State of California
Awards for Innovation in Higher Education
for
Cabrillo College’s Accelerated Allied Health Pathway Proposal

Section A. Cover Page

Contact Information for Application Coordinator

The contact information for an application coordinator to serve as the point of contact for any issues related to the substance of the application:

Carrie Mulcaire, Grants Development Director
Cabrillo College
camulcai@cabrillo.edu,
Tel: 831.477.3566
6500 Soquel Drive, Aptos, CA 95003

Participants

The list of organizations that will participate in the innovation described in the application:

Cabrillo Community College District, Pajaro Valley Unified School District (PVUSD), Santa Cruz City Schools (SCCS), California State University at Monterey Bay (CSUMB), Foothill College, The Regional Occupational Program for Santa Cruz County, Santa Cruz County College Commitment (S4C).

Abstract

An Accelerated Allied Health Pathway for Underrepresented Minority Students

Cabrillo Community College District in partnership with local K-12 school districts, California State University at Monterey Bay (CSUMB), Foothill College, Santa Cruz County College Commitment (S4C), and Santa Cruz County’s Regional Occupational Program (ROP), will research and develop an accelerated, seamless and affordable pathway in four of Cabrillo’s Allied Health (ALH) programs: Nursing, Dental Hygiene, Radiologic Technology, and Medical Assisting for underrepresented minority high school (HS) students in Santa Cruz County. This cohort-based model includes providing underrepresented minority (URM) high school students with career exposure, critical student support and guidance, academic preparation, and access to Allied Health prerequisites at Cabrillo to successfully pursue an Allied
Health pathway. This program will enable students to continue on to Cabrillo to complete an accelerated, transferable Allied Health associates degree, complete one of four Allied Health professional programs, and continue on to either CSUMB or Foothill to receive a bachelor’s in the respective ALH programs (nursing or dental hygiene) within one additional year from the professional program. Documentation and evaluation of this accelerated allied health pathway model could spread this innovation to other community college campuses across the state.

Contact Information for Representative of Fiscal Agent

The contact information for a representative of the California community college district that will serve as fiscal agent for the award:

Graciano Mendoza, Director of Business Services
Cabrillo College
grmendoza@cabrillo.edu
Tel: 831.479.6279
6500 Soquel Drive, Aptos, CA 95003

I assure that I have read and support this application. I understand that, if this application is chosen for an award, Cabrillo Community College District will serve as the fiscal agent for the award and that the responsibility of the fiscal agent includes distribution of funds to any other participants in the application pursuant to any agreement between the participants. I also understand that, if this application is chosen for an award, the Committee on Awards for Innovation in Higher Education may request submittal of reports or other information.

Regards,

[Signature]

Laurel Jones
President / Superintendent
Cabrillo Community College District
1. From the perspective of students, what is the problem you are trying to solve? (1 page)

Cabrillo’s Accelerated Allied Health (ALH) Pathway project addresses three main problems faced by under-represented minority (URM) students: 1) lack of awareness of and support for pursuing high-wage health careers; 2) lack of preparation to succeed and persist in college courses, and 3) bottlenecks in moving through prerequisite courses and significant delays in completing Allied Health programs and bachelor’s degrees. In 2016, Santa Cruz County residents continued to experience economic hardship as the County placed second among the most unaffordable places to live in the U.S. (after Brooklyn). Health careers offer relatively high wages to cover the County’s high housing and living costs. Over one-third of Santa Cruz County residents are Latino, who disproportionately experience more financial insecurity and have lower levels of educational attainment, serving as a major barrier for socio-economic upward mobility. The demand for qualified, trained employees in these fields is high and steady. While four out of 10 jobs in the County are now in health fields, applicant pools historically lack URM candidates.

While the State of California mandates that the current healthcare workforce reflect the racial and ethnic diversity of its citizens, many URM students face obstacles to pursuing these careers. These include a lack of understanding of the professions themselves and being unprepared by their K-12 educational system for the academic rigor associated with pursuing the required professional training, particularly math and science prerequisite courses. In addition, students lack career guidance and peer support at the high school level and have limited financial means and less family support to cover the high cost of postsecondary education. Their peers, parents, and other relatives may not see college as an affordable, viable aspiration; colleges have a role to play in helping parents connect to their children’s educational and career paths and in supporting cohorts of students as they move along a pathway.

