Health Care Improvement Initiative: Outcomes and Impact of an Academic-Practice Partnership Between a Large Integrated Health System’s Nurse Scholars Academy and the University of San Francisco School of Nursing and Health Professions

Ryan Fuller
rmfuller@dons.usfca.edu

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Health Care Improvement Initiative:
Outcomes and Impact of an Academic-Practice Partnership Between a Large Integrated Health System’s Nurse Scholars Academy and the University of San Francisco School of Nursing and Health Professions

Ryan M. Fuller

University of San Francisco
Abstract

**Problem:** By December 2018, a large integrated health system’s Nurse Scholars Academy (NSA) will have financially-sponsored 64 registered nurses to return to school through a strategic academic-practice partnership program at the University of San Francisco (USF). Referred to as ‘Nurse Scholars,' health system employees elected to return-to-school through NSA. As a five-year initiative, NSA was at risk for not receiving additional funding beyond 2020 without a thorough outcomes analysis that articulated the outcomes to executive leadership.

**Context:** This health system employs more than 23,000 registered nurses in Northern California (NCAL). The NSA is a region-wide effort to accelerate academic progression, leadership development, and nursing professional development for strategic groups of Registered Nurses (RNs). NSA oversees disbursement of health system sponsored tuition assistance to Nurse Scholars at strategic academic partners in the United States.

**Interventions:** The intervention included the development of an instrument to assist with measuring academic-practice partnership impact. Completed in three plan-do-study-act (PDSA) cycles, the intervention was tested and refined over five months. To summarize the findings, the project produced an executive dashboard for executive leadership.

**Measures:** Quantitative measures included employee retention, the benefit of financial help to students, and measurable examples of professional development. Qualitative measures derived from survey responses were analyzed to identify the impact of completing a change-in-practice project, capacity for future leadership, and observed change in professional maturity.

**Results:** The first PDSA cycle tested the Nurse Scholar survey, and 67% of eligible Nurse Scholars responded. Results were positive, with each outcome measurement goal met except for survey response rate and professional certification rate. Employee retention was 95%. Promotions or additional responsibility assigned to a Nurse Scholar occurred in 62% of students.
Certification rate for Nurse Scholars was 81%. Nurse Scholar dissemination was 33%. Both groups unanimously agreed that the degree program had a positive impact on their professional maturity. Degree completion rate overall was 100%. In addition, 85% of Nurse Scholars agree or strongly agree that financial assistance impacted their ability to enroll in and complete a degree program. The second PDSA cycle refined the survey and improved the distribution method. The final PDSA cycle developed a summary for executive stakeholders and identified next steps for sustainability.

**Conclusions:** This project established baseline data, engaged stakeholders and developed a foundation for NSA to identify program outcomes and share them with executive leadership. Survey questions and data collection processes were optimized. This project illuminated a need for additional research that examines the quantifiable clinical/financial/patient impact of individual Nurse Scholar projects on their respective micro, meso, or macro systems. Finally, longitudinal outcomes of Nurse Scholars would be of future interest to fully understand the health system’s return-on-investment in sponsoring tuition and human resources for the academic-practice partnership to occur.
Health Care Improvement Initiative:
Outcomes and Impact of an Academic-Practice Partnership Between a Large Integrated Health System’s Nurse Scholars Academy and the University of San Francisco School of Nursing and Health Professions

This large integrated health system employs more than 23,000 registered nurses in their Northern California (NCAL) region. The NCAL Nurse Scholars Academy (NSA) is a region-wide effort to accelerate academic progression, leadership development, and nursing professional development for strategic groups of registered nurses (RNs). Two of the target groups are hospital-level nurse leaders without a Master of Science in Nursing (MSN) degree and regional/executive nurse leaders without a Doctor of Nursing Practice (DNP) degree.

**Problem Description**

By December 2018, NSA will have financially-sponsored 64 registered nurses to return to school through an academic-practice partnership with the University of San Francisco (USF). Referred to as ‘Nurse Scholars,’ learners are RN employees of the health system. Partnership programs include the MSN Clinical Nurse Leader (MSN-CNL) program and the Executive Leadership DNP (ELDNP) program.

Before this project, NSA did not have a comprehensive outcome evaluation strategy that identified the quantitative, qualitative, and financial impacts of the academic-practice partnership. As a five-year initiative, NSA is at risk for not receiving additional funding in 2020 without a specific outcome’s analysis. Therefore, the development and implementation of an evidence-based outcome measurement strategy for NSA were essential.

**Available Knowledge**

There is considerable evidence articulating the value of academic-practice partnerships. A literature search was conducted using the project’s PICO question as a framework. EBSCOhost
FUSION; search terms included “academic-practice partnership,” “outcome measurement,” and “nurs*.” Six articles helped inform an evidence-based outcome strategy and return-on-investment calculation for NSA. Articles were evaluated using the Johns Hopkins Nursing Evidence-based Practice Model (see Appendix B for the full literature evaluation table). In particular, the articles provide meaningful insight into what other academic-practice partnerships have done to identify and improve outcome measurement by listing specific qualitative and quantitative outcomes applicable to this project.

**PICO Question**

Does an evidence-based outcome measurement strategy (O), for RN leaders (P), who complete an NSA academic-practice partnership degree program at USF (I), compared to the existing outcome measurement strategy (C) improve the ability of NSA to articulate the partnership’s impact and outcomes?

**Quantitative Outcomes of Mutually-beneficial Partnerships**

Nabavi et al. (2012), completed a systematic review of the literature which reveals four significant themes of successful academic practice partnerships: (a) potential mutual benefits; (b) moving from being competitors to collaborators; (c) joint practice; (d) beneficial outcomes. The authors also identified mutually beneficial outcome measures to assist with evaluating the success of the partnership. Measures included increased student accountability, providing a supportive learning environment, improved student graduation rates, and an increased standard of professional development (Nabavi et al., 2012). The authors conclude academic-practice partnerships should focus on results that each partner would not be able to achieve independently (Nabavi et al., 2012). Finally, quantitative outcomes of the partnership included increased employment opportunities, financial help to students, and measurable examples of professional development in nursing (Navabi et al., 2012).
Focus Groups Provide Qualitative Outcomes

Sherman, Dyess, Hannah, & Prestia (2013) examines how masters focused academic-practice partnership can impact the nurse leader pipeline in an organization. This program aimed to improve readiness for nursing leadership through graduate education in nursing. Although the article focuses on the development of a nursing leadership curriculum, the process in which the curriculum developed may inform components of NSA outcome measurement strategy. For example, within the process of forming the curriculum, potential students took five self-reported measurement scales as well as participated in a focus group (Sherman et al., 2013). Included in the article are specific focus-group questions that may inform focus-group questions for this project, including “Can you describe your vision for the health care system in 2020,” “What did you hope to gain from your education,” and “Can you tell us about your understanding of nursing leadership” (Sherman et al., 2013).

Qualitative Measures of Leadership Development

Howard & Williams (2016) developed a robust academic-practice partnership aimed at preparing doctoral-educated nurse leaders; results examined outcomes for both the academic and practice partner. Many parallels exist between Howard and Williams' (2016) project and the Nurse Scholars Academy. The authors identify that outcome evaluation of a 7-year, multi-site, academic-practice partnership was a significant challenge (Howard & Williams, 2016). Resource limitation, time, and availability of data all threatened the ability to fully articulate the value of partnership (Howard & Williams, 2016). Despite the challenges, the authors outline potential outcome measures that would effectively articulate the value of a partnership. Examples given for qualitative outcomes include the value of the clinical practicum, professional maturity, portfolio development, professional role development, and the impact of completing a change-in-practice project (Howard & Williams, 2016).
The Value Proposition of Graduate Education

Pilon, Crutcher, Leming-Lee, Watters, Wolgast, & Arnow (2014) explore the value proposition of leadership development through graduate education in nursing. Exemplars encourage building a business case for the investment in education as pivotal for the success of an academic-practice partnership. This assists in later articulating the return-on-investment outcome measurement to stakeholders. Patient and organizational outcomes can be measured, at least partially, through the extrapolation of the impact of each master and the doctoral student’s change-in-practice project (Pilon et al., 2014). Improved capacity for leadership and advancing organizational talent may also be quantifiable (Pilon et al., 2014).

