

Assessment of Specialty Nurse Needs for Hawai'i

Hawai'i State Center for Nursing April 2022

Background:

In the 2021 Nursing Workforce Supply Report, the Hawai'i State Center for Nursing (HSCN) reported that the state has a nursing shortage. This report further detailed, "the reality is that the current nursing shortage is an enormous and complicated problem. Solving it will require discussion, insight, innovation, and collaboration of individuals and organizations across the healthcare system. We also expect that solutions will come from collaboration with entities outside of healthcare including commerce, travel, education, and housing" (page 5).

In late 2021ⁱⁱ, several hospitals communicated to HCSN the growing need for specialty nurses, and starting in early 2022, a desire to engage in a collaborative, statewide approach to developing a solution for these needs. Specifically, they had interest in a collaborative specialty-transition-to-practice program for incumbent nurses. HSCN inquired to the statewide Chief Nursing Officer (CNO) group, to assess general interest in engaging in a collaborative, statewide approach, as well as to assess the demand for and capacity to engage in specialty training for their employed nurses. This needs assessment aims to identify the specialty nursing areas of greatest priority as well as define opportunities and considerations that will support development of in-state strategies that will help close the gaps in these specialty nursing workforce needs. We expect to learn additional helpful information as a comprehensive healthcare employer demand survey is currently being fielded by the Healthcare Association of Hawai'i (HAH). This survey will help define the unmet needs in nursing, as well as the landscape of specialty nursing and other healthcare professions, across the state and by county.

Needs Assessment:

HSCN surveyed nurse leaders from healthcare organizations across all islands and from diverse settings, and systems. The primary goal was to determine which specialties are in greatest need for incumbent nurse development. The survey asked respondents to rate the importance of each of the previously prioritized nursing specialties, as well as the estimated number of nurses needed to transition into these areas. Secondarily, this assessment aimed to identify organizations interested in participating in collaborative efforts to streamline and reduce the cost of training in high-priority areas. While specific commitment to engage in a statewide collaborative specialty-transition-to-practice was not requested, responses relating to ratings, nurse staffing needs, and resources help

¹ Hawai'i State Center for Nursing. (2021). 2021 Hawai'i Nursing Workforce Supply Report. http://www.hawaiicenterfornursing.org/wp-content/uploads/2021/12/Statewide-Report-v.Final_.pdf

inform statewide interest. Additional survey questions investigated challenges in delivering specialty transition to practice support, existing resources to support specialty-transition-to-practice, and other nursing specialty needs.

The priority list of specialties included those previously reported to HSCN by the CNO group and recent informal communication². These specialties include Cardiac Catheterization Lab, Case Management, Credentialing Specialist, Critical Care – Intensive Care Unit (ICU), Dialysis / Nephrology, Emergency Room, Nurse Leadership, Palliative Care / Hospice, Perinatal, Perioperative, Primary Care, Respiratory Care, Skilled Nursing / Long Term Care, and Surgery - Operating Room.

Respondents:

Of the 65 nurse leaders from 34 different organizations, representing 50 facilities across different islands and settings who received the survey, respondents included 14 individuals who represented 11 organizations. All counties were represented, though not all setting types were represented by each county. For facilities or systems with multiple respondents, the larger numerical value was selected as the response, and all qualitative responses were kept. In cases where the same answer was reported, the answer was counted as a single response (i.e., reporting of curriculum tools in table 2). This needs assessment provides a glimpse of where we need to focus specialty nursing development but as we had several facilities that did not respond to the survey, we know that the overall demands are likely higher and more varied.

Thank you to the survey respondents, which include representatives from: Hale Makua Health Services, Hawaii Pacific Health (HPH), The Queen's Health System and Medical Center, Kaiser Permanente Moanalua Medical Center, Dept. of Human Services Adult Protective Services, Kona Community Hospital, Adventist Health Castle, Kuakini Medical Center, Wahiawa General Hospital, Hawai'i Health Systems Corporation Kauai Region, and Kahuku Medical Center. Respondents represent long-term care, acute hospital settings, critical access hospitals, rural hospitals, and adult protective services.

