State of the Bakersfield College Nursing Programs
AY 2018/19
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OVERVIEW OF PROGRAMS
The Nursing Programs are in direct alignment with the mission, vision, and core values of the College. They provide continuous, direct administrative and clerical support to all Nursing and Medical Science courses to our socially, culturally, and economically diverse student community. Operational services for all programs and courses support the College’s mission by:

1) offering stackable certificates and degrees to attain highly desired workplace skills that allow students to immediately transition into the workforce and earn a living wage;
2) preparing students to transition to a university to obtain graduate level degrees;
3) overseeing legal and fair program selection processes so there is no disproportionate impact on any group(s) of our diverse student(s);
4) providing ongoing faculty, staff, and student support in order to foster instructional excellence, efficient and consistent business practices, critical thinking, professional communication, student success, and optimal program outcomes;
5) confirming the state standards for each individual program/course are in place and upheld, and;
6) promoting positive contributions for our community by cultivating critical thinking skills, effective communication, and professionalism.

CURRENT STATE OF NURSING PROGRAMS USING THE FOUR PILLARS OF GUIDED PATHWAYS
Clarifying the Path
Our designated Program Educational Advisor and Counselor collaborate with individual students to develop Comprehensive Educational Plans. By identifying and clarifying their path early, students are more likely to meet their career goals, whether it is to earn a job skills certificate as a Nurse Assistant (NA), a Certificate of Achievement in Vocational Nursing (VN), or an Associate Degree in Nursing (ADN). Currently 96% (N= 2878) of our students have declared ADN as their major, compared to 1% (N=19) LVN-ADN, and 3% (N=109) VN. See Chart 1.

A strong collegial partnership has been developed and maintained between BC and California State University, Bakersfield (CSUB) nursing departments. A CSUB Counselor is on campus weekly to meet potential transfer students, foster relationships, and develop plans to facilitate seamless transfers and expedite higher degree obtainment. Currently, students may earn their BSN in as little as one year at CSUB. However, BC and CSUB Program Directors are currently exploring different concurrent educational models to facilitate a more rapid, affordable path for students to earn a BSN in as little as 6 months of completing their ADN, without jeopardizing student learning outcomes and first time pass rates. Likewise, articulation agreement discussions with the University of Phoenix and Grand Canyon University are occurring to provide choices for our students.

Currently, CSUB opens 55 seats annually for their ADN to BSN program. See Table 1 for transfer Trend Data for the last three cohorts. In AY’s 2016/17, 2017/18, and 2018/19 the data shows a progressive growth in the percentage
of students who are being admitted into each cohort, despite the fact the number of applicants are essentially unchanged. The proportion of BC students who are occupying the 55 available seats per cohort is also trending up. This shows the strength of our student’s qualifications and the commitment of CSUB to place our community students. We acknowledge that CSUB is not the only institution to which our students transfer, but based on student follow up information regarding transferring, we believe it is the primary institution. The department has requested transfer rates from institutions who have expressed desires to collaborate with BC in order to achieve more accurate and comprehensive transfer metrics.

<table>
<thead>
<tr>
<th>Total number of Applicants, including students from other institutions and BC students</th>
<th>AY 2016/17</th>
<th>AY 2017/18</th>
<th>AY 2018/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC ONLY Applicants</td>
<td>39</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>Number of BC Applicants accepted</td>
<td>26</td>
<td>27</td>
<td>36</td>
</tr>
<tr>
<td>Acceptance Rates of BC Graduates</td>
<td>67%</td>
<td>79.4%</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage of BC Graduates in each cohort of N=55</td>
<td>47.2%</td>
<td>49.1%</td>
<td>65.4%</td>
</tr>
</tbody>
</table>

**Table 2 - Trend Data: BC’s AND to CSUB**

### Entering a Pathway

The Nursing Program offers program orientation/informational sessions, once in spring and once in fall semester. These sessions are focused on entering the path by ensuring student are taking the correct pre-requisites. In addition, the Educational Advisors and Counselors discuss and reinforce momentum points in relation to time at BC. Students are able to quickly reach program eligibility and apply to their Program by taking 15 units each semester along with English and Math in the first year.