Measuring Academic Progression as a Retention Driver

Williams & Howard (2017) illustrate how an academic-practice partnership increased nurse retention for advanced practice providers. The authors anticipate at least 3-year retention of graduates based upon signed-agreements between the health system and the employee. Similarly, Dobalian, Bowman, Watye-Lake, Pearson, Dougherty, & Needleman (2014) identified retention as a critical outcome of an academic-practice partnership. Improved retention of well-educated clinical and leadership staff was a primary driver of the partnership between the Veterans Affairs Nursing Academy and their nationwide academic partners (Dobalian et al., 2014). Exemplars illicit nursing retention as an expected outcome of a successful academic-practice partnership.

Impact of the Literature

Many sources caution an outcome measurement strategy is inherently challenging to realize due to practical organizational barriers (Howard & Williams, 2016; Navabi et al., 2012; Sherman et al., 2013; Williams & Howard, 2017). Obstacles include difficulties in data collection, resource limitations, and the time needed to gather, analyze, and interpret data (Howard & Williams, 2016; Navabi et al., 2012; Sherman et al., 2013). Therefore, one strategy
for application is to ensure the data evaluation strategy is as simple and realistic as possible. Utilizing data sources that already might be preferable over time-intensive processes such as focus groups and surveys.

Existing data sources with the necessary information are limited or non-existent for NSA. Therefore, the outcome evaluation plan needed to include qualitative, quantitative, and financial impacts of the academic-practice partnership on both the students and organizations (Dobalian et al., 2014; Navabi et al., 2012; Howard & Williams, 2016; Sherman et al., 2013; Williams & Howard, 2017).

**Rationale**

For this project, change-in-practice is inherently complicated and requires a focused outcome measurement plan. The value of an academic-practice partnership lies within its ability to articulate the impact collaboration has had on the practice partner, the academic partner, and the individual learner.

Academic-practice partnerships are an evidence-based strategy to improve leadership development and professional development amongst registered nurses (Dobalian et al., 2014; Howard & Williams, 2016; Navabi et al., 2012; Sherman et al., 2013; Williams & Howard, 2017). Programs can provide mutually beneficial outcomes to both the academic and practice partners. Measuring outcomes is critical to articulate the return-on-investment for the sponsoring organization as well as the academic partner. Developing an evidence-based outcome measurement strategy fills an identified area for improvement in the NSA microsystem.

**Kotter’s Change Process**

Improving the ability of NSA to measure the impact of programs effectively is dependent on many factors. One is the capacity of the microsystem to incorporate this change in both its processes and culture. Kotter's (1996) eight-stage change process provides a meaningful
framework to facilitate this evidence-based change in practice (see Appendix C for an outline of the model). Kotter's eight-stage process is a mainstream vision for leading change (Pollack & Pollack, 2015). Kotter is a practical choice for the clinical nurse leader, as they work through many steps of the eight-stage change process. The process includes establishing a sense of urgency, developing a vision, communicating and empowering the team, and working to anchor the new approach in the daily activity of the microsystem (Pollack & Pollack, 2015). Kotter's eight steps align well with many of the clinical nurse leader's roles as an outcome manager, information manager, and team manager.

Kotter’s model provided guidance as to how the change-in-practice should be approached and incorporated into the design of the PDSA cycles. Kotter’s model impacted initial presentations emphasizing a sense of urgency amongst the microsystem through educational presentations describing the gaps in outcome measurement strategy and the evidence that supported their creation. Next, the model-guided development of a centralized vision co-created with the NSA leadership team. That vision was then communicated more broadly across the larger NSA team. Plans to improve the outcome measurement process were tested, and small wins were celebrated. Finally, making the change stick included developing next steps that integrated the outcome measurement strategy processes into the regular work activities of NSA staff.

**Specific Aim**

To develop an evidence-based outcome measurement strategy for NSA, and then conduct three plan-do-study-act (PDSA) cycles enhancing the strategy throughout five months. Examine NSA's impact on 36 Nurse Scholars who have graduated from either the USF MSN-CNLP or ELDNP program on or before the Summer 2018 semester.

**Methods**
The methods for this quality improvement project built around the available knowledge on improving outcome measurement for an academic-practice partnership as well as contextual factors within the microsystem. This project was an evidence-based change of practice project at the health system, and as such was not formally supervised by an institutional review board (see Appendix A).

**Context**

In December 2015, NSA launched as a five-year initiative with the potential to expand beyond 2020. NSA aims to address the Institute of Medicine's (IOM) Future of Nursing Report (IOM, 2011), the Institute for Health Care Improvement (IHI) Triple Aim (Berwick, Nolan, & Whittington, 2008), the "fourth" aim addressing care of the provider (Bodenheimer & Sinsky, 2014), and the need for workforce development in the era of health care reform (Buerhaus, Skinner, Auerbach, & Staiger, 2017). The workforce is aging, and nurse leaders are retiring at increased frequency. Knowledge transfer, mentoring, and the pace at which we develop nurses must increase in order to keep up with the demands of complex adaptive health care systems in an informatics age.

Over the past five years, employee turnover at the assistant nurse manager, nurse manager, director, and chief nurse executive levels has been an area of increased organizational focus. NSA globally aims to increase the capacity for future leadership amongst emerging and existing nurse leaders within the organization. Offering employer-sponsored tuition was intended to improve overall retention, nursing knowledge, and health of the communities that the health system serves.

The project charter guided this improvement work in the NSA microsystem of 23 employees working in a centralized health system office (see Appendix D). The charter reflects the findings of a microsystem assessment conducted using the IHI Microsystem Assessment tool.
The microsystem assessment assisted in identifying the key stakeholders in NSA, their current processes, and aided in the identification of process gaps that existed. Through evaluation of the microsystem, it became clear to the project leader that outcome analysis was a primary concern for both stakeholders within the microsystem as well as stakeholders within the microsystem’s larger meso and macrosystems. Following the microsystem assessment, developing an outcome measurement strategy that provided infrastructure for an ROI and executive dashboard became the focus of the charter.

An IHI Culture Assessment also influenced the project charter (see Appendix E), along with a SWOT analysis (see Appendix F), and the cost-avoidance calculation (see Appendix G). The IHI Culture Assessment assisted with identifying the need to improve outcome measurement to increase transparency within the culture of the microsystem. The SWOT analysis identified strengths in the microsystem including a strong academic-practice partnership with USF; it also identified weaknesses like a lack of data collection to date. Finally, the cost-avoidance calculation signals that organizational investment in employer-paid tuition is highly favorable when compared to costs of employee turnover.

**Intervention**

Development of a measurement strategy was central to building a new survey instrument for Nurse Scholar data collection. Evidence-based survey questions assisted with measuring the impact of academic progression on registered nurses. Collaboratively, the project team authored the first draft of the Nurse Scholar survey (see Appendix H). The survey was placed in SurveyMonkey and emailed to all USF Nurse Scholars who had graduated on or before Summer 2018 semester. Email reminders were sent to Nurse Scholars every two weeks for a total of six weeks.
Data was collected from NSA and USF to help fill data gaps. Data were compiled into a central database and analyzed. Interpretation of data consisted of simple quantitative analysis for numerical data and simple theme identification for qualitative responses. Iterative PDSA cycles drove rapid quality improvement in the intervention process as measures were refined and process improved.

**Study of the Intervention**

Study of the intervention identified more efficient or effective means for collecting outcome data. This project can assist with identifying an effective means of ongoing NSA outcome data collection. Stakeholders require an ongoing collection methodology that improves the quality and accessibility of NSA outcome data. The project intended to increase NSA's ability to improve outcome communication with both internal and external stakeholders. Both organization's leadership are stakeholders who ultimately determine if the intervention provided the necessary information to articulate the outcomes and impact of NSA sufficiently.