Findings:

Respondents reported a sum of 295 "estimated number of nurses transitioning to the specialty annually in your organization". From this list of priority specialties, Critical Care-ICU accounted for the greatest need for incumbent nurse transition of all the specialties. The five specialties that had the greatest value in each category in Table 1 were identified. The four specialties that appeared in the top of each category in Table 1 are Critical Care-ICU, Emergency Room, Surgery-Operating Room, and Primary Care. These will be referred to as "top four" (T4) for the remainder of this report.

² Hawai'i State Center for Nursing (2021). CNO meeting, September 30, 2021. Unpublished meeting notes.

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Table 1: Priority specialty nurse demands by rating of importance and sum of nurses needed

Priority Specialty	Average Rating (1=lowest, 5=greatest)	Organizations indicating 4 or 5 Rating	Nurses Needed to Transfer into Specialty Area Annually	Percent, Specialty to Total (N=295)
Critical Care - ICU	4.29	<u>6</u>	59	20%
Emergency Room	3.71	5	<u>50</u>	<u>17%</u>
Surgery - Operating Room	4.00	5	32	<u>11%</u>
Perinatal	3.20	3	<u>28</u>	9%
Primary Care	3.80	4	<u>25</u>	<u>8%</u>
Skilled Nursing / Long Term Care	2.43	1	22	7%
Nurse Leadership	<u>4.40</u>	4	16	5%
Perioperative	3.00	1	16	5%
Case Management	3.17	2	14	5%
Dialysis / Nephrology	3.00	2	14	5%
Respiratory Care	2.00	1	11	4%
Cardiac Catheterization Lab	2.40	1	8	3%
Palliative Care / Hospice	2.00	0	0	0%
Credentialing Specialist	1.00	0	0	0%

Note: Cells with bold underlined font represent the five specialties with the greatest value respective to each column.

Of the priority list, respondents were also asked to report the curriculum, if any, that they currently use to prepare nurses for specialty-transition-to-practice. Respondents were also asked if they have nurse experts available to teach in a collaborative training environment; these nurse experts are referred to as "prospective educators" henceforth. Of the specialties in the T4 specialties all had established curricula in use by organizations and prospective educators. In addition, all specialties with reported curriculum tools in use included the national curriculum. Three specialties also had curricula developed by individual organizations or systems.

Table 2: Curriculum used by organizations and prospective educators available to teach by

priority nurse specialty.

priority nurse specialty. Priority Specialties	Curriculum³ packages or tools utilized	Organizations with available prospective educators	
Cardiac Catheterization			
Lab	Springboard, HealthStream	2	
Case Management	None Reported	2	
Credentialing Specialist	None Reported	0	
Critical Care – ICU (T4)	HealthStream (x3), HPH Critical Care Academy, ECCO Modules (x2), Relias	4	
Dialysis / Nephrology	None Reported	1	
Emergency Room	HealthStream (x3, 1 with Jane Competencies), HPH Emergency Department		
(T4)	Academy, ENA Modules (x2)	3	
Nunga Landarahin	HPH Custom Bridge to Leadership, HealthStream, Huron/Studer Leadership		
Nurse Leadership Palliative Care /	Development, AONL	2	
Hospice	None Reported	0	
Perinatal	HPH Perinatal Academy, AWHONN POEP Modules (x3), HealthStream	3	
	HealthStream (x2), "system		
Perioperative	education", AORN, ASPAN	3	
Primary Care (T4)	HealthStream	1	
Respiratory Care	None Reported	1	
Skilled Nursing / Long Term Care	Relias	1	
	HealthStream (x3), "system education", HPH		
Surgery - Operating	Perioperative Academy, AORN Modules (x2) Periop		
Room (T4)	101	2	

Notes: Specialties with bold and (T4) are the top four specialties, overall. Curriculum with an "x" followed by a number indicates that number of respondents provided the same answer.

When asked about challenges in providing specialty-transition-to-practice support, nearly 75% of the respondents named staffing shortages. In the open-ended response option, one respondent elaborated that the volume of needs exceeds resources. These

 3 A list of acronyms and their references for the curriculum tools appears at the end of this report.

resources were noted to include trainers, classrooms, equipment, and preceptors. Another respondent commented on the lack of funding for nursing positions.