Because our Courses and Programs are stackable, students may choose an option most suitable for their personal situations. While it is clear the majority of our students end career goal is to obtain an ADN, several of them chose to enroll in the VN Program. Reasons for this may include lower ranking scores on the Multi Criteria Point Allocation selection process for the ADN program, overall lower GPA’s, the impacted status of the ADN program, coupled with the limited number of available seats. There has been a significant increase in the number of ADN students applying for our programs. See Chart 2 – Number of BC Applications Received per Semester. The department currently receives over 800 applicants for the ADN Program, more than 80 applicants for the LVN to Registered Nursing (RN) Program, and greater than 130 applicants for the VN Program annually. Current acceptance rates are: 68 students for the ADN Program per semester (spring and fall); 10 LVN to ADN students annually in the fall semester, and; 33 students in the VN Program annually in the fall semester.
The Central Valley is a medically underserved area. Some reasons for this designation: limited number of RN and Nurse Practitioners; increased population growth, and; changes in the insurance coverage. According to the research report *The San Joaquin Valley Registered Nurse Workforce: Forecasted Supply and Demand* (2018), data suggest the total number of licensed RNs will decrease between 2017 and 2030.

In contrast, the forecasted demand for RNs will grow more than 35%. **This difference will leave the San Joaquin Valley with a large projected shortage of RNs.** All levels of nursing remain a high growth, high demand occupation for our Central Valley Region, and more specifically for Kern County. The shortage of nurses in Kern County coupled with the population increase have produced a crucial need to create more jobs in these fields. *See Charts 3&4 – Demand: Regional Trends for RN’s and VN’s.*
Despite the increase in the number of graduates (See Chart 5 – Supply: Number of BC ADN and VN Graduates per AY), our community partners still need more graduates in order to mitigate the current deficit and projected decreasing numbers in the workforce. As of the last Advisory Board meeting in 2018, current RN vacancies reported range 15-35% with the highest demand being in specialty areas such as pediatrics and the intensive care units.

The demand for Certified NAs is growing faster than for workers in nearly every other job. According to the United States Bureau of Labor Statistics, an estimated increase of 18% of Nurse Assistants will be needed through 2024. The average rate of job growth is only 7%. This equates to nearly 300,000 new NA’s will be needed to meet this enormous demand. While at first glance, the number of NA’s we are putting out looks promising. (See Chart 6 – Supply Number of BC Students who Completed the NA Program per AY. However, most of the students earning their NA certificate do so to fulfill prerequisites to Nursing Programs and do not work as a NA. Only 49 students for fall 2018 declared NA as their major.
Staying on the Path
Bakersfield College Nursing Programs offer state of the art equipment, outstanding faculty members, and a wealth of resources to students that allows them to expand on their inquisitiveness, knowledge, and work ethic. The rigorous nature of the Nursing Program not only prepares students to seamlessly transition into the workplace, but it also produces a sense of community, which motivates most to remain in Kern County and provide care for its residents.

The ADN program on time completion (OTC) rates for the last several years has been greater than 80%. However, we did see a dip to 72% in the Spring 2018. This was due to the LVN to ADN students who had nearly a 50% failure rate. See Chart 7 - Trend Data: BC’s OTC Rates for Nursing Programs. Our goal is to achieve a 90%, by continuing our success strategies that incorporate multiple contacts with students; we believe we will be able to achieve this goal.

