impact of the Nursing Faculty Shortage on Nursing Education and Practice) and the RWJF sponsored National Academy of Medicine (NAM) report, the Future of Nursing 2020: Leading Change, Advancing Health, noted a significant challenge—the looming shortage of nurse faculty, particularly nurses with a doctoral degree. The NAM report recommended doubling the number of nurses with a doctoral degree by 2020. A shortage of nurse faculty severely limits the number of people who could be educated as nurses to care for the US population. Over 50% of US nursing schools require faculty to have an earned doctorate. About 30% require a master's degree, but a doctorate is preferred. According to the American Association of Colleges of Nursing (AACN), two key barriers to faculty recruitment are a limited pool of doctorally prepared nurses and noncompetitive faculty salaries ([Fang, 2020](#)).

The most common doctoral degrees for nurse faculty are the PhD (Doctor of Philosophy) or the DNP (Doctor of Nursing Practice). Since its introduction in 2001 at the University of Kentucky, the number of nurses completing a DNP has greatly increased, while the number of nurses pursuing a PhD has remained stagnant.

Overall, since 2013, PhD nursing program enrollments declined by 11.2%, a statistically significant decrease (AACN, 2020). PhD prepared nurses engage in research to improve health and health care through science, discovery and innovation, generate grant funding for the school and university, and are more likely to take on a faculty role (44.9% to only 7.6% for DNP prepared nurses) to prepare the next generation of nurses. (AACN, 2020).

In its 2020 report to the Secretary of Health and Human Services and the US Congress, NACNEP revisited progress on the nurse faculty shortage since its 2010 report. While the federal government and private philanthropies have together contributed millions of dollars toward developing more nurse faculty, there remains a critical shortage of doctorally prepared nurses, particularly those with a PhD degree. Many current nurse faculty are projected to retire over the next few years. Who will prepare the next generation of nurses to improve health, well-being and health equity in the US? ([National Advisory Council on Nursing Education and Practice, 2020](#)).

### **The RWJF Future of Nursing Scholars Program and the Funders Collaborative**

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RWJF developed The Future of Nursing Scholars Program (FNS) in 2013 to create a diverse cadre of PhD-prepared nurses who would advance science and discovery through research and lead transformational change in nursing and health care (see Paper title in this issue). Given the persistence of the nurse PhD and nurse faculty shortages, RWJF also developed a Funders Collaborative to increase funding support for the project and to introduce new partners to these critical issues. RWJF engaged Arabella Strategic Philanthropic Advisors to assist with identifying potential funding partners, such as high net worth individuals, family philanthropies, and business leaders in small and large organizations that produce health care related products. While many of these contacts may not have joined the funding collaborative, they did learn more about nurses' contributions to improving health, the challenges presented by the nurse faculty shortage, and the key roles that nurses play in decision making.

Initially, 15 funders committed \$6M to the project. Over time though, two of these funders withdrew their commitment for a variety of reasons discussed later in the paper. In the end, RWJF contributed \$20 M and 13 other funders contributed an additional \$3M. These additional funds supported 42 nurses to earn their PhD degree through the program. Six of the thirteen funders are health systems (Cedars Sinai, Cincinnati Children's Hospital, Memorial Sloan Kettering, Northwell Health, Rush University Medical Center, and Sharp HealthCare), four are regional or health related philanthropies (Independence Blue Cross Foundation, the Rhode Island Foundation, Michigan Funders group,

United Health Foundation) and others include United Health Care, Johnson & Johnson, and the Care Institute.

The perspectives of two different types of FNS collaborative funders (three total entities) and the scholars they supported are profiled here. Together, these three funders, a regional philanthropy (Independence Blue Cross), and two health systems (Cedars Sinai and Sharp HealthCare), supported thirteen nurses to complete their PhD through the RWJF Future of Nursing Scholars program.