The required prerequisite classes for Allied Health (ALH) programs are crowded and have long wait times for admission - not only at Cabrillo but at most community colleges. This creates delays which can stretch semester after semester for years. This translates into lost income, exhausted student loans, and an Allied Health degree and career too far in the future to enable persistence. Allied Health (ALH) students at Cabrillo wait an average of approximately four years to take Biology 4, a gateway prerequisite course – with 28.4% of URM students taking the course at least twice (compared to 16% of non-URM students). Students wait additional years to enter their Allied Health programs: 6.2 more years for nursing students, 5.2 more years for Radiologic Technology (RT) students, and 4.2 more years for Dental Hygiene (DH) students. This quickly adds up to seven to eleven (11) years before ALH program admission – too long for many. The lost wages are significant: eight years of foregone nursing wages reach approximately $640,000. Students who declare but do not complete a nursing major will lose subsidies on federal loans. ALH students also incur excessive debt and use up their financial aid before entering their ALH program.

---

1 ATTOM Data Solutions. Q3 2016 Home Affordability Index.
2 Santa Cruz County Community Assessment Project: 2016 Comprehensive Report
2. What is the innovation? Describe how it addresses the program’s goal. (2 pages)

This proposal includes the development of an innovative program that engages K-12 school districts, Cabrillo College, and Allied Health baccalaureate programs in a partnership to create an accelerated, seamless, and affordable pathway in health careers for underrepresented minority high school (HS) students in Santa Cruz County. The innovation is to remove obstacles by implementing a full set of interventions, geared to a specific cohort of students, and sustained across Allied Health degrees and programs.

By partnering with Cabrillo Advancement Program (CAP), a college readiness program for low-income middle and high school students, sixth graders will participate in health careers exposure activities such as using Cabrillo’s Allied Health Simulation Lab to get CPR certified. With over 50% of CAP students’ strong interest in health careers, CAP staff will provide a feeder stream for students’ early engagement to health careers and connect them with activities that further increase students’ academic self-efficacy.

To address the obstacles of a lack of career awareness in health careers and college readiness among high school students, Cabrillo will enter into a formal partnership with two local high school districts to expand counseling and guidance activities and enable dual enrollment opportunities for HS students taking ALH prerequisite courses at Cabrillo. Events and activities for parents and students will promote the pathway and its support for students’ – both academic and financial. These partnerships will follow the format of MOUs under new legislation AB 288, College and Career Access Partnership (CCAP), which expands dual enrollment opportunities for HS students by enabling them to enroll and get priority registration for college-level prerequisite courses to create a seamless pathway for career educational programs. Cabrillo will establish these AB 288 CCAP agreements with Pajaro Valley Unified School District (PVUSD) and Santa Cruz City Schools (SCCS) in order to serve four high schools with a large percentage of URM students.

While hundreds of high school students will receive specialized guidance from counselors on the Allied Health pathway, approximately 35 HS students each year will be referred by ROP’s Medical Technology group, the Advancement Via Individual Determination (AVID) program in the high schools, CAP and other community partners to join the Allied Health (ALH) Careers Cohort for further career exposure and academic preparation with Cabrillo ALH staff. They will also receive a Foundation course (modeled after our evidence-based ACE program) that addresses motivation among students in a peer-based model, academic preparation for college-level prerequisite courses and access to specialized tutoring (such as Math Plus). These students will also receive a scholarship of $1,500 to cover the costs of textbooks and transportation. Cohort students will receive an assessment and evaluation by the Allied Health Director based on the College Student Inventory (CSI) survey and, as appropriate, the Test of Essential Academic Skills (TEAS) that is required for nursing program entrance. Finally, parents, siblings, and other relatives of cohort members will be engaged in activities that help them become more familiar with the college environment and the potential of health careers for these students.

Dual enrollment during high school and priority registration for college prerequisite courses enabled by the AB 288 MOUs described above, will significantly reduce the number of years to complete Allied Health degree requirements. These courses are at no cost to the HS student.
Expanded wet laboratory capacity and equipment will allow for the college to add a Biology section (BIO 4, 5, and 6) contributing to a faster, smoother path for completing ALH prerequisites.

The use of technology in the Allied Health Simulation Lab to review course material will help reduce the need for students to repeat courses multiple times (a particular issue for URM students). Another innovative idea is to explore, research, and develop a new Allied Health meta-major for incoming students. This meta-major pathway will be focused on degrees in nursing, dental hygiene, radiologic technology, or medical assisting but with milestones that allow students to productively engage in career exploration or temporary employment before resuming their studies. In addition, Cabrillo will develop a new associate’s degree which would give Allied Health and pre-med students transfer options to UC and CSU institutions. For example, students could pursue a Bachelor’s degree in Nursing at California State University Monterey Bay (CSUMB) or in Dental Hygiene at Foothill College, within four years of their graduation from high school.

