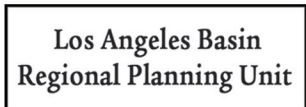


Perioperative Specialty RN Training Pilot Project Final Report



PERIOPERATIVE SPECIALTY RN TRAINING PILOT PROJECT

Executive Summary

June 2019

While the overall supply and demand of RNs in California's nursing workforce is currently in balance, health care organizations are experiencing growing demand and short supply of experienced RNs in various specialty areas. Hospitals across Southern California sought options to build their specialty nursing workforce in a way that is sustainable, reduces cost, promotes collaboration, and minimizes competition across the region as a priority for action. The Hospital Association of Southern California (HASC) engaged *HealthImpact* in working together with its members to explore root causes of the limited supply, recommending strategies and innovative methods for change or improvement in the development of the specialty workforce needed, carried out through academic-practice collaboration.

The need for perioperative RNs in particular was identified to be a high priority, with employers reporting a lack of qualified candidates to fill positions and facing increasing vacancies. Addressing the gap was further compounded by challenges associated with the resources needed to prepare RNs for these complex hard-to-fill positions, requiring the acquisition of specific knowledge and unique skills not typically included in academic nursing programs preparing RNs for licensure.

Responding to the need for industry-driven career pathway programs in perioperative nursing, this project engaged two nursing programs at Azusa Pacific University and Mount Saint Mary's University, to develop and provide perioperative courses for 17 RNs in collaboration with eight area hospitals in summer and fall 2018 as pipelines to employment. This approach aimed to meet workforce needs supporting the professional advancement of incumbent RNs while strengthening their career mobility and retention within existing employers.

Conducted as a local pilot project with the support of the South Bay Workforce Investment Board (SBWIB) and the Los Angeles Basin Region's Workforce Development Boards involving schools and hospitals in the Los Angeles area, outcomes and recommendations arising from these programs inform opportunities for change and improvement. Evolution of the model to adopt and refine success strategies will support the expansion of future programs and its application to other specialties, additional nursing schools and hospitals across the region.

Partnerships with



Background

Across Southern California, there is growing demand for experienced nurses in specialty areas. Hospitals seek options to build a specialty nursing workforce in a way that is sustainable, reduces cost, promotes collaboration, and minimizes competition across the region.

The **Hospital Association of Southern California (HASC)** engaged *HealthImpact* to work with its members to explore root causes of limited supply and recommend strategies that tie directly to the causes. HASC is a regional trade association representing more than 180 member hospitals and 40 health systems in Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara and Ventura counties. *HealthImpact*, the state's designated nursing workforce center, is recognized for developing collaborative solutions through academic-practice partnerships, and it facilitated and guided the study. In January 2016, HASC established a workgroup of administrators, nurse educators, human resources professionals, and nursing school leaders from 18 organizations to reach a consensus on causes and produce recommendations to create the needed workforce pipeline.

The workgroup confirmed that a shortage of experienced specialty nurses does exist, using data collected from the workgroup, extrapolated to 175 HASC hospitals, and prioritized seven specialty areas with volumes of vacant RN positions as follows¹: Critical Care: 2,320; Emergency: 1,392; Perioperative: 1,072; Labor & Delivery: 864; and Neonatal ICU: 688. Numbers for Case Manager and Care Coordinator specialties were not identified, but continued and growing needs are apparent in these areas.

On a Related Note...

Care Coordinator and Case Manager roles were identified as priority specialty areas. To address this need, HASC partnered with the Southeast Los Angeles County Workforce Development Board (SELACO) and other stakeholders to help create the C3 Skills Alliance (www.c3skillsalliance.org). Funded by the SlingShot initiative, the alliance developed care coordination training programs for health care personnel in Los Angeles and Ventura counties.

Under this initiative, approximately 200 new and incumbent workers at the entry through professional levels were successfully trained through local adult schools, community colleges and the California State University system. Course content is available statewide to educate patient care staff in hospitals, clinics and long-term care facilities.