Table 3: Challenges to organizations' ability to provide specialty-transition-to-practice

support for high-priority areas

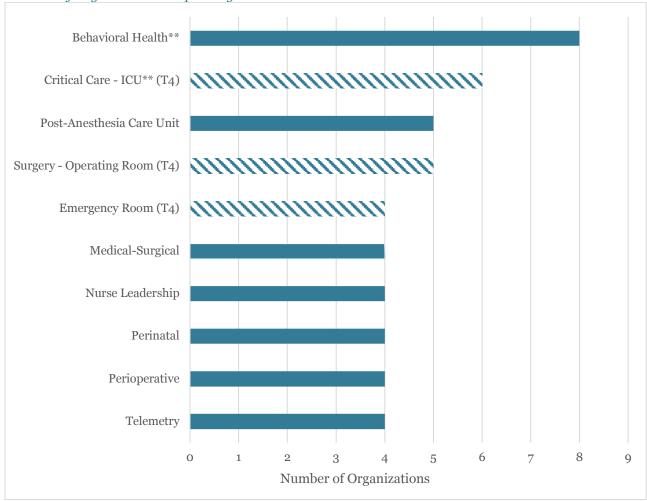
Challenge	Percent of respondents indicating challenge
Staffing shortages	73%
High cost of training programs	45%
Unavailability of prospective	
educators	36%
Cost of curriculum	18%

Organizations were asked to indicate which of 55 nursing specialties their organization currently had vacancies due to limited local applicants or lack of adequate local workforce. Here we inquired only if organizations had gaps but did not request an estimated number of vacancies or rating of priority of the specialties. Of the ten most-cited specialties with vacancies, three also appeared in the T4 list (Figure 1). Just as important as the number of nurses needed to transfer into specialties by certain specialties, is how widespread the need for specialties are. The specialties that had more organizations reporting vacancies is an indication of pervasive challenges in filling needed positions. Critical Care-ICU, Behavioral Health, and Perioperative/Surgical each had significantly larger numbers of organizations reporting vacancies than the other specialties.

For Critical Care-ICU, five sub-specialties were included. Of these sub-specialties, medical had the most vacancies (3 organizations), followed by surgical (2 organizations); one organization each indicated vacancies in cardiovascular, neurological, and trauma (Figure 2). Similarly, Behavioral Health included three unique sub-specialties; of these, inpatient adult was the most reported sub-specialty with vacancies (Figure 3). Finally, Perianesthesia and Perioperative specialties(Figure 4) were recorded as having vacancies 16 times. Surgery-Operating Room and Post-Anesthesia Care Unit were the two most recorded specialties with vacancies within this continuum of specialties.

Though Critical Care-ICU was the specialty with the highest overall importance ratings and the largest number of nurses needed to transfer into these units annually, the landscape of vacancies also demonstrates widespread gaps for Behavioral Health and Perianesthesia and Periaperative specialties.





Note: Fields with "(T4)" and patterned bar are those that appeared in the top five in the priority list. **Critical Care-ICU and Behavioral Health are the aggregate of the sub-specialties.

Figure 2: Number of organizations indicating nurse vacancies for Critical Care-ICU (T4), by sub-specialty

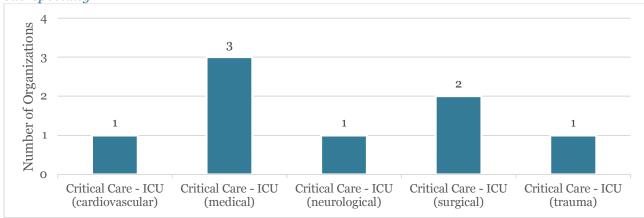
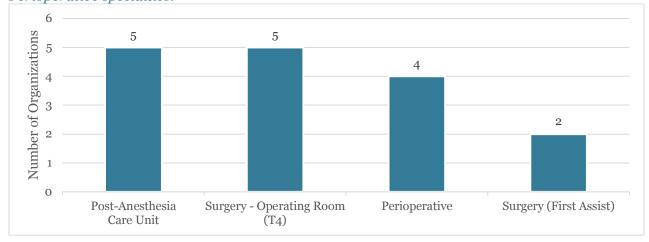


Figure 3: Number of organizations indicating nurse vacancies for Behavioral Health, by subspecialty.