The VN program has improved the on time completion rate over the last 3 years, however we are aiming for continued improvement. The on time completion rates for AY’s 2013/2014, 2014/2015/ and 2015/2016 were 57%, 67%, and 73%, respectively.
There are many modalitiesFaculty use to assure students stay on their chosen path. The Department, programs, and faculty have developed, shared, and institutionalized best practices to foster student success, including:

**Implemented documentation for at risk students and referrals for early remediation:** This is a strategy that involves intrusive intervention and communication with the student. Students who attain an 80% or less on any exam are required to meet with lead faculty. Faculty develop learning contracts to promote student success, retention, and OTC. Other referrals include the success coach, counseling, financial aid, or an advisor for further assistance.

**Using simulation and technology to keep current with industry standards.**
This last year we have concentrated on modernizing, updating, cleaning and organizing our skills lab. Also, we have fully staffed our lab with high quality personnel – a Simulation Coordinator and Laboratory Assistant. With the grant monies we were able to purchase a Medication Dispensing System and electronic medical record documentation components. Students are also using a virtual reality simulation program to provide more experience with patients and documentation. The program has a full-time faculty member as the simulation coordinator allowing a focus on the integration of theory and clinical information through simulation.

**Teaching and Learning Strategies**
Faculty use a myriad to promote success and retention. Some of the most successful strategies include:

1. Faculty hold Boot Camps prior to the start of each semester to answer student questions and to facilitate preparation for the semester. Examples of success strategies may include time management, organization, stress reduction strategies, and reading apprenticeship.
2. Utilizing live streaming of simulations in the classroom to provide large group debriefing of nursing practice.
3. Imbedding Habits of the Mind into course syllabi and encouraging students to use the resource.
4. Facilitating mock job interviews along with resume and cover letter workshops prepare students for entry into the workforce.

**Learning**
Data is a key component that corroborates student learning and program success. There are four primary metrics routinely used and annually reported to the Boards of Nursing (BON). These data points include OTC; attrition rates; NCLEX first time pass rates, and job placement rates. It is vital for our numbers to hit BON standards to maintain continuing Program approval. See Chart 8 - Trend Data: On Time Pass Rates, Attrition, and First time NCLEX-RN Pass Rates ADN Program. Additionally, the results of trend data allow us to monitor and mitigate any problem areas within our curriculum. This is particularly important since we are implementing our new curriculum.

**Trend Data: On Time Pass Rates, Attrition, and First time NCLEX-RN Pass Rates ADN Program**

<table>
<thead>
<tr>
<th></th>
<th>AY 2014/15</th>
<th>AY 2015/16</th>
<th>AY 2016/17</th>
<th>AY 2017/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>On time Completion</td>
<td>79.9%</td>
<td>77.4%</td>
<td>80.8%</td>
<td>TBD</td>
</tr>
<tr>
<td>Attrition Rate</td>
<td>12.1%</td>
<td>8.5%</td>
<td>9.5%</td>
<td>TBD</td>
</tr>
<tr>
<td>First time NCLEX-RN</td>
<td>91.13%</td>
<td>91.30%</td>
<td>91.35%</td>
<td>96.27%</td>
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</tbody>
</table>

The Programs also track job placement rates, which run between 98-100% for our nursing graduates. The breakdown as to where they are employed have not been consistently tracked, however this is a goal for the next cycle.
ACCOMPLISHMENTS ALIGNED WITH STRATEGIC DIRECTIONS