This health workforce alliance is embedded in HASC's long-term regional workforce strategy and helped to energize and strengthen our ability to respond to employer needs by providing the Perioperative Specialty RN training pilot in partnership with the SBWIB.

¹ Based on HASC Workforce Survey Report, Quarter 4, 2015.

The HASC nursing workgroup determined that the root causes and contributing factors of identified specialty nursing shortages were:

- 1** *Loss of experienced specialty nurses due to increased retirements.*
- 2** *Personnel turnover caused by intensity and stress of these work environments.*
- 3** *High cost of recruitment and onboarding.*
- 4** *Insufficient RN pre-licensure education specific to specialties and new demands of regulation and increased acuity in these settings.*

Increased demand for experienced specialty nurses extends beyond individual hospitals and beyond Southern California².

- Nearly 90% of hospitals responding to the quarterly HASC survey across California (n=210) report difficulty filling open positions.
- 40% of hospitals reported “high demand” for nurses in difficult-to-fill specialty nursing positions such as perioperative nursing with more than double the 18% reported in 2014.
- Hospitals reported increasing use of nursing overtime and contract personnel to meet escalating staffing needs, while forecasting an increase in anticipated vacancies.
- Highest perception of overall demand is in the Los Angeles region; highest perception of shortage of experienced RNs is in the Inland Empire.



²Survey of Nurse Employers in California, conducted by UCSF in collaboration with HASC and *HealthImpact*, fall 2015.

To assist in developing a data-driven strategy, the need for real-time and relevant regional market data was critical. Two sources were used to provide insight on the supply and demand of specialty RNs. These sources included the *HASC Healthcare Workforce Survey Report* that captures turnover, new hire and vacancy data from over 95 hospitals in the Los Angeles region and the *Survey of Nurse Employers in California* which evaluates overall demand for RNs in the state and collected information specific to the hiring of newly graduated nurses from over 100 hospitals in the region.

A *Regional Plan for RN Specialty Programs* (2016 to 2019) provided a framework for change, delineating four phases of planning and growth within which this perioperative project was carried out as part of Phase III-IV.

Regional Plan

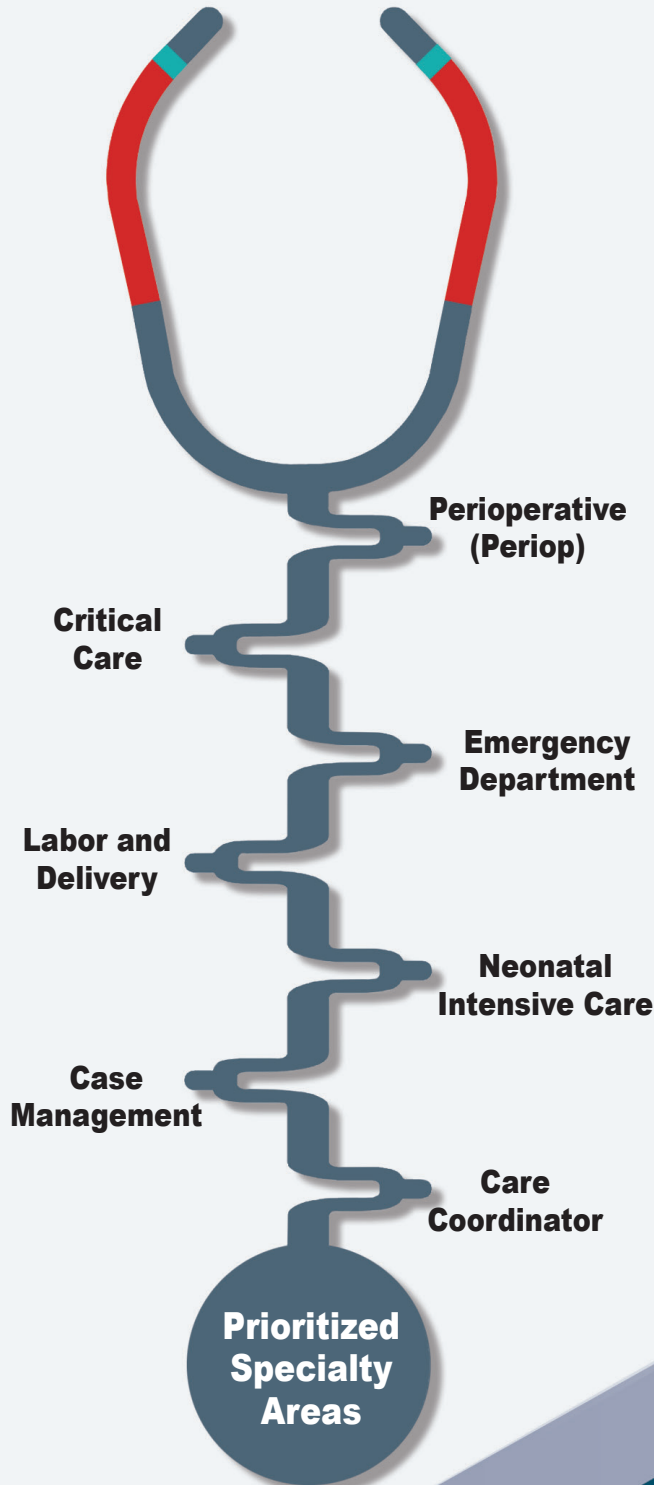
PHASE I Assessment & Strategy (January-May 2016) and Regional Plan Development (June-August 2016)