### **Regional philanthropy: Independence Blue Cross Foundation (IBC Foundation)**

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The Independence Blue Cross Foundation (IBC Foundation)—[ibxfoundation.org](http://ibxfoundation.org)—is the private, corporate, charitable foundation of Independence Blue Cross (Independence) with a mission to lead sustainable solutions that improve the health and well-being of the Southeastern Pennsylvania community. IBC Foundation was established in 2011 and builds upon Independence's social mission to improve health and health care access for underserved communities in the region. Since 2011, it has awarded more than \$55 M in charitable grants to community-based nonprofit organizations, privately funded health centers, and accredited nursing programs in Southeastern Pennsylvania. The IBC Foundation has provided, through grant-making and leadership opportunities, more than \$13 million to support nursing student scholarships, provide enriching experiential learning opportunities, and empower nurses to pursue leadership roles in health care and beyond.

The IBC Foundation was the inaugural funder of the FNS Funding Collaborative, entering as a direct action from the *Future of Nursing 2020* report. They supported eight scholars over 3 years in the first three cohorts of the program. Four scholars completed their PhD at Villanova University M. Louise Fitzpatrick College of Nursing and four completed their PhD at University of Pennsylvania School of Nursing. The scholars were selected by the schools for entry into the PhD program and for funding through the IBC Foundation.

The scholars supported by the IBC Foundation were grateful for the funding support, covering tuition and a stipend, as well as the interest and involvement shown by the IBC Foundation. The scholars learned about regional philanthropy from IBC Foundation leaders, were invited to present their research at IBC Foundation conferences and mentored early career nurses in the IBC Foundation Nursing Internship program. The scholars benefitted from their engagement with health care leaders they met through their experiences. They expressed hope that future nursing funders would follow the IBC Foundation's example and become more involved with scholars they fund so they have the opportunity to learn from other health

related sectors. The IBC scholars have disseminated their research in peer reviewed publications and through presentations. In addition, since graduation, several IBC scholars have assumed faculty positions.

### Health Care System: Cedars Sinai

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Cedars-Sinai (CS) in Los Angeles, CA has been Magnet-recognized since 2000. Cedars has an active Nursing Research Council and, since 2005, an endowed Nursing Institute, the Geri and Richard Brawerman Nursing Institute for Professional Development. The Institute's goals are to foster education, leadership, research and community outreach for both students and staff. Ninety percent of the 3,100 Cedars staff nurses have a BSN, 17% also have an MSN. In the leadership team of 300 educators (Advanced Practice Registered Nurses, managers, and directors) 5% have a PhD and 2% a DNP.

Many Cedars nurses are interested in pursuing a doctoral degree but are challenged by the financial need to maintain an income while seeking further education. Several Cedars Nursing Research Council members were enrolled in PhD programs for over 5 years without completing the coursework and defending their dissertation. Many of the Cedars staff were considering a DNP program which could be completed in 2 years while working, however the DNP programs did not have the strong research focus which the nurses and Cedars preferred. In addition, thirty Cedars nursing educators participate as clinical faculty for Western Governors University (WGU) BSN program and are interested in teaching in other graduate nursing programs that prefer faculty to have a PhD degree. Believing that nurses with more education are better prepared to provide the highest level of care, make a significant impact on the health care system, and diminish health inequities, Cedars joined the Future of Nursing Scholars Funding Collaborative. Cedars supported two Future of Nursing scholars, one in each of the first two program cohorts. Cedars also provided additional financial support for tuition as well as release time for employees chosen for the FNS program. This type of support has not been monetized but accounts for an additional funding commitment.

Interested Cedars nurses were asked to complete a brief essay describing why they sought a PhD. The essays were reviewed by the Cedars Nursing Research Council. For the first cohort, the Council chose one nurse based on her essay and her past leadership in the RWJF Cedars Transforming Care at the Bedside (TCAB) initiative (RWJF developed TCAB in 2003 with Institute for Healthcare Improvement). This Cedars nurse was clinical faculty in the WGU BSN program and had been accepted to the University of San Diego PhD program. In the second cohort, a Cedars nurse was selected and completed her PhD via the online PhD program at the Medical University of South

Carolina (MUSC). For each of the 3 years of the program, in addition to the FNS funding, the scholars received a Brawerman PhD Scholarship of \$5,000, additional funding for tuition assistance, and registration and travel expenses for conference presentations. In addition, they received release time from work to attend PhD classes, required summer FNS meetings, and conferences.