<table>
<thead>
<tr>
<th>Strategic Direction</th>
<th>Departmental Accomplishments</th>
</tr>
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<tbody>
<tr>
<td><strong>Student Learning</strong></td>
<td>A commitment to provide a holistic education that develops curiosity, inquiry, and empowered learners</td>
</tr>
<tr>
<td>• Facilitated major curriculum revision for the ADN program with successful BON approval.</td>
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<tr>
<td>• Implemented new curriculum for ADN Program Fall 2017, Level 4 will be implementing in spring 2019, and then will reevaluate.</td>
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<tr>
<td>• Maintained and/or improved OTC, attrition rates, NCLEX pass rates, and job placement.</td>
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<tr>
<td>• Maximized use of SWI Grant monies to work towards 5-year work plan to develop a fully accredited simulation center (In process of implementing a Simulation Program to meet INASCL, SSH, and CSA standards.)</td>
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<tr>
<td><strong>Student Progression and Completion</strong></td>
<td>A commitment to eliminate barriers that cause students difficulties in completed their educational goals</td>
</tr>
<tr>
<td>• Received community partners support to increase ADN and LVN to ADN enrollment numbers. Maintained first time pass rates greater than 96% for ADN and VN programs.</td>
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<tr>
<td>• Implemented multi-criteria selection requirement for the RN program</td>
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<td>• Filled classified positions – DA II, Educational Advisor, and Success Coach.</td>
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<tr>
<td>• Provided focused professional development activities for faculty and classified to strengthen skills, build teamwork, promote collegiality, and course alignment.</td>
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<tr>
<td><strong>Facilities</strong></td>
<td>A commitment to improve the maintenance of and secure funding for college facilities, technology, and infrastructure for the next thirty years</td>
</tr>
<tr>
<td>• Managed and monitored multiple budgets to ensure regulation compliance with grant/projects sources. Controlled and authorized expenditures according to stated work plans. (GU001, RP 126, RP 113, SWI Sim and Nursing Faculty Grants, and 5 Foundation accounts.)</td>
<td></td>
</tr>
<tr>
<td>• Created an Equipment Inventory List and tracking system for skills laboratory.</td>
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<tr>
<td>• Maintained Biomed to properly maintain, manage, and identify/label equipment.</td>
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<tr>
<td>• Collaborated with M&amp;O to dispose of antiquated equipment/supplies.</td>
<td></td>
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<tr>
<td>- Replaced outdated, broken equipment.</td>
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<tr>
<td>- Incorporate diverse mannequins and task trainers to meet regulatory standards.</td>
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<tr>
<td>• Initiated electronic filing systems for student record keeping and archiving of documents.</td>
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<tr>
<td>• Completed successful renewal of the CCCC0 Enrollment Growth grant.</td>
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<tr>
<td><strong>Leadership and Engagement</strong></td>
<td>A commitment to build leadership within the College and engagement with the community</td>
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<tr>
<td>• Maintained and cultivated strong community partnerships by actively participating in the Health Community Alliance Initiative and Advisory Board meetings to kick off</td>
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<tr>
<td>• Cohosted a biannual Joint Advisory Meeting</td>
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<tr>
<td>• Implemented an online compliance management system to collect, store and share required information and documentation with the clinical agencies.</td>
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<tr>
<td>• Implemented an interoffice electronic communication system to promote collaboration and communication, increase productivity and bringing tasks to completion.</td>
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<tr>
<td>• Implemented an electronic tracking system to monitor staff licenses (a BON regulation).</td>
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FUTURE DIRECTIONS OF THE NURSING DEPARTMENT

“More nurses, more money!” Historically this has been the approach to solving the nursing shortage in our community and across the nation. These strategies alone are no longer effective in current times due to the multidimensional problems we are now encountering in our educational systems, healthcare delivery organizations, and work environments. It is the department’s belief, and therefore direction, that in order to move the dial on creating more nurses and nursing faculty for our community we will need to embrace a systematic and collaborative approach between these three entities.

All groups are being challenged with internal and external forces that have created barriers to relieving the nurse and nursing faculty shortage. Some of these forces include: system changes within individual organizations; lack of resources including monies, personnel, physical space and/or equipment; legislative changes; the impact of reimbursement; and the continuous technological advances. The nursing department has developed a five year strategic plan using internal resources to counter the external forces. There are several components in which we will be working on simultaneously, and some that will require a leveling approach.