PHASE II Regional Planning & Coordination (September - December 2016) and Program Design & Development (January-December 2017)

PHASE III Program Implementation (January-June 2018) and Program Evaluation, Strengthening & Expansion (July-December 2018)

PHASE IV Expand, Scale, Sustain (January-June 2019) and Strategic Positioning & Institutionalization (July-December 2019)

The pilot project for Perioperative (Periop) Specialty Training was identified to be a priority for development with implementation in Phase III of the Regional Plan for Specialty Programs. Based on the root causes, the HASC workgroup recommended a regional approach to prepare nurses for prioritized specialty areas:



The issues, causes, and solutions address certain criteria:

- *Reduce competition among local hospitals for nursing personnel*
- *Reduce staffing costs related to vacancy driven overtime and higher cost of travelers*
- *Connect nurses at various points along the career continuum to needed roles*
- *Improve hiring decisions and potentially reduce turnover*
- *Reduce recruitment costs through a planned pipeline based on projected need*
- *Achieve lower cost and increased efficiencies through centralized education, compared to the cost of independent courses provided within each hospital*
- *Establish community-based education standards and adopt best practices*

Both universities played a lead role in the design and execution of the Periop Specialty Courses they offered.

Lessons Learned



How did this project implement the goals and strategies of the local/regional plan?

The pilot project implemented the goals and strategies of the regional plan by preparing existing RNs, five new graduate RNs, and unlicensed new graduate nurses for specialty roles in the Los Angeles area through two Periop courses developed and conducted by Mount Saint Mary's University (MSMU) and Azusa Pacific University (APU).

Conducted as post-graduate courses, licensed nurses were enrolled through a nursing school into a community-based continuing education course with special student status. Each school utilized a standard set of modules developed by the Association of Operating Room Nurses (AORN, Periop 101: A Core Curriculum™), carried out through either a 10-week or 18-week course that included both clinical and didactic components. Each school provided a lead faculty to coordinate the program, working with hospitals to enroll employed RNs in the course, and provide experienced Periop RNs to function as preceptors working directly with the RN enrolled in the course during a clinical practicum.

The model provides for the option to combine RN students, new graduates, and experienced nurses in one course, in accordance with the SBWIB funding criteria. Hospitals participating in these pilot courses enrolled currently-employed RNs and a percentage of new graduate RNs, with the intent to transfer them into hard-to-fill, vacant Periop specialty positions. For the pilot, hospitals provided documentation of their in-kind contribution through salaries of RNs enrolled in the courses, and the experienced RN preceptors working with them, along with supplies, equipment, and physical space in lieu of payment of a portion of course registration fees to participate.