Measures evolved throughout the project to reflect current evidence and ongoing stakeholder feedback (see Appendix I). Outcome, process, and balancing measures were identified to help evaluate the full impact of academic progression on Nurse Scholars. Outcome measures include the impact on leadership development, employee retention, and professional development. Process measurements include degree completion rate and the impact of financial support on the ability to complete a degree program. Balancing measures include improving the potential for future leadership capacity and the perceived personal impact of completing a degree program.

Quantitative measures were derived through analysis of numerical survey responses. Qualitative measures derived from a general analysis of survey responses looking for simple themes or patterns within the qualitative responses. Responses help identify the impact of
portfolio development, perceived impact of completing a change-in-practice project and perceived a change in professional maturity. Measures include retention, financial help to students, and measurable examples of professional development.

The team considered other measures but ultimately focused on those measures that were achievable within the scope of this project. For example, evaluating the impact of projects on clinical and workforce outcomes was beyond the scope of this project. Also, longitudinal outcomes were not measurable due to the relatively short timeframe of NSA.

**Ethical Considerations**

This project had no explicit ethical considerations. The author does not claim any conflict of interest in completing this project. Nurse Scholars voluntarily completed NSA degree programs. As part of their participation in the program, Nurse Scholars provided permission for surveys during and after their degree program. This project was exempted from human subject's research review due to meeting the criteria as an evidence-based quality improvement project. Finally, for privacy purposes, the Nurse Scholar survey results are displayed in aggregate, and no individual responses are disclosed.

**Results**

Survey responses are summarized in the appendix (see Appendix J). Initially, 28 of the 36 USF Nurse Scholars who graduated on or before Summer 2018 responded to the survey. Three emails sent over six weeks reminded Nurse Scholars to take the survey. Of the 28 initial responses, only 23 were complete responses. Therefore, the initial response rate was 58%. Since the goal was a 75% response rate, a fourth request was sent from the project team leader directly to Nurse Scholars who did not complete the survey. Following the additional request, 27 Nurse Scholars responded resulting in a final response rate of 67%.
Based on the initial results of the survey, the second PDSA cycle refined the survey tool and distribution process. The refined survey (see Appendix K) reflects changes based on learnings from the first PDSA cycle. Changes included separate surveys for each population (i.e., one survey for MSN and another for DNP students), simplification and clarity of question language, and a reduction in an overall number of questions. The distribution process changed from a post-graduation survey to a required survey in the Nurse Scholar's final USF course. Collaboration with the academic-practice partner was essential in this step. With the changes made in this second PDSA cycle, most or all of Nurse Scholars are likely to respond to the survey. The graduating cohorts will test this in late 2018.

Leveraging data from the first and second PDSA cycles, the third PDSA cycle brought the NSA team together to review the data collected in order to create an executive dashboard for senior leadership (see appendix L). Due to confidential and proprietary information, the entire outcomes report and executive dashboard cannot be included in the appendix. The executive dashboard was presented to the regional president and received positive feedback. Following the presentation, the regional president asked for a draft strategy to extend NSA beyond 2020.

**Outcome Measures**

Nurse Scholars enrolled in a USF degree program exhibited strong employment retention at 100% for ELDNP students and 94% for MSN students. Overall Nurse Scholar employee retention was 95%. Nurse Scholars reported being promoted or assigned additional responsibility during or after their degree program at rates of 73% and 53%. Overall, promotions or additional responsibility assigned to a Nurse Scholar was 62%. Professional certification rates were reported at 100% and 74% respectively. Overall the certification rate for Nurse Scholars was 81%. Finally, Nurse Scholars reported engaging in a knowledge dissemination activity at rates of 37% and 33% respectively. Overall Nurse Scholar dissemination was 33%.
Process Measures

The primary process measure for this project was graduation rates of Nurse Scholars completing a USF degree program. Overall, 100% of ELDNP students and 100% of MSN students completed their programs as Nurse Scholars. Degree completion rate overall was 100%. The additional process measure examined the impact of financial assistance on enrolling and completing a degree program. Nurse Scholars in the ELDNP program reported that 75% would agree or strongly agree that financial assistance impacted their ability to enroll in and complete a degree program. Similarly, MSN scholars reported 80% would agree or strongly agree to the same statement. Overall, 85% of Nurse Scholars agree or strongly agree that financial assistance impacted their ability to enroll in and complete a degree program.

Balancing Measures

Balancing measures focused on the impact that completing a degree program had on the individual Nurse Scholar. ELDNP Nurse Scholars unanimously agreed that their degree program increased their capacity for leadership, integration of evidence into practice, and reinforced a positive perception of working at the health system. MSN Nurse Scholars reported similar findings at 93% agreeing or strongly agreeing. Overall, 95% of Nurse Scholars believe their degree program impacted these facets of their career. Other survey questions inquired if completion of their evidence-based practice project impacted professional maturity. Both groups unanimously agreed that the degree programs had a positive impact on their professional maturity.

Discussion

The initial results provide insight into the value of NSA academic progression but also identified opportunities for further research. It also identified the need for improvement in ongoing data collection for Nurse Scholars in academic programs. Lessons learned through the
course of three PDSA cycles improved the clarity, process, and effectiveness of data collection for NSA outcome metrics.

Overall, the results were positive with each outcome measurement goal achieved except the survey response rate and the professional certification rate goal. The measures identified for this project explored many facets of a Nurse Scholar completing a USF degree program including employee retention, professional development, and the impact of financial assistance on their ability to enroll in and complete a degree program. Improvements made during the project that has provided infrastructure for outcome measurement and reporting.

Summary

Nurse Scholars reported significant increases in professional development, maturity, and accomplishment as a result of their education. With 100% of Nurse Scholars completing their academic degree program and 95% employee retention, the health system’s investment in academic progression for nurse leaders has resulted in a better-educated nursing workforce. All Nurse Scholars obtained leadership skills that enable them to translate evidence into practice in an evolving and complex health care system. Professional certification rate was below the goal due to the MSN-CNL program not requiring certification as a requirement for graduation. MSN-CNL students are scheduled to sit for the CNL exam following graduation. Currently, not all students complete and pass the examination which is a continued area of focus for the partnership.

PDSA cycle two improved aimed to improve survey response rate and data mining, which was an issue identified in the evaluation of PDSA cycle one. PDSA cycle two changed the survey administration by incorporating the survey in the final course of the USF program. The practice partner created the SurveyMonkey, and the academic partner placed it in the final academic course utilizing the learning management system. Nurse Scholars will now complete
the survey as an assignment in their final course; this should significantly improve survey response rate. It will also hardwire the data collection process.

PDSA cycle three revised the Nurse Scholar survey itself. Revisions made included simplification of questions, reducing the number of questions, and creating a unique survey for each population of students measured. It was helpful to create a separate survey for each type of degree program evaluated. PDSA cycle three brought the USF data together into a broader executive dashboard for NSA. The data collected in this project was essential in order to develop the dashboard. This dashboard provides executive-level communication that NSA identified as critical to its future funding and success as a long-term organizational initiative.

**Conclusion**

As identified in the literature review, measuring the impact of an academic-practice partnership is inherently challenging. It requires collaboration and fluidity within the partnership. A strong academic-practice advisory council is essential to drive real-time improvements in the outcome evaluation strategy. For example, integrating outcome measurement by placing a survey link in the learning management system of the final academic course was a simple solution. Best practices for this academic-practice partnership leverage resources on both sides of the partnership. The advisory council reviews data together on at least a quarterly basis and exhibits joint ownership in outcomes.

All Nurse Scholars completed an evidence-based change-in-practice project which impacted their micro, meso, or macro systems. However, the examination of the impact of those change-in-practice projects is beyond the scope of this project. There is a significant opportunity for collaborative research in this area and is a next step to the foundation this project has built.

Longitudinal outcomes of Nurse Scholar academic progression are another area of particular importance to understand return-on-investment fully. Over time, Nurse Scholars are
likely to continue to receive increasing responsibility, enhance their ability to influence the translation of evidence into practice, and more broadly engage in systems transformation from wherever they lead. Academic progression has immediate benefits but also has potential long-term benefits that are not quantifiable at this time. Others attempting to measure the impact of an academic-practice partnership would find this data meaningful as an aspect of their evaluation strategy.