1 – Simulation

The nursing programs have been integrating simulated learning into the curriculum for over 15 years. We were “earlier adopters,” but unfortunately there was inconsistent use and training of the equipment. We were able to move a faculty into the lab as a Simulation Coordinator, however this posed challenges. Because this position was classified as a “non-teaching” position by the College, faculty had to teach classes to make load and serve as a Sim
Coordinator. It is not surprising this position was not sustainable. Second, there was a huge learning curve with some of the equipment. Most of the faculty were either intimidated by it, could not invest the time to learn how to use, or simply did not have the desire to try and use it. So unfortunately, much of the equipment went unused.

Fast forward to 2017 and beyond – simulation is no longer optional; it is an essential pedagogical approach to the success of our programs and our students. It has moved from a novelty to a validated methodology of instruction for students. Research clearly and consistently reports all healthcare education, not just nursing, has better outcomes if simulation is integrated with didactic and clinical experiences. Simulation is also becoming standard in hospitals and other facilities as a vehicle for healthcare professionals to demonstrate competency and participate in interprofessional education. Again, it is well documented that with the use of simulated learning experiences, patients have better experiences, there is a decreased number of medication and procedural errors, and the clinicians gain skill mastery and confidence.

There are fully accredited simulation centers in both the Northern and Southern Regions of our state, but there is not one center even remotely near the central valley. Students or clinicians who are required to complete certain competencies must commute to one of these remote regions to pay for their competency exam. Our community is using simulation in hospitals. An accredited simulation center could provide training and education for hospital educators to improve simulation for their staff. Bakersfield College could fill this need in our community. It is our vision to put BC on the map with a fully accredited simulation center for the central valley within the next five years.

**Plan**

What will this take? And, what does this mean? Although our vision may be big, we believe it is vital to our programs and students success. It is realistic, but will require planning, coordination, and most of all administrative support.

- We have begun steps necessary in achieving this goal. Over the course of the last year and a half, we have been cleaning, organizing, inventorying, and modernizing our current skills laboratories, both on main campus and at the Weill Center. We have moved a faculty back in the role of Simulation Coordinator, and hired a full time classified Laboratory Assistant. Currently these two people coordinate, manage, and teach over 500 students in our programs. The Simulator Coordinator job, although requires 100% teaching for all levels of students in our programs, it is still not fully recognized as a teaching position making it necessary for the faculty to teach extra classes. This is not the usual practice in all academic institutions.

- We are currently in the process of incorporating diverse mannequins and task trainers to meet regulatory standards. This is being funded with monies from the CCCCO Enrollment Grant and the Regional Strong Workforce Initiative Simulation (SWI) Grant.

- With continued support from the SWI grant, our plan is fund professional development to provide training and national certification for our Simulation Coordinator, a requirement for an accredited simulation center. We will be requesting the grant to fund a part-time Healthcare Simulation Technician to prepare and run the simulation equipment, operate simulators, task trainers, simulation rooms and other equipment and props. This will allow the educator to focus on teaching and debriefing each simulation group.

- We will need to find a space, preferably the math sciences rooms immediately across our existing skills lab, to gut and build a state of the art simulation center.

**2 – Community Partnerships**

Historically, the nursing department has cohosted an Advisory Committee meeting twice a year. These meetings have been more informative on programmatic, regulatory, and facilities changes and/or concerns. If we as a community are going to affect real change surrounding current issues then the structure and dynamics of these meetings must change. This process is already underway and successes have already been realized. This last year, an Education Subcommittee was formed to tackle the ongoing problem of students and faculty not having access to vital components for teaching, learning, and delivery of safe patient care. Through collaboration, communication, and hard work, the subcommittee was able to remove barriers so that students and faculty now have access to the patient’s electronic medical record, the medication dispensing system, and the glucose monitoring devices.