What role did the partners play? Were any new partnerships developed, or how were existing partnerships expanded? Describe the benefits.

Both universities played a lead role in the design and execution of the Periop Specialty Courses they offered. MSMU recently hired a faculty member who had previous extensive surgical experience; and APU's course instructor is currently a surgical services director in a local hospital and a leader in the local Association of Operating Room Nurses (AORN) chapter; thus, content and practice experts developed and conducted the courses. Mount Saint Mary's University conducted the course for two health care system partners (three hospitals):

- Veterans Affairs West Los Angeles Medical Center (West LA VA)
- Coast Plaza Hospital
- Memorial Hospital of Gardena (Avanti Hospitals)

The two RN Periop Specialty Nurse Training Courses offered by Mount Saint Mary's University and Azusa Pacific University funded by SBWIB utilized the AORN Periop 101: A Core Curriculum™, with classroom, simulation and distance learning with online and computer-based education and assignments. Operating under this model the SBWIB, HASC, HealthImpact, training providers, and employers functioned as collaborative partners.



The MSMU course, conducted from May 29, 2018 to July 31, 2018, included eight RNs who completed/passed the course with an average passing score of 86% (80% was the minimum passing score required). Benefits (of the course and partnerships) included:

- ▶ Practice site at one of the participating hospitals — The West LA VA (with its Periop Educator attending most of the classes to support its own RNs attending the course)
- ▶ 40 CEUs awarded by MSMU
- ▶ 41.7 CEUs awarded by AORN
- ▶ RN participants received a 1-year complimentary AORN membership (value \$160)
- ▶ RN participants have 6-month access to the Periop 101 materials and resources
- ▶ RN participants received a free copy of *Alexander's Care of the Patient in Surgery, 16th Edition* and the *AORN 2018 Guidelines for Perioperative Practice* (value \$316)
- ▶ 10-week summer course with 4 hrs./week (2 hours classroom and 2 hours hands-on in an open operating room applying lecture concepts as a lab experience)
- ▶ Hospitals assigned the RNs up to 32 hours per week in an Operating Room (OR), providing direct care under the guidance and supervision of an experienced Periop RN functioning as a preceptor

Azusa Pacific University conducted the course from Sept. 15, 2018 through Dec. 22, 2018. Nine (9) nurses were enrolled from two hospital partners with whom they have other academic-practice partnerships, and three newer hospital partners. The established hospital partners provided in-kind support to the project, including:

- ▶ USC Verdugo Hills Hospital (benefits included providing support and preceptors for nurses from another facility) and,
- ▶ Methodist Hospital of Southern California (benefits include providing classroom and operating room space, utilization of unopened expired supplies, and occasional OR staff to augment the classroom "lab" sessions on Saturdays)

Newer hospital partners included:

- California Hospital Medical Center (Dignity Health)
- St. Francis Medical Center (Verity Health)
- Los Angeles Community Hospital (Alta Hospitals System)

**APU states that
the more partners
there are, the better
and more cost-effective
the course is.**

Word of mouth is the best marketing tool.

Benefits of the APU courses are:

- The 16-week academic course was delivered by an experienced Periop RN, who is AORN Certified, and adjunct faculty at APU
- Combination of didactic content, skills, and simulation, OR preceptorship, and AORN Periop 101 online modules (26 Modules & AORN Videos with Testing)
- Students received a one-year paid AORN membership
- Unique combination of Adult Learning Model and Flipped Classroom approach
- Students received free textbooks: *Alexander's Care of the Patient in Surgery, 16th Edition* and *the AORNs 2018 Guidelines for Perioperative Practice* (value \$316)
- 58 BRN Contact Education Hours from the APU School of Nursing for didactic/skills/clinical hours
- Eight Saturday sessions for didactic learning and skills training from 8 a.m. to noon hosted by Methodist Hospital of Southern California in Arcadia
- A minimum of 11 eight-hour shifts of preceptorship in the OR on a weekday (M-F) at the partner hospital (88 hours total)
- AORN Certificate for Periop 101: A Core Curriculum™ course completion, and 41.7 Contact Hours from AORN upon successful completion of the course and final exam

How was the amount of local resources and/or contributing partners expanded or leveraged?