Future consideration for requiring MSN-CNL students to become certified as part of their MSN-CNL program is a topic for the academic-practice partnership advisory council. Collectively, a strategy should be identified to increase the professional certification rate of MSN-CNL students should the partnership continue to seek 100% certification of all USF Nurse Scholars. One option would be to require professional certification as part of the MSN program.

Repeating a measure at the beginning, middle, and end of a scholar's program would provide meaningful outcome data. Examples might include performing a 360 degree or leadership assessment at the beginning and end of each of the program. Repeated measures would potentially provide more insight into the impact on Nurse Scholars than the data currently gathered.

In the same regard, a mechanism or tool to track Nurse Scholar projects would improve the ability trend long-term impact of Nurse Scholar quality improvement projects. Manual collection or survey data collection provides low-quality data and has variable response rates. Improving the way information flows from the hospitals to the Nurse Scholars Academy could positively impact outcome data collection.

Overall, the project enabled NSA to create an executive dashboard and outcomes report. This report prompted further conversation amongst executive leadership, which includes
exploring extending NSA beyond its original five-year timeframe. Ultimately, this was the quality gap the project attempted to correct for the microsystem.
References


Appendix A

IRB Non-research Determination Form

CNL Project: Statement of Non-Research Determination Form

Student Name: Ryan Fuller

Title of Project:
Outcome Measurement Strategy for Nurse Scholars Academy

Brief Description of Project:

A) Aim Statement:

To develop an evidence-based outcome measurement strategy for NSA, and then conduct a PDSA cycle using the strategy for Nurse Scholars who have graduated from either the USF MSN-CNL or ELDNP program on or before the Summer 2018 semester.

B) Description of Intervention:

To develop and implement an outcome evaluation strategy for NSA that identifies the quantitative and qualitative outcomes of Nurse Scholar graduates from either the MSN-CNL or ELDNP program. The outcome evaluation strategy will include the following:

1. Completion rate of Nurse Scholars who entered a NSA degree program.
2. Retention rate of Nurse Scholars post-graduation from a degree program.
3. Impact of Nurse Scholars MSN-CNL or ELDNP final projects on the health system.
4. Impact on completion of a NSA degree program on the Nurse Scholar.

C) How will this intervention change practice?

The project introduces an outcome measurement strategy based on the current available evidence. Development of a survey that enables NSA to gather data on a routine basis, as well as the ability to conduct focus groups with Nurse Scholars, comprise the intervention aimed to improve the overall outcome measurement for the microsystem.
D) Outcome measurements:

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of a Nurse Scholars Academy MSN-CNL or ELDNP degree prepares employee for progressively responsible leadership</td>
<td>Nurse Scholars, KP, USF-KP Academic Partnership</td>
<td>25% of Nurse Scholars are promoted or take on additional responsibility during or in the 12 months after their enrollment in a Nurse Scholars Academy degree program.</td>
</tr>
<tr>
<td>Impact of completing a MSN-CNL or ELDNP on KP employee retention</td>
<td>Nurse Scholars, KP, USF-KP Academic Partnership</td>
<td>90% of Nurse Scholars will remain employed at KP during and after their degree program.</td>
</tr>
<tr>
<td>Impact of completing a MSN-CNL or ELDNP on a KP employee professional development</td>
<td>Nurse Scholars Survey</td>
<td>Upon Graduation: 100% of Nurse Scholars will hold a professional certification 25% will have presented or published</td>
</tr>
</tbody>
</table>

E) Process measurements:

<table>
<thead>
<tr>
<th>Process</th>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Nurse Scholars who enter a degree program and complete the program</td>
<td>USF-KP Academic Partnership</td>
<td>90% of Nurse Scholars complete their degree program.</td>
</tr>
<tr>
<td>Impact of NSA financial support on the Nurse Scholar</td>
<td>Nurse Scholar Survey</td>
<td>80% of Nurse Scholars will agree or strongly agree their financial support influenced their decision to enroll, and their ability to complete a degree program.</td>
</tr>
</tbody>
</table>

F) Balancing measurements:

<table>
<thead>
<tr>
<th>Balancing</th>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for leadership development for the Nurse Scholar</td>
<td>Nurse Scholar Survey and Focus Groups</td>
<td>90% report improved capacity for leadership, evidence-based practice, and/or intention to continue employment with KP.</td>
</tr>
<tr>
<td>Perceived impact of completion of NSA degree program on the Nurse Scholar</td>
<td>Nurse Scholar Survey and Focus Groups</td>
<td>90% report will agree or strongly agree portfolio development and completing a change-in-practice project resulted in a positive change in their professional maturity.</td>
</tr>
</tbody>
</table>

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: [http://answers.hhs.gov/ohrp/categories/1569](http://answers.hhs.gov/ohrp/categories/1569)

☐ This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

☐ This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:
EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>The aim of the project is to improve the process or delivery of care with established/accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The specific aim is to improve performance on a specific service or program and is a part of usual care. ALL participants will receive standard of care.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does NOT follow a protocol that overrides clinical decision-making.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment, or evaluation of the organization to ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/or patients.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: “This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board.”</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

ANSWER KEY: If the answer to ALL of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is NO, you must submit for IRB approval.
*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

STUDENT NAME (Please print):
Ryan Fuller, University of San Francisco CNL Student

SUPERVISING FACULTY MEMBER NAME (Please print):
Dr. Nancy Taquino, University of San Francisco
## Appendix B

### Literature Evaluation Table

<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Sample</th>
<th>Outcome/Feasibility</th>
<th>Evidence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Howard &amp; Williams. (2016).</td>
<td>Case Report</td>
<td>N/A</td>
<td>Provides an overview of a multi-site hospital system partnership with one academic partner. Offers a logic model for program evaluation. Describes early lessons learned from the first four years of the partnership.</td>
<td>V A</td>
</tr>
<tr>
<td>Study</td>
<td>Design</td>
<td>Sample</td>
<td>Outcome/Feasibility</td>
<td>Evidence Rating</td>
</tr>
<tr>
<td>-------------------------------------------</td>
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<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Sherman et al. (2013).</td>
<td>Case Report</td>
<td>N/A</td>
<td>Describes the use of an academic-practice partnership to advance leadership development amongst emerging nurse leaders across multiple sites. Recommendations include a formal outcome evaluation plan utilizing both qualitative and quantitative analysis. Outlines the contextual circumstances that necessitate an academic-practice partnership to address succession planning in nursing leadership.</td>
<td></td>
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<td></td>
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<td></td>
<td>VA</td>
</tr>
<tr>
<td>Pilon et al. (2014).</td>
<td>Case Report</td>
<td>N/A</td>
<td>Authors review the importance of graduate education for nurse leaders. Explore the role graduate education plays in preparing emerging nurse leaders for clinical leadership. Offer six case studies, which include ROI estimations and examples of outcomes of graduate education on nurse leader practice / impact on the health system.</td>
<td>VA</td>
</tr>
</tbody>
</table>


Pilon et al. (2014). The value proposition for graduate education of emerging nurse leaders: Immediate benefit to organizations. *Nurse Leader.*
<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Sample</th>
<th>Outcome/Feasibility</th>
<th>Evidence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Williams &amp; Howard. (2017).</td>
<td>Case Report</td>
<td>5 cohorts of 20-30 students</td>
<td>Examines an academic-practice partnership aimed at improving retention and professional development of advanced practice nurses. Explore the perceived outcomes of the individual learner, the practice partner, and the academic partner.</td>
<td>V A</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>Dobalian et al. (2014).</td>
<td>Case Report</td>
<td>142 individual interviews and 23 focus groups</td>
<td>Emphasizes the critically of inter-organizational collaboration to promote the success of the academic-practice partnership. Explores the role of a nursing academy in promoting academic-progression in nursing, and the impact that makes on organizational retention.</td>
<td>V A</td>
</tr>
</tbody>
</table>
Appendix C

Kotter’s Eight-Step Change Model

1. Create urgency
2. Form a powerful coalition
3. Create a vision for change
4. Communicate the vision
5. Empower action
6. Create quick wins
7. Build on the change
8. Make it stick

Creating the climate for change

Implementing & sustaining for change

Adapted from Dr. John Kotter’s 8 Step Process for leading change
http://www.kotterinternational.com/our-principles/changesteps/changesteps
Appendix D

Project Charter

**Project Title**
Outcome Measurement Strategy for a Nurse Scholars Academy (NSA).

**Global Aim**
By 2020, through the Nurse Scholars Academy (NSA) initiative, increase the number of Master of Science in Nursing Clinical Nurse Leader (MSN-CN) and Executive Leadership Doctor of Nursing Practice (ELDNP) prepared registered nurse (RN) leaders via a robust academic-practice partnership between the University of San Francisco (USF) and a large integrated health system in Northern California (NCAL).