**Plan**

- Engage in education and long term workforce planning with faculty and community partners. This has already started with the Community Healthcare Alliance meeting wherein we were able to bring together College,
Community and Legislative Leaders together to begin discussion on how to strategize for future Community Healthcare Needs. The discussions will continue quarterly with this group, and also biannual with the BC/CSUB Advisory Committee and subcommittees to explore, strategize, plan, and execute projects, including Recruitment and Hiring; Administrative (Chief Nurse Executives and Nursing Directors); Education (Hospital and Nursing Educators); Long term Care Council, State Prison Council; and a Transition Team.
- Attend national nursing conferences to keep up-to-date on current issues and changes, and network.
- Strengthen collegial collaboration with CSUB. Discussions have already began about how to streamline transitioning ADN’s to BSN’s with concurrent enrollment of transferable courses to the university.

3 – Education for Nursing Faculty and Students
Traditionally most faculty were not trained to become Nursing Educators, nor did most of us even have teaching on our career radar. So, one might ask how did most faculty land in academics? Many of us were “discovered” by a clinical faculty who had students on the unit we were working on, or by a mentor encouraging us to “try” teaching.
In today’s career arena, we must move to a more intentional and systematic approach to incorporating the Nurse Educator into the curriculum and effectively highlighting it as a viable career option.

Plan
- Work with CSUB to develop Concurrent Educational Program offering a program for ADN to BSN, and MSN course of study to emphasize a Master’s Degree in Nursing Education.
- Work with faculty to review curriculum to intentionally identify career options beyond entry level nurses, but also inclusive of nurse educator, researcher or administrative role.
- Support career progression mentorships for new faculty, and encourage degree mobility
- Identify potential program students and encourage Educator Role – “grow our own.”

4 – Increased Enrollments
Historically, the RN program has always seated the largest number of students, averaging approximately 50 students per semester. Currently we are at 68 students per semester, and still not able to keep up with the community partners high vacancy rates. Second in line for enrollments is our VN program wherein we seat 30 students per year, followed by the LVN to RN which currently seats 10 students per year.

As previously discussed the number of nursing applications are at an all-time high for all programs. Currently we face several barriers that may impede our ability to increase enrollment numbers. These barriers include number of qualified faculty, clinical sites, campus space, preceptors, resources, funding, and non-competitive salaries.

Plan
To help meet the needs of the community, we are planning to grow our LVN-RN program, thus producing more entry level RN’s for the workforce.
- We are in the process of obtaining BRN approval to increase LVN-RN program size from 10 to 40 and ADN program from 60 to 90.
- We will pilot an evening clinical rotation to avoid adding more stress to the day clinical sites.
- We have recruited existing faculty who volunteered to pilot evening program.

Also, in order not overwhelm the hospitals with nursing students, and still meet the regulatory requirements of our Boards of Nursing, we must maximize the allowable amount of clinical time to be accomplished using simulated learning experiences to master required skill sets and competencies. However, in order to safely and realistically support this change, we need the support of our College Administration. This support is vital to allow us to affect necessary changes needed to help close the nursing supply and demand gap. More specifically, this entails considering changing the Simulated Coordinator position to a teaching assignment so that it is truly in alignment with current practices, and recognizes that the faculty is actively teaching each and every day.
A Visual Synopsis of our Program's Current Directions/Goals and Needs

**Community Collaboration**
Meet community needs by producing more RNs to minimize forecasted nursing shortage and fill increasing vacancy rates.

**Increase ADN Degrees**
Increase enrollment numbers for the ADN & LVN-ADN by 38% and 300%, respectively. Expand Programs without compromising quality.

**Strategic Directions**
- **#1 Learning**
- **#2 Progression & Completion**
- **#4 Engagement with Community, Industry, and Educational Partners**

**Create a Transfer Pathway**
To shorten length of time for ADN-BSN to 6 months with articulation with CSUB, and UOP & GCU.

**Decrease Barriers to Program Expansion**
In order to improve supply and demand forecast and aligned with Institute of Medicine Goals in that we double BSN degrees by 2025.

**Resources Needed**
- **FT Faculty**
  to accommodate increase RN Program numbers and cover Home Health Aide Certificate.
- **Program Manager**
  Required to accommodate increased number of students. Also to assist with and ensure compliance with regulations / program directives and to assist with grant management.