Both universities had existing clinical affiliation agreements with these local hospitals. Helpful tactics that expanded and leveraged the partnerships were:

- 1 *Frequent school communication with their respective hospital partners*
- 2 *HASC supporting communications through email blasts to their member hospitals and*
- 3 *Direct marketing and outreach provided by the project director within an extensive network.*

APU's hospital partners are aware of the university's planned course schedule, so they can plan ahead to recruit and prepare their nurses to participate and their managers to replace the positions left by those nurses transitioning to the operating room. Word of mouth is the best marketing tool, which enabled new hospital systems to have several nurses participate in each course.

Additional benefits included the ability for APU to provide the AORN RN Preceptor Module to select hospital partners, as a result of volume purchasing of the AORN Periop 101 modules. APU also has other campuses in Southern California providing further opportunity to offer future courses going forward to support hospital partners in other locations.



Significant activities that helped to build workforce capacity included:

The SBWIB posted the course on the I-TRAIN website, offering to promote the course to all of the Workforce Development Boards (WDB) in the L.A. region, as well as their community partners. This occurred late in the planning process during bi-weekly team calls and was helpful as a key communication strategy to be replicated for future projects. The SBWIB provided onsite registration through its Gardena One Stop Center at both universities. This required personnel that normally work Monday through Friday to be available on Saturday (which was graciously accommodated).

Establishment of the Incumbent Worker Training Agreement during team planning was helpful for communicating with hospital partners and will be a good resource for future projects.

The funding provided by the SBWIB certainly was appreciated by the partner hospitals, several of which wrote thank-you emails following inclusion in the specialty courses.

Finally, the SBWIB approved a new graduate nurse who was not yet a hospital employee to attend the course at APU under the pilot funding.

What innovative or best practices were developed?

- Flipped classroom teaching strategy with interactive dialogue and PowerPoint materials supported active learning and professional development.
- Course with integrated classroom didactic, online modules, self-directed adult learning, simulation, and precepted clinical hours (at the nurse's place of employment).
- Course utilizes the AORN Periop 101: A Core Curriculum™ for fundamentals, competencies, and best practice.
- Host hospitals, offering OR space for simulation and classrooms demonstrates true partnership for community benefit.
- West LA VA made available their Periop Educator to attend all classes, participate in simulation, and ensure preceptors for their employees.
- A survey tool was created to gather qualitative data from hospital partners by phone or teleconference following completion of the Periop Specialty Courses.

Both courses utilized the AORN Periop 101: A Core Curriculum™ for fundamentals, competencies, and best practice.

The greatest achievements included:

- Positive working relationship between SBWIB, HASC, *HealthImpact*, MSMU, APU, and eight hospital partners, with the potential for expansion, strengthened sustainable regional collaborative relationships.
- Incumbent Worker Training Agreement was created.
- RN participants appreciated the “hands-on” practice during the course.
- Several RN participants verbally stated that they had been performing procedures incorrectly up until taking this course and were thankful for the theoretical underpinnings of the course.
- Stories shared by the instructor were helpful and assisted students to make intellectual and practice connections.
- 100% of the nurses completed the course.
- The transition in practice of up to 17 nurses into the OR in six months was supported (July-December 2018).
- Multiple partners worked together to educate workforce in a specialty area.
- The nurses felt the support from their hospital’s leaders (CNOs, Educators, Preceptors, etc.), some of whom also attended the completion date celebration.