**Specific Aim**
To develop an evidence-based outcome measurement strategy and evaluate for the 36 Nurse Scholars who have graduated from either the USF MSN-CN or ELDNP program on or before the Summer 2018 semester.

**Background**
NSA was launched in December 2015 by health system executive leadership as a five-year initiative in response to multiple internal and external factors. These included the Institute of Medicine’s (IOM) Future of Nursing Report (IOM, 2011), the Institute for Health Care Improvement (IHI) Triple Aim (Berwick, Nolan, & Whittington, 2008), the “fourth” aim addressing the care of the provider (Bodenheimer & Sinsky, 2014), and the need for workforce development in the era of health care reform (Buerhaus, Skinner, Auerbach, & Staiger, 2017). Holistically, NSA is a strategic effort to accelerate academic progression, leadership development, and nursing professional development across 21 hospitals in NCAL. In 2017, 18 Nurse Scholars have completed either a MSN-CN or ELDNP degree. By December 2018, NSA anticipates 46 more Nurse Scholars to complete their program. To date, NSA does not have a comprehensive outcomes evaluation strategy that looks at both the quantitative and qualitative outcomes of their graduates. Without this data, developing a true return-on-investment (ROI) for the program is impossible. As a five-year initiative, the program is at high-risk for ending in 2020 without a clear articulation of the organizational outcomes degree completion by Nurse Scholars has achieved.

**Sponsors**

<table>
<thead>
<tr>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health System President</td>
</tr>
<tr>
<td>Executive Director, Nurse Scholars Academy</td>
</tr>
</tbody>
</table>
**Goals**

To develop and implement an outcome evaluation strategy for NSA that identifies the quantitative and qualitative outcomes of Nurse Scholar graduates from either the MSN-CNL or ELDNP program. The outcome evaluation strategy will include the following:

1. Completion rate of Nurse Scholars who entered a NSA degree program.
2. Retention rate of Nurse Scholars post-graduation from a degree program.
3. Impact of Nurse Scholars MSN-CNL or ELDNP final projects on the health system.
4. Impact on completion of a NSA degree program on the Nurse Scholar.

**Team**

| Health System Executive Director, Nurse Scholars Academy | Health System NSA Strategy and Operations Program Director |
| USF MSN-CNL Director | Health System NSA Program Lead Consultant |
| USF ELDNP Director | Health System NSA Business Analyst |
| Health System Regional Director Professional Practice | Health System Regional Director Professional Development |

**Measurement Strategy**

**Population Criteria**

36 Nurse Scholars graduating from either the USF MSN-CNL (30 learners) or ELDNP (6 learners) by the Summer 2018 semester.

**Data Collection Method**

Data will be obtained from multiple sources. These include, NSA, the academic-practice partnership, human resources (HR), and Nurse Scholar survey. Once established, the data will be analyzed in Q3 2018 for distribution in Q4 2018. Following initial analysis, the data will be collected annually in Q3 for Q4 distribution.
### Data Definitions

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse Scholar</td>
<td>RN health system employee enrolled in, or graduated from, a USF MSN-CNL or ELDNP program</td>
</tr>
<tr>
<td>Professional Certification</td>
<td>Any nationally recognized nursing professional certification.</td>
</tr>
<tr>
<td>Program Completion</td>
<td>Successful graduation from either the MSN-CNL or ELDNP program.</td>
</tr>
<tr>
<td>Retention</td>
<td>Maintaining employment with the health system following completion of either the MSN-CNL or ELDNP program.</td>
</tr>
<tr>
<td>Promotion</td>
<td>An increase in formal responsibility within the organization as evidenced by a new job or role that is graded higher than the previous job held.</td>
</tr>
</tbody>
</table>

### Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Data Source</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of a Nurse Scholars Academy MSN-CNL or ELDNP degree prepares employee for progressively responsible leadership</td>
<td>Nurse Scholars, Academic-practice Partnership</td>
<td>25% of Nurse Scholars are promoted or take on additional responsibility during or in the 12 months after their enrollment in a Nurse Scholars Academy degree program.</td>
</tr>
<tr>
<td>Impact of completing an MSN-CNL or ELDNP on health system employee retention</td>
<td>Nurse Scholars, Academic-practice Partnership</td>
<td>90% of Nurse Scholars will remain employed at health system during and after their degree program.</td>
</tr>
<tr>
<td>Impact of completing an MSN-CNL or ELDNP on a health system employee professional development</td>
<td>Nurse Scholars Survey</td>
<td>Upon Graduation: 100% of Nurse Scholars will hold a professional certification 25% will have presented or published</td>
</tr>
<tr>
<td>% of Nurse Scholars who enter a degree program and complete the program</td>
<td>Academic-practice Partnership</td>
<td>90% of Nurse Scholars complete their degree program.</td>
</tr>
<tr>
<td>Impact of NSA financial support on the Nurse Scholar</td>
<td>Nurse Scholar Survey</td>
<td>80% of Nurse Scholars will agree or strongly agree their financial support influenced their decision to enroll, and their ability to complete a degree program.</td>
</tr>
<tr>
<td>Perceived impact of completion of NSA degree program on the Nurse Scholar</td>
<td>Nurse Scholar Survey</td>
<td>90% report will agree or strongly agree portfolio development and completing a change-in-practice project resulted in a positive change in their professional maturity.</td>
</tr>
</tbody>
</table>
Aim

Develop and implement an executive dashboard leveraging an evidence-based outcome measurement strategy for Nurse Scholars Academy Nurse Scholars Enrolled in a USF Academic Degree Program

Primary Drivers

- Nurse Scholars (RN Employees)
- Health System (Practice Partner)
- University of San Francisco (Academic Partner)

Secondary Drivers

- Nurse Scholar Retention
- Leadership and Professional Development
- Return on Investment
- Workforce Preparation and Readiness
- Academic Practice Partnership Benefits
- Impact on Profession of Nursing

Interventions / Actions

- HR Data Evaluation
- Nurse Scholar Survey
- Quantifying Impact on Nurse Scholars
- Accurate Data Collection on Key Metrics
- Data on Promotions, Leadership Development, and Project Completion
- Gathering Stories on NSA Impact to Organization
- Collaboration on Advancing CNL Competencies
- Awards, Accolades, and Publications / PR
- Continued USF Enrollment
- Increase Number of Graduate Prepared Nurses

Driver Diagram
### Project Timeline

<table>
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<tbody>
<tr>
<td>Conduct IHI Microsystem and Culture Assessment</td>
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<tr>
<td>Conduct Literature Review</td>
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<tr>
<td>Develop Project Charter and ROI</td>
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<td>Establish Stakeholder Support</td>
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<tr>
<td>Develop Nurse Scholars Survey and Focus Groups</td>
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<tr>
<td>Launch Nurse Scholars Survey</td>
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<tr>
<td>Collect Responses and Analyze Data</td>
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<tr>
<td>Refine Nurse Scholars Survey Based on PDSA 1</td>
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<tr>
<td>Prepare plan to test revised survey created in PDSA 2</td>
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<tr>
<td>Summarize Findings for Executive Leadership into Dashboard in PDSA 3</td>
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<tr>
<td>Finalize Project and Make Recommendations for Future Sustainability/PDSA Cycles</td>
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</table>