Figure 4: Number of organizations indicating nurse vacancies for Perianesthesia and Perioperative specialties.



Opportunities:

Past assessments of specialty nurse employment demand⁴ identified areas of nursing need but lacked a rating of priority. This needs assessment provides the opportunity to compare the high priority specialty training needs to the estimated annual number of nurses needed to transition into these areas. This comparison appears to be highly correlated (Figure 5). By including a ranking of importance, Hawai'i's nursing workforce planning efforts may focus on meeting employment demand and organizational importance. Addressing the T4 from the high-priority list first will both address the highest volume of nurse specialist needs, and the greatest priority for nursing employers.

⁴ Healthcare Association of Hawai'i. (2019). Hawai'i Healthcare Workforce Initiative 2019 Report. Retrieved from http://hah.org/wp-content/uploads/2019/08/HAH_HiHealthWorkforceInitiative_2019Report.pdf

70 60 50 40 30 20 10 0 1 2 3 4 5 6 7

Figure 5: Correlation of number of organizations indicating a 4 or 5 rating and number of nurses needed to transfer into specialty areas.

Note: Each dot indicates a priority nursing specialty

Of the 11 respondents to the survey, seven currently are members of HSCN's Hawai'i Nurse Residency Program (HNRP) Collaborative. Only one HNRP member facility reported that they do not have enough prospective educators. In contrast, 100% of non-HNRP members reported not having prospective educators they need to develop a specialty RN workforce. By engaging in a state-wide collaboration, the organizations that currently are not engaged in transition-to-practice programs like the HNRP Collaborative or have nurse experts on staff that can facilitate specialty-transition-to-practice training are likely to benefit from an interfacility collaborative approach to specialty development (Table 5). While sharing of prospective educators may alleviate statewide deficits, the capacity of the prospective educators may remain a limiting factor until progress is achieved in developing new specialty nurses and these nurses have acquired time on the job to gain both competency and capacity to teach.

Table 4: Comparison of organizations indicating they have prospective educators to organizations with an active HNRP collaborative agreement with HSCN.

	Count of organizations reporting ONE OR MORE (>=1) prospective educators	Count of organizations reporting ZERO (o) prospective educators
Active member of the HNRP Collaborative	6	1
Not a member of the HNRP Collaborative	0	4

⁵ Hawai'i State Center for Nursing (2022). Hawai'i Nurse Residency Collaborative Program Data. Unpublished program data.

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The HNRP Collaborative also uses a standardized curriculum for new graduate nurse transition to practice. Organizations that participate in the HNRP Collaborative average a nurse resident retention rate of 94% (7-year average). Though HNRP Collaborative members facilitate the residencies individually, new graduate nurse transition to practice and retention in this state has benefited from the standardized curriculum approach. Applying this model of standardized curriculum to specialty-transition-to-practice may improve the feasibility and scale of a statewide collaborative approach, as well as positively impact retention outcomes for the nurses trained.

When determining impact goals as a state, ensuring representation of organizations across the state is important. Upon assessing the location of the organizations reporting vacancies, three of the T4 priority specialties and Behavioral Health had representation across multiple counties (Table 5). These vacancies are aligned with the prioritized specialties, indicating matching by rated importance, the transition of staff needs, and existing gaps.

Table 5: Specialties with vacancies reported by organizations, by county representation.

Specialties/subspecialty groupings with vacancies reported by organizations across multiple counties.	Specialties/ sub-specialty groupings on reported on only one county.
Critical Care-ICU (all)* Emergency Room* Surgery-OR* Other Perioperative/Surgery Behavioral Health	Primary Care* (Hawaiʻi County)

Note: Specialties with bold and asterisk (*) are the T4 specialties, overall.