The two Cedars scholars had clinical and education roles in the organization prior to entering the FNS program. Since completing their PhD, both scholars have disseminated their research in peer reviewed journals, book chapters and through local and national presentations, served as grant and abstract reviewers and clinical faculty, and led key organizational initiatives to enhance education, professional development, and evidence-based practice at Cedars. In addition, they participated in Covid-19 organizational initiatives to educate, cross-train, and redeploy nurses and travelers to acute care clinical areas and published on lessons learned during the pandemic.

### Health System: Sharp HealthCare

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Sharp HealthCare (SHC) is a not-for-profit health system with four acute-care and three specialty hospitals and 18,000 employees. Sharp has four Magnet designated hospitals. The system Nurse Residency Program has accreditation with distinction from the American Nurses Credentialing Center Practice Transition Accreditation Program. Sharp promotes a culture of excellence for nursing practice, research and person-centered care through the Caster Nursing Institute. Within the Institute, there are four centers of excellence and strategic priorities include support to advance nurses' education through scholarships and other resources.

Sharp chose to partner with RWJF and the University of San Diego because of the prestige of both organizations, the desire to increase the number of PhD prepared nurses, and for the professional and leadership development, mentoring and peer support received by scholars that will serve as a springboard to the career enrichment of the Sharp scholars. Sharp had a collaborative relationship with the University of San Diego prior to the FNS program.

Sharp established a formal application process that required demographic information, curriculum vitae, responses to three essay questions, a scholarly writing sample, and a recommendation by a Sharp doctorally prepared nurse. A selection panel of doctorally prepared nurses, representing each hospital, reviewed the applications and used a scoring rubric reflecting alignment of health system goals with applicant goals, scholarly writing sample, and recommendations.

Sharp supported three of their nurses, one each in the third, fourth, and fifth cohorts, to complete their

PhD at the University of San Diego through the FNS program. Sharp funds supported tuition, books, computers and software, and professional activities including attendance at the FNS seminars, and conferences for dissemination of their scholarly work. The program supported nurses who may not have been financially able to pursue doctoral education and contribute to the body of knowledge about their respective patient population without this support. The selection process was competitive and intentionally selected nurses from different hospitals and specialties within the organization. The scholars gave presentations each fall to internal stakeholders (funding approvers) about their summer intensives and progress in the program. Upon graduation, scholars presented their research at the organization's annual research and innovation conference.

The three Sharp Future of Nursing Scholars completed their PhD at the University of San Diego. They returned to Sharp and assumed leadership roles as nurse managers, educators in the organization and a local university, and mentors to Sharp nurses interested in advancing their education. The scholars noted that they are now better prepared to identify research opportunities, allocate resources to conduct research, and mentor staff in the research process. One of the Sharp scholars has presented her research to CA neonatologists and will be the Principal Investigator in a statewide research project expanding on her dissertation research. She noted that the PhD experience provided a new lens on her work as a clinical nurse specialist.

## Perspectives from RWJF and the Funders

RWJF anticipated that addressing the decades long nurse faculty and nurse PhD shortages would require additional funding (more than its \$20M commitment) and engagement of more funding partners. Arabella was very helpful in identifying potential partners. Some potential partners, such as Jonas Philanthropies and the Gordon and Betty Moore Foundation, had already developed their own nursing projects. They were anxious about spreading their funding too thin and raised interesting questions about how additional funders names would be attached to the project. Other potential new funders who were committed to improving health care were challenged to understand how supporting PhD education for nurses met their direct care improvement goals. Since RWJF is viewed as a large philanthropy, several also asked why RWJF didn't just increase its commitment beyond the \$20M and support the initiative itself. A few funders had specific criteria relating to geography, specific school partner, and/or research topics such as gerontology, childhood obesity, public health. These criteria were easily accommodated.