### Plan Do Study Act (PDSA) Cycles

**PDSA 1**
- Design an evidence-based survey based on outcome measures in the literature
- Test the survey using graduates through Summer 2018
- Analyze the results of the survey and compile results

**PDSA 2**
- Refine the survey with input and support from the NSA team and USF advisory council team
- Develop a method to administer the survey leveraging the partnership between USF
- Prepare the process to test with the December 2018 Nurse Scholar Graduates

**PDSA 3**
- Conduct a team meeting to review the data collected
- Identify key metrics for NSA dashboard
- Develop the dashboard
- Test the dashboard with presentation to executive leadership
### Assessment Tool—A Culture of Respect, Communications, and Disclosure

<table>
<thead>
<tr>
<th>Element**</th>
<th>Y</th>
<th>+</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal Culture of Safety</strong></td>
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</tr>
<tr>
<td>The organization is grounded in the core values of compassion and respect and the ethical responsibility to always tell the truth to the patient and family.</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>There is an expectation for ongoing communication, honesty, and transparency that is set from the board and leadership and closely monitored.</td>
<td>X</td>
<td></td>
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<tr>
<td>Error is seen as the failure of systems and not people.</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>All can expect support at the sharp end of unanticipated outcome and near-miss.</td>
<td>X</td>
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</tr>
<tr>
<td><strong>Malpractice Carrier</strong></td>
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<tr>
<td>There is a commitment to rapid disclosure and support.</td>
<td>X</td>
<td></td>
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<tr>
<td>There is a written understanding of how cases will be managed in partnership between patient/family/carrer.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanisms are in place for rapid respectful resolution.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Policies, Guidelines, Procedures</strong></td>
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<tr>
<td>There is a policy on patient and family communications.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is a policy on patient and family partnerships.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational infrastructure for clinician support exists.</td>
<td>X</td>
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</tr>
<tr>
<td>There are policies on disclosure and documentation.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedures are known and in place for internal and external communication of sentinel events.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidelines/policies support a fair and just culture (non-punitive) and the reporting of adverse events.</td>
<td>X</td>
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<tr>
<td>There is a written crisis communication plan. This plan is centrally located and easily accessible by all staff.</td>
<td>X</td>
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<tr>
<td><strong>Training</strong></td>
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</tr>
<tr>
<td>Ongoing training programs are in place for all staff on communication, expectations, policies, procedures, guidelines.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is just-in-time coaching (training) for disclosures.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Disclosure Processes in Place</strong></td>
<td></td>
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<tr>
<td>There is rapid notification of patient/family and activation of support—typically immediately around what is known.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is a team to support staff preparing to disclose (coaches).</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Root cause analyses commence immediately, are closely managed, and the results are shared, including with the patient and family.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>The Disclosure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization is transparent and honest.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibility is taken.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We apologize/acknowledge.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is a commitment to providing follow-up information.</td>
<td>X</td>
<td></td>
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<tr>
<td>The caregiver is supported throughout the process.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization provides continuing support for the patient/family.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All hospital staff disclosing are trained in their role</td>
<td>X</td>
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<td></td>
</tr>
<tr>
<td><strong>Ongoing Support</strong></td>
<td></td>
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</tr>
<tr>
<td>Resources are available to assist families experiencing unanticipated outcomes (not limited to error) – support is defined by needs of the patient and family (e.g., emotional support).</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources are available to assist staff at the sharp end of unanticipated outcomes (not limited to error) – based on the needs of the clinician (e.g., emotional support).</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedures are in place and are known to ensure ongoing communications with patients, families, and staff.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Procedures are in place and are known to bring the case to closure respectfully, as viewed by the patient and family.</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td><strong>Learning</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Mechanisms are in place to ensure learning by the board, executive leadership, MSEC, and across the organization.</td>
<td>X</td>
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</tr>
<tr>
<td>Measurement systems are in place to assess the impact of communication, disclosure, and support (as well as quality and safety) practices on premiums, claims, cases, and payments.</td>
<td>X</td>
<td></td>
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</tr>
</tbody>
</table>

**Adapted from Medically Induced Trauma Support Services (MITSS)**

Institute for Healthcare Improvement – DRAFT April 2008
We welcome feedback on this draft: contact Frank Federico at ffederico@ihi.org.
Appendix F

NSA Outcome Measurement SWOT Analysis

**Strengths**
- Human Resources and NSA Salesforce Database
- Nurse Scholars Agreed to Outcomes Measurement / Surveys as Part of Funding
- USF Motivated to Support Data Collection
- Resources Available in NSA to Support Data Collection
- SurveyMonkey Account in Place

**Opportunities**
- Ongoing Data Collection Requires a Process that is Sustainable
- Data Could be Collected by USF at Time of Program Completion
- USF Digication Portfolios Source of Data / Information
- Focus Groups on an Ongoing Basis to Support Program Improvement

**Weaknesses**
- No Baseline of Data Collection
- Scholars Can Opt Out of Survey
- Manual Process - Takes a lot of Tracking and Time to Reconcile Data
- Data Points are Extensive and Many are Qualitative
- Literature Around Outcome Evaluation of Academic-Practice Partnerships is Limited

**Threats**
- ROI Is Difficult to Calculate as There is a Strong Qualitative Aspect to the Value of Academic Progression
- Senior Leadership Wants to See Translation into Patient Outcomes - Beyond the Scope of this Project
- Data Collection Needs Failsafe Method that Minimizes Missing Data Points
Appendix G

Cost Benefit Analysis

**A: Nurse Scholar Investment**

<table>
<thead>
<tr>
<th>Employee Group</th>
<th>Nurse Scholar Count</th>
<th>Nurse Scholar Tuition</th>
<th>Total Tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSN Scholars</td>
<td>30 employees</td>
<td>$30,720</td>
<td>$614,400</td>
</tr>
<tr>
<td>DNP Scholars</td>
<td>6 employees</td>
<td>$72,000</td>
<td>$432,000</td>
</tr>
<tr>
<td><strong>Total 2017 USF Tuition</strong></td>
<td></td>
<td></td>
<td>$614,400 + $432,000</td>
</tr>
</tbody>
</table>

**B: Nurse Scholar Turnover Cost**

<table>
<thead>
<tr>
<th>Employee Group</th>
<th>Nurse Scholar Count</th>
<th>Estimated Cost Per Turnover</th>
<th>Potential Turnover Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSN Scholars</td>
<td>30 employees</td>
<td>$80,000</td>
<td>$1,650,000</td>
</tr>
<tr>
<td>DNP Scholars</td>
<td>6 employees</td>
<td>$717,000</td>
<td>$4,302,000</td>
</tr>
<tr>
<td><strong>Total Estimated 2017 Turnover Cost</strong></td>
<td></td>
<td></td>
<td>$3,520,000 + $1,434,000</td>
</tr>
</tbody>
</table>

**Potential Estimated Turnover Cost $4,684,000**

**C: Cost Avoidance Calculation**

| 2017 Potential Nurse Scholar Turnover Cost | $4,684,000 |
| 2017 Nurse Scholar Investment            | - $537,400  |

**Potential Cost Avoidance $4,146,600**
Appendix H

Nurse Scholar Survey Version One

2018 Nurse Scholar Survey

Welcome Nurse Scholar!

Please take 10-15 minutes to complete this important survey. As a Nurse Scholar, it is critical that we collect information on your degree progress, graduation, and accomplishments.

The data collected here helps us ensure we can articulate the full value of the Nurse Scholars Academy programs to senior leadership. This will help us continue to offer these incredible opportunities for future Nurse Scholars at Kaiser Permanente.

2018 Nurse Scholar Survey

Demographics

* 1. Name
   First Name
   Last Name

* 2. NUID (i.e. B123456)

* 3. Email Address (i.e. name@kp.org)

* 4. Preferred Phone Number (i.e. 707-555-1212)
5. What is your current employment status with Kaiser Permanente?