Considerations for Implementation:

The establishment of a multi-organization specialty-transition-to-practice program requires organizational commitment, coordination and agreement on curriculum, clinical and simulation experiences, logistical agreements related to sharing of nurse experts as prospective educators, and other considerations. Some of these considerations and processes steps include:

- Address greatest needs first.
- Crosswalk curriculum, implementation, and staffing needs with existing resources to limit manual labor and duplication of efforts across organizations.
- Determine remote training requirements to address workforce development needs across multiple counties.
- Assess partner resources including academic partnerships and inter-facility resources and staff sharing.
- Assess if multiple trainings can be held concurrently; assess the impact on collaborative partner resource requirements.
- Determine an acceptable timeline for implementation.
- Determine budget and financial needs.

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⁶ Hawai'i State Center for Nursing (2021). 2021 Annual Report. https://www.hawaiicenterfornursing.org/wp-content/uploads/2022/01/2021-Annual-Report-Final.pdf

- Seek funding support, if needed.
- Draft agreements for engagement (MOUs, charters, affiliate agreements, etc.).

Using these steps as a guide, HSCN concludes that Critical Care-ICU, Perianesthesia and Perioperative specialties, Emergency Room, and Behavioral Health are the specialties with the greatest needs across the state. Therefore, these nursing specialties should be addressed first. Utilizing existing curriculum, that is validated or developed by national specialty nurse organizations, is both in current practice by some organizations and has a track record of success with the HNRP Collaborative. This will also facilitate statewide and multi-organization training efforts. Participating organizations should select a standard nationally recognized and validated curriculum for each specialty to ensure validity, evidence-based content, as well as scalability across organizations.

Prospective educators with expertise in specific nursing specialties areas are limited, with not all organizations who cited needs also citing available prospective educators. It should be a priority to develop the plan and process to broaden the access to these prospective educators across organizations. Determining how these nurses are engaged, both in supporting didactic and clinical experiences will be critical to the success. As important will be developing supportive mechanisms for the nurse expert in their teaching endeavors. These may include teaching support or mentorship if they lack experience in teaching, time buy-out, and compensation. Extending expectations without balancing workload can have negative consequences on retaining the expert nurse workforce and a statewide training model is contingent on an adequate number of specialty nursing experts serving as educators.

Academic-practice partnerships have been discussed as a mechanism to facilitate this program and ensure that there is teaching support and access to simulation facilities. Assessment of available resources, including simulation labs, faculty to co-facilitate learning, learning platform resources, and their associated costs should be included in the program design. The state is currently in a severe nursing faculty shortage. Consideration on how to feasibly engage in academic-practice partnerships that will support both sides of the partnership is critical. A successful partnership between academia and healthcare organizations has the potential for greater gains than the sum of its individual parts.

Developing a statewide collaborative approach to train incumbent nurses in specialty areas is a step in the right direction towards addressing our current nursing shortage. Designing the statewide program will require discussion, insight, innovation, and collaboration; all functions that Hawai'i's nursing partners have succeeded at in the past, and continue to do, today.

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⁷ Hawai'i State Center for Nursing (2021). The Hawaii State Nursing Faculty Shortage. http://www.hawaiicenterfornursing.org/wp-content/uploads/2021/12/State-of-Hawaiis-Faculty-November-2021_FINAL_11-29-21.pdf

Table 6: Acronyms referenced in curriculum tools.

	Enced in Curriculum tools.	
Acronym/Term	Source	
AONL	American Organization of Nurse Leaders	
AORN	Association of periOperative Registered Nurses	
ASPAN	American Society of PeriAnesthesia Nurses	
AWHONN POEP	Association of Women's Health, Obstetric and Neonatal Nurses	
	Perinatal Orientation and Education Program	
ECCO	Essentials of Critical Care Orientation	
	*Provided by American Association of Critical-Care Nurses	
	(AACN)	
ENA	Emergency Nurses Association	
HealthStream	HealthStream, LLC healthcare learning management system	
HPH Academy	Hawai'i Pacific Health transition to practice employment program	
Huron Leadership	Huron Consulting Group for healthcare organizational	
Development	development	
Studer	Studer Group for healthcare organizational coaching	
Leadership		
Development		
Relias	Relias Academy healthcare continuing education courses	