The FNS accelerated three year PhD trajectory was challenging for many health systems. Many systems

already had relationships with nursing programs either in the area or on-line and were committed to directing their nurses to these schools. Several health systems originally committed funding to support their nurses pursuing a PhD through FNS, however they were not familiar with the heavy condensed time commitment required to complete the PhD course work and dissertation in 3 years. The health system expected that the nurse would continue to work full-time while pursuing the PhD in 3 years. When they realized that this was not optimal, they withdrew from the funding collaborative. In addition, several health systems had initially committed a larger funding amount but found later that there were fewer nurses who wanted to pursue a PhD, so their actual funding amount was less than originally committed.

There were many lessons learned for RWJF in developing, maintaining and operationalizing the FNS Funding Collaborative. The University of Pennsylvania School of Nursing, the national program office (NPO), was an invaluable partner in the Funding Collaborative as well as the FNS program itself. As with many funding campaigns, outreach to potential funders was time intensive with a slow return on investment. The potential funders who were not as familiar with nursing, nursing education and the value of PhD prepared nurses learned a lot, but most did not eventually commit to supporting this initiative. Some wanted their funding to go directly to care improvement, and others felt that their smaller investment might be dwarfed by RWJF, and/or they were not prepared for their nurses to decrease work time while pursuing further education. The national program office spent much time managing the relationships between the funders and the 42 scholars they supported and the nursing programs they attended, in addition to implementing the program with over 200 Future of Nursing Scholars.

Each of the three FNS collaborative funders profiled here also identified lessons learned. Through this experience the IBC Foundation realized that addressing an issue of such magnitude as the nurse faculty shortage takes time, requires support from a broad range of stakeholders, and must consider factors beyond just the number of PhD-prepared nurses.

The healthcare systems provided financial support for tuition and release time for employees chosen for the FNS program to pursue their PhD. For a clinical practice setting, Cedars noted that it is important to be clear regarding expectations of future roles and responsibilities following PhD completion, such as role on the research council, grant writing, funded release time for faculty appointments, scholarship, publications, and dissemination of research finding. They suggested identifying organizational positions in advance that require a PhD education, such as Chief Nursing Officer, Executive Director/Vice President of Education and Practice, Research and Quality Improvement, and also defining if the organization is willing to share the PhD prepared nurse in a joint appointment with nursing education.

One issue encountered by health system scholars is the inability—either because of time or financial resources—to pursue a postdoctoral fellowship or even perhaps pursue their own research interests when they complete their degree. When the scholars return to full time clinical or administrative roles, as may be required by some institutions as payback for funding, their roles might preclude or limit research participation, data gathering and dissemination of increased knowledge through grant funding, publications, and presentations. Although health system scholars continue to be actively involved with research in the system, their own research interests may be on hold.

## Conclusion

The Future of Nursing Scholars Funding Collaborative was successful in supporting 42 nurses to complete their PhD, assume faculty roles and/or return to their health systems better prepared to conduct research, mentor others, and assume leadership roles in the system. While outreach was time intensive, it reached potential partners who had not considered supporting nursing education before and hopefully will join future nursing projects. While RWJF had created a funding collaborative before, this one was different in its focus (PhD nursing education vs. practice), timing (2014 vs. 2018), and approach to several nontraditional partners. Health system partners may now be better prepared to consider adjustments for nursing staff who want to enroll as a full-time student with a part time work commitment.

Despite the challenges inherent in any funding collaborative, RWJF will continue to pursue future collaborations. The nurse faculty and nurse PhD shortages have persisted now for over a decade. Although FNS made a significant contribution by developing over 200 new nurse PhDs (faculty and leaders), more funding collaborations that engage new and different partners must be developed so that nursing education does not have focus on the same problems in the next decade.

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## Authors' Contributions

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