6. Where do you work now (what region/work location/health system?)

7. What is your current job title/role?
* 8. What is your highest degree earned? (Note: please do not include any degrees still in progress)
   - Diploma
   - Associates Degree
   - Bachelor's Degree
   - Master's Degree
   - Doctoral Degree

* 9. What is your highest NURSING degree earned? (Note: please do not include any degrees still in progress)
   - Diploma
   - ADN
   - BSN
   - MSN
   - DNP / DNSc / ND
   - PhD

* 10. Are you currently nationally certified?

* 11. Which certification do you currently hold?

2018 Nurse Scholar Survey
Certification

2018 Nurse Scholar Survey
NSA Degree Program Questions
*12. Which Nurse Scholars Academy degree program have you participated in?

*13. Have you passed the Clinical Nurse Leader exam?

   - Yes
   - No

*14. What university and program are you attending (or did you attend) using Choice Program funding?

   University Name (i.e. Capella University)

   Program Name (i.e. MSN in Education)
Graduation?

* 15. Have you graduated from your degree program?
   ○ Yes
   ○ No

2018 Nurse Scholar Survey
Nurse Scholar Graduate Report

* 16. Which semester/quarter did you graduate?

* 17. Please provide the month and year of your graduation (Note: You can estimate day of graduation if you do not remember)

   Date
   MM/DD/YYYY

* 18. What is the name of your capstone project/dissertation title?

19. Please enter the link to your project/dissertation on a repository website (if applicable):

* 20. What impact did your project have on your career?
21. Have you been able to impact evidence-based practice in your hospital/work setting?

22. What impact did your project have on quality metrics, change in practice, and/or clinical outcomes data?

23. Did your project incorporate Caring Science theory? If yes, please describe.

24. Has your project continued since graduation? Is it still making an impact, or have you expanded it further?
   - [ ] Yes
   - [ ] No

25. Please describe how your project has continued, or how it has continued to make an impact on your unit post-graduation.

   KAISER PERMANENTE
   NURSE SCHOLARS ACADEMY

2018 Nurse Scholar Survey

Project Impact

KAISER PERMANENTE
NURSE SCHOLARS ACADEMY

2018 Nurse Scholar Survey
Nurse Scholar In-Progress

* 26. What is your projected graduation semester/quarter?
   - Fall 2018
   - Spring 2019
   - Summer 2019
   - Fall 2019
   - Spring 2020
   - Summer 2020
   - Fall 2020
   - Spring 2021
   - Summer 2021
   - Fall 2021
   - I am on an academic break / leave of absence (on a break but returning)
   - I have withdrawn from my degree program (no longer enrolled)
   - Other (please specify)

* 27. What is your estimated date of graduation? (Note: estimate to the best of your ability)

   Date
   MM/DD/YYYY

* 28. What is your project topic for your MSN capstone or DNP / PhD project? (Note: Please list your current project topic, even if it may change in the future or is not finalized yet)

   [Blank line]

Kaiser Permanente Nurse Scholars Academy

2018 Nurse Scholar Survey

Personal and Professional Impact
* 29. How has this degree program affected your professional growth and leadership?

* 30. How has this degree program impacted your personal life?

* 31. Have you received any promotions or additional responsibilities during this program or since graduating from this program?
   - Yes
   - No

32. If you answered yes to question 31: Please describe the responsibilities or promotions you have received during or since graduating from this program?

* 33. Did financial support:

<table>
<thead>
<tr>
<th>Influence your decision to enroll in a degree program?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td><img src="Image" alt="Rating Icons" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Influence your ability to complete a degree program?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td><img src="Image" alt="Rating Icons" /></td>
</tr>
</tbody>
</table>
* 34. Which professional conferences have you attended in the past year?

☐ AONE - American Organization of Nurse Executives  ☐ NNLC - KP National Nursing Leadership Conference

☐ ANPD - Association of Nurses in Professional Development  ☐ SPN - Society of Pediatric Nurses

☐ ACNL - Association of California Nurse Leaders  ☐ NACNS - National Association of Clinical Nurse Specialists

☐ AWHONN - Association of Women's Health, Obstetrics, and Neonatal Nursing  ☐ AAACN - American Academy of Ambulatory Care Nursing

☐ AACN - American Association of Critical Care Nurses  ☐ WOCNS - Wound, Ostomy, and Continence Nurses Society

☐ AORN - Association of Operating Room Nurses  ☐ I have not attended any conferences in the past 12 months

☐ ANCC Magnet - National Magnet Conference

☐ Other (please specify)

* 35. Are you a member of your local medical center professional practice council or quality council?

☐ Yes  ☐ N/A

☐ No

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**Kaiser Permanente Nurse Scholars Academy**

2018 Nurse Scholar Survey

Nurse Scholar Accomplishments and Engagement

**Thinking of any scholarly activity over the past three years, please answer the following questions as they are relevant to you.**

36. Publications: Title of article/chapter, Type of publication (book, journal, online publication), Name of journal/book, author(s) as it appears on the publication, date of publication, DOI/link
37. Podium Presentations: Title of presentation(s), Name of event, Presenters, Location, Date

38. Poster Presentations: Title of poster(s), Name of event, Author(s) as it appears on the poster, Location, Date

39. Awards: Name of award, Organization, Date issued

40. Certifications: Name of national certification, Date issued

2018 Nurse Scholar Survey
Share Your Knowledge

* 41. Are you willing to be a mentor to a new Nurse Scholar in the future?
   ○ Yes
   ○ No
   ○ Maybe - I need more information

* 42. Are you willing to participate in a Nurse Scholars Academy focus group at a future date?
   ○ Yes
   ○ No
   ○ Maybe - I need more information
43. What "words of wisdom" would you like to share with potential scholars interested in advancing their education through a Nurse Scholars Academy program?


44. Is there anything else you would like to share with the Nurse Scholars Academy?


## Appendix I

### Outcome Measurement Strategy

<table>
<thead>
<tr>
<th>Measure</th>
<th>Data Source</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of a Nurse Scholars Academy MSN-CNL or ELDNP degree prepares employee for progressively responsible leadership</td>
<td>Nurse Scholars, Academic Partnership</td>
<td>25% of Nurse Scholars are promoted or offered additional responsibility during or in the 12 months after their completion of their degree program.</td>
</tr>
<tr>
<td>Impact of completing an MSN-CNL or ELDNP on employee retention</td>
<td>Nurse Scholars, Academic Partnership</td>
<td>90% of Nurse Scholars will remain employed during and after their degree program.</td>
</tr>
<tr>
<td>Impact on increasing national certification</td>
<td>Nurse Scholars Survey</td>
<td>100% of Nurse Scholars will hold a professional certification.</td>
</tr>
<tr>
<td>Impact on increasing knowledge dissemination</td>
<td>Nurse Scholars Survey</td>
<td>25% of Nurse Scholars will present at a conference or publish in a peer-reviewed journal.</td>
</tr>
<tr>
<td>% of Nurse Scholars who enter a degree program and complete the program</td>
<td>Academic Partnership</td>
<td>90% of Nurse Scholars complete their degree program.</td>
</tr>
<tr>
<td>Impact of NSA financial support on the Nurse Scholar</td>
<td>Nurse Scholar Survey</td>
<td>80% of Nurse Scholars will agree or strongly agree their financial support influenced their decision to enroll, and their ability to complete a degree program.</td>
</tr>
<tr>
<td>Potential for leadership development for the Nurse Scholar</td>
<td>Nurse Scholar Survey</td>
<td>90% report improved capacity for leadership, evidence-based practice, and/or intention to continue employment with health system.</td>
</tr>
<tr>
<td>Perceived impact of completion of NSA degree program on the Nurse Scholar</td>
<td>Nurse Scholar Survey</td>
<td>90% report will agree or strongly agree portfolio development and completing a change-in-practice project resulted in a positive change in their professional maturity.</td>
</tr>
</tbody>
</table>
## Appendix J