Barriers, Challenges and Strategies for Change or Improvement

Challenges	Strategies
<p>Information about the course and model was not communicated far enough in advance of the course for hospitals and participants to sufficiently plan ahead.</p>	<ul style="list-style-type: none"> • Notifying hospitals of future course dates well in advance would help facilitate advance planning and strengthen future attendance. • It would be beneficial for schools to offer the course more than once per year with options to expand to more hospitals. • Development of a true regional collaboration among nursing programs and hospitals, along with cooperation within each school and their affiliated hospitals would facilitate coordination and strengthen strategic planning addressing evolving workforce needs by scaling of course offerings to meet those needs. • Access and sustainability would be strengthened by engaging hospitals beyond L.A. County, including the Riverside, San Bernardino, Ventura, and Santa Barbara areas. • Expanding the number of hospitals and partnerships would support cost-effective course offerings by each nursing program while assuring full classes with reduced risk of course cancellations.
<p>Support and guidance of planning steps is needed for hospitals moving beyond interest to engagement and action.</p>	<ul style="list-style-type: none"> • The project director assisted hospital leaders to understand the pilot funding opportunity, conditions of participation, course offerings, and helped navigate the process to enroll their nurses. • Conducting an academic-practice collaborative meeting was effective in addressing planning. • The importance of planning to anticipate vacancies and identify resources was reinforced during the qualitative interviews conducted with the partner hospitals. • CEOs, CFOs, and CNOs should be routinely informed of regional and statewide workforce trends, the cost savings and benefits from investment in development of their existing workforce, hiring those who have demonstrated successful completion of a course, and reducing reliance on contract personnel such as RN travelers, etc.

Challenges	Strategies
<p>Difficulty related to identifying a primary leader in each of the partner hospitals to obtain and provide information, plan and coordinate RN enrollment in the course, and participate in evaluation and outcomes resulting from the course led to delays.</p>	<p>A coordinating role and function is essential for each hospital involved in future partnerships and courses. Establishing and maintaining a contact list supports and streamlines communication.</p>
<p>Some hospitals unable to fully transition incumbent nurses from their current units into the OR before or during the course presented limitations in obtaining clinical time needed to fully acquire skills and competencies.</p>	<p>Pre-planning to provide supporting processes to ensure nurses participating in the course are fully transitioned into the OR before or during the course should be considered a condition of participation in future courses to maximize learning outcomes and realize the greatest benefit.</p>
<p>A second collaborative meeting with both schools and all hospital partners discussing progress was scheduled, but not conducted due to low registration.</p>	<p>Information shared at regional HASC convenings in 2018 and Specialty RN Advisory Team meetings in 2019, provided opportunity for shared dialogue. Conducting periodic meetings with collaborative partners is important to plan, evaluate and improve future courses.</p>
<p>Hospitals did not have processes in place to plan ahead for specialty training as an option to support vacancies and turnover, requiring real-time posting of positions, hiring staff, accommodations for HR and labor requirements with class start dates looming.</p>	<p>The need to budget for specialty training based on actual and anticipated vacancies was reinforced during the qualitative interviews conducted with the partner hospitals. Aligning workforce planning processes in advance of specialty courses will support timely enrollment.</p>
<p>Incumbent worker policy (SBWIB) draft in development at the beginning of the pilot, posed limitations in providing clear guidelines for deliverables until after the courses started.</p>	<ul style="list-style-type: none"> • Incumbent worker policy was revised by SBWIB with input from <i>HealthImpact</i> and HASC. • Providing policies, establishing clear partner expectations, and deliverables in advance of future courses will strengthen engagement, support planning, and facilitate measurement of outcomes.
<p>Class absences due to vacations and hospital staffing shortages necessitating remediation of course content, were costly (faculty time and salary) and difficult to reschedule.</p>	<p>Course faculty were flexible, providing make-up sessions, extended timelines for completion of modules, and retesting to achieve 100% course completion.</p>
<p>Availability of an experienced RN preceptor and variable exposure to adequate surgical case experience was inconsistent.</p>	<ul style="list-style-type: none"> • Smaller hospitals could consider sending future nurses to a larger hospital for the clinical education practicum to gain broader experience. • Completion of the Periop 101 preceptor course is encouraged, but not required.

Challenges	Strategies
<p>Challenges obtaining course evaluations from participants including hospital in-kind data impacted outcomes evaluation.</p>	<p>Course evaluation forms and other reporting requirements should be identified early as a condition of participation in future courses, and completed before administering certificates of completion.</p>
<p>Some nurses indicated the course would be of greater benefit if it lasted longer than 10 weeks.</p>	<p>Recommendations for model course and core curriculum identify 10-week or 16-week courses as acceptable, depending on university semester requirements. Extending courses across two semesters, or employers extending clinical time with an experienced RN in a preceptor role beyond the course are viable options.</p>
<p>Some nurses felt that the location was too far to drive for the class and simulation lab experience.</p>	<p>In-person sessions were scheduled in blocks of time to reduce frequency of travel. Conducting future classes accessible to varied locations would support participation.</p>
<p>Disconnect in communication between what the RN was learning in the classroom and what they were to accomplish in the clinical site training occurred. There was a need for progress reports provided between school and hospital partners.</p>	<p>Faculty dialogue with hospital personnel prior to the course, including providing course guidelines and schedules should be augmented to include processes for in-person and virtual meetings with Periop Directors, OR Educators, and/or Preceptors prior to the start of the course, during the course to discuss progress, and upon course completion to evaluate outcomes.</p>
<p>SBWIB incumbent worker policy limited the number of new graduate nurses that could be funded in the pilot courses.</p>	<ul style="list-style-type: none"> • Including newly licensed graduate nurses and senior RN students in future courses would provide pipelines for hiring new nurses into vacant specialty positions following completion of the course, graduation from the nursing program, and passing the RN licensure exam (essential to be hired and practice in an RN role). This option would address the shortage of specialty RNs by increasing the number of specialty RNs overall. • Going forward, actively seeking participation and funding criteria for new graduate nurse and senior nursing students is recommended.
<p>Hospital partners did not fully recognize the cost-benefit and value that investing in this education would provide. This impacts planning future expenditures for specialty training and limits reduction of organizational costs related to contracted use of RN travelers, registry, and premium pay when staffing hard-to-fill specialty vacancies.</p>	<ul style="list-style-type: none"> • All partner hospitals were offered assistance in measuring their return on investment (ROI) and provided a spread sheet template with sample calculations. • Determining hospital cost-benefit is important to program growth, future sustainability, and cost-effective filling of critical vacancies. This is recommended to be included as part of the required outcomes measures.



Final Comments and Conclusions

The amount of time required by a university to establish the program (develop course components, recruitment, and enrollment), conduct the course, and complete follow-up activities including evaluating course outcomes are important considerations to improve and sustain future courses.

Nursing schools need assistance with establishing admission criteria and processes that include unique funding requirements, facilitation to support the development of sustainable academic-practice collaboratives, and opportunities to share outcomes and best practices with other programs.

Hospitals need assistance with analysis of their current vacancy-driven costs, facilitation

of strategies and processes involved in strategic workforce planning, and the cost-benefit of participating with other hospitals in community-based specialty courses conducted by schools of nursing.

Courses are appropriate for RN students in their senior year or final semester, new graduates as well as experienced nurses, including those previously exposed to OR clinical practice who could benefit from further development or a refresher to perform in that role.

Overall, the hospital and university partners involved in this grant-funded pilot see this RN specialty training initiative as a great community service and resource to fill critical shortages in hospital specialty areas.



*Special thanks to Anthem Blue Cross
for their generous support of this initiative.*



FOR MORE INFORMATION, PLEASE VISIT THESE WEBSITES:

HASC at www.hasc.org/workforce-development-0

HealthImpact at www.healthimpact.org

SBWIB at www.sbwib.org

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