### PDSA Cycle 1 Evaluation Results

<table>
<thead>
<tr>
<th>Measure</th>
<th>Data</th>
<th>Target</th>
<th>Result</th>
<th>Met?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compiled Data on Degree Enrollments and Completions</td>
<td>Organizational Data</td>
<td>100% of all enrollment and graduation data captured</td>
<td>100% ELDNP 100% MSN 100% Overall</td>
<td>Yes</td>
</tr>
<tr>
<td>Completion of Nurse Scholars Survey</td>
<td>Nurse Scholars Survey</td>
<td>At least 75% of USF Nurse Scholars who have graduated from their program will complete the survey</td>
<td>100% ELDNP 60% MSN 67% Overall</td>
<td>No</td>
</tr>
<tr>
<td>Degree Prepares Employee for Progressively Responsible Leadership</td>
<td>Nurse Scholars Survey</td>
<td>25% of Nurse Scholars are promoted or offered additional responsibility during or in the 12 months after their completion of their degree program</td>
<td>75% ELDNP 53% MSN 62% Overall</td>
<td>Yes</td>
</tr>
<tr>
<td>Employee Retention</td>
<td>Nurse Scholars, Academic Partnership</td>
<td>90% of Nurse Scholars will remain employed at health system during and after their degree program</td>
<td>100% ELDNP 94% MSN 95% Overall</td>
<td>Yes</td>
</tr>
<tr>
<td>Improving Professional Development</td>
<td>Nurse Scholars Survey</td>
<td>100% of Nurse Scholars will hold a professional certification</td>
<td>100% ELDNP 74% MSN 78% Overall</td>
<td>No</td>
</tr>
<tr>
<td>Increased Knowledge Dissemination</td>
<td>Nurse Scholars Survey</td>
<td>25% of Nurse Scholars will present at a conference or publish in a peer-reviewed journal</td>
<td>37% ELDNP 33% MSN 33% Overall</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree Completion</td>
<td>Academic Partnership</td>
<td>90% of Nurse Scholars complete their degree program</td>
<td>100% ELDNP 100% MSN 100% Overall</td>
<td>Yes</td>
</tr>
<tr>
<td>Financial Assistance</td>
<td>Nurse Scholar Survey</td>
<td>80% of Nurse Scholars will agree or strongly agree financial support influenced their decision to enroll, and their ability to complete a degree program</td>
<td>75% ELDNP 85% MSN 80% Overall</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Balancing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity for Future Performance</td>
<td>Nurse Scholar Survey</td>
<td>90% report improved capacity for leadership, evidence-based practice, and/or intention to continue employment with health system</td>
<td>100% ELDNP 93% MSN 94% Overall</td>
<td>Yes</td>
</tr>
<tr>
<td>Professional Maturity</td>
<td>Nurse Scholar Survey</td>
<td>90% report will agree or strongly agree portfolio development and completing a change-in-practice project resulted in a positive change in their professional maturity</td>
<td>100% ELDNP 100% MSN 100% Overall</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Appendix K
Nurse Scholar Survey Version Two

Welcome MSN Nurse Scholar!

Congratulations on Completing your Degree Program!
Please take 10-15 minutes to complete this important survey. As a Nurse Scholar, it is critical that we collect information on your graduation and accomplishments.

The data collected here helps us ensure we can articulate the full value of the Nurse Scholars Academy to senior leadership. This will help us continue to offer these incredible opportunities for future Nurse Scholars at Kaiser Permanente.

Demographics

* 1. Name
   First Name
   Last Name

* 2. NUID (i.e. B123456)

* 3. Email Address (i.e. name@kp.org)
* 4. Preferred Phone Number (i.e. 707-555-1212)

* 5. What is your current job title/role?

* 6. What is your current employment status with Kaiser Permanente?

---

**MSN Nurse Scholar Survey**

**Working Outside of NCAL KFH/HP**

* 7. Where do you work now (what region/work location/health system?)

---

**MSN Nurse Scholar Survey**

**Nurse Scholar Graduate Report**

* 8. Which NSA MSN cohort are you in?
9. What is the name of your capstone project?

10. Please enter the link to your Digification Portfolio (i.e. https://usfca.digication.com/...)

11. Please upload your final poster for your MSN project

12. Did your MSN education impact your ability to translate evidence into practice in your microsystem?

13. Did your MSN project impact quality metrics, change in practice, and/or clinical outcomes data in your microsystem?
14. Did your MSN project incorporate Caring Science, human-centered design, our national professional practice model, and/or our national competency model?

15. Has your project continued since graduation? Is it still making an impact, or have you expanded it further?
   - Yes
   - No

16. Please describe how your project has continued, or how it has continued to make an impact on your unit post-graduation.

17. Please upload any documents that show the continued outcome data of your project.
   - Choose File
   - No file chosen

MSN Nurse Scholar Survey

Personal and Professional Impact
*18. What impact did your project have on your career and professional maturity?*

*19. Have you received any promotions or additional responsibilities during this program or since graduating from this program?*

- Yes
- No

20. **If you answered yes to question 19:** Please describe the responsibilities or promotions you have received during or since graduating from this program?

*21. Did financial support from the Nurse Scholars Academy:*

<table>
<thead>
<tr>
<th>Influence your decision to enroll in a degree program?</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence your ability to complete a degree program?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence your decision to remain employed at KP?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence your opinion of KP as an employer?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
22. Which professional conferences have you attended in the past year?

- AONE - American Organization of Nurse Executives
- ANPD - Association of Nurses in Professional Development
- ACNL - Association of California Nurse Leaders
- AWHONN - Association of Women’s Health, Obstetrics, and Neonatal Nursing
- AACN - American Association of Critical Care Nurses
- AORN - Association of Operating Room Nurses
- ANCC Magnet - National Magnet Conference
- NNLC - KP National Nursing Leadership Conference
- SPN - Society of Pediatric Nurses
- NACNS - National Association of Clinical Nurse Specialists
- AAACN - American Academy of Ambulatory Care Nursing
- WOCNS - Wound, Ostomy, and Continence Nurses Society
- I have not attended any conferences in the past 12 months

23. What publications or presentations (poster or podium) have you completed during your time as a Nurse Scholar?

24. What awards or accolades have you received during your time as a Nurse Scholar?
25. What national certification(s) do you hold (if any)?

- [ ] Clinical Specialty (i.e. RN-OB, CEN, CCRN, etc.)
- [ ] Quality (i.e. CPHQ)
- [ ] Leadership (i.e. CNL, CNML, CENP, NEA-BC)
- [ ] Education (i.e. CNE, RN-BC)

26. Are you willing to be a mentor to a new Nurse Scholar in the future?

- [ ] Yes
- [ ] No
- [ ] Maybe - I need more information

27. Are you willing to participate in a Nurse Scholars Academy focus group at a future date?

- [ ] Yes
- [ ] No
- [ ] Maybe - I need more information

28. What “words of wisdom” would you like to share with potential scholars interested in advancing their education through a Nurse Scholars Academy program?
Closing

29. How was your experience at USF? What could we improve for future programs with our academic partner?

[Blank Box]

30. Is there anything else you would like to share with the Nurse Scholars Academy?

[Blank Box]
Appendix L
NSA Executive Dashboard Exemplar

AT-A-GLANCE

36 MONTHS
Since NSA Launch

60 MONTH COMMITMENT

$12.4 M
Tuition Invested

$28.9 M COMMITMENT

96% RETENTION
Degree Program Scholars

Nurse Scholars To-Date

1008 TOTAL

491 Academic Progression Nurse Scholars

517 Leadership Development Nurse Scholars

Progress to Degree Targets

314/500 Bachelors 63% 
120/250 Masters 48% 
57/100 Doctoral 57%

2018 Baseline Data: Highest Degree Earned*
NCAL KFH and TPMG Workforce

62.1% Bachelors
10.6% Masters
0.90% Doctoral

*Self-Reported HealthStream Data as of September 30, 2018

IOM Goal: Diversity Priority
Nurse Scholar Ethnic Diversity

59%

IOM Goal: 80% BSN by 2020
RN’s BSN or Higher

73.6%

RN’s Interested in RN-BSN
Nurses Remaining

1,970