Figure 1 below illustrates how URM students move through the Allied Health pathway, including milestones that recognize fulfillment of ALH prerequisites, skill certificates or associate degree completion for students who may need to engage in employment or family care during their educational pathway. By providing more options and more support along the way, Cabrillo hopes to increase the successful academic and professional outcomes for hundreds of URM students in the County – 35 students each year in the high school ALH Career Cohort, as well as others who ultimately benefit from the expanded high school guidance, academic support, added prerequisite capacity, and Allied Health degree options. Development of an accelerated, transferable Allied Health degree will allow students to pursue degrees in science or medicine by preparing them to transfer to a UC or CSU after one to two years of community college, an obvious benefit in conserving financial resources. In addition, documentation and evaluation of this accelerated ALH pathway model could spread the innovation to other college campuses across the state.

Figure 1. Accelerated Allied Health Pathway for Underrepresented Minority HS Students

Source: Dr. Barbara Johnson with contributions from Cabrillo faculty and staff.
### 3. How will you implement this innovation? (2 pages)

The table below provides a timeline of actions, organizations involved in implementation, and proposed activities for this Accelerated Allied Health Pathway model. Discussions and letters of support have been obtained for all partner organizations involved in this proposed project.

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Involved Parties</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 - 7/17 – 6/18</td>
<td>K-14 counselors, faculty, admin.</td>
<td>Discuss / train on ALH Pathway project goals, identify HS candidates &amp; how to support within HS environment.</td>
</tr>
<tr>
<td>Year 1 - 7/17- 12/17</td>
<td>Cabrillo College, PVUSD, SCCS</td>
<td>Develop AB 288 College and Career Access Partnership (CCAP) MOUs with two school districts to enable dual enrollment at Cabrillo for high school students.</td>
</tr>
<tr>
<td>Year 1 - 7/17-12/17</td>
<td>Cabrillo Advancement Program (CAP)</td>
<td>Conduct early engagement activities and provide a feeder stream of URM students into ALH Cohort.</td>
</tr>
<tr>
<td>Year 1 - 7/17 - 6/18</td>
<td>ROP, AVID, S4C, ALH Faculty</td>
<td>Publicize the pathway project, outreach to 100s of students, counselors, parents, connect them to activities.</td>
</tr>
<tr>
<td>Year 1 - 7/17 - 6/18</td>
<td>ALH Faculty &amp; Staff, Students</td>
<td>Create ALH Careers Cohort, recruit up to 35 students, develop recruitment materials and selection criteria.</td>
</tr>
<tr>
<td>Year 1 - 7/17 - 6/18</td>
<td>ALH Faculty &amp; Staff, Students</td>
<td>Assess students using College Student Inventory (CSI) or Test of Essential Academic Skills (TEAS) to explore career &amp; academic goals, motivation, and commitment.</td>
</tr>
<tr>
<td>Year 1 - 1/18 - 6/18</td>
<td>Cabrillo ALH Faculty, staff, counselor</td>
<td>Deliver a Foundation class for cohort to increase motivation, improve study skills, and build confidence w/ material.</td>
</tr>
<tr>
<td>Year 1 - 1/18 - 6/18</td>
<td>Cabrillo ALH Faculty &amp; Staff</td>
<td>Create &amp; deploy scholarship fund for cohort, $1,500/student (textbooks, transport, AP prep books &amp; exams, etc.).</td>
</tr>
<tr>
<td>Year 1 - 7/17 - 6/18</td>
<td>Cabrillo PRO staff, ALH &amp; school faculty &amp; advisors.</td>
<td>Develop an evaluation plan for ALH Pathway project; hold professional development events for faculty</td>
</tr>
<tr>
<td>Year 1&amp;2 - 7/1 -6/19</td>
<td>ALH faculty &amp; counselors, Curriculum Committee</td>
<td>Research ALH Meta-major and develop accelerated, transferable ALH degree to enable students to obtain prerequisites &amp; transfer to premedical programs (UC/CSU).</td>
</tr>
<tr>
<td>Year 2 - 7/18 - 6/19</td>
<td>Cabrillo, PVUSD, SCCS, ALH staff</td>
<td>Implement dual enrollment with priority enrollment enabled via AB 288 MOU; prerequisite readiness work.</td>
</tr>
<tr>
<td>Year 2 - 7/18 - 6/19</td>
<td>ALH faculty, students, parents, Cabrillo staff</td>
<td>Start first class of an Allied Health Career Cohort; engage in college readiness activities, including college tours, financial aid &amp; literacy courses, etc.</td>
</tr>
<tr>
<td>Year 2 - 1/19 - 6/19</td>
<td>ALH faculty, Marketing</td>
<td>Develop marketing materials for pathway project; update website to help students navigate through ALH pathway.</td>
</tr>
<tr>
<td>Year 2 - 7/18 - 6/19</td>
<td>ALH faculty, Foundation</td>
<td>Approach funders / donors for scholarship funds.</td>
</tr>
<tr>
<td>Year 2 - 7/18 - 6/19</td>
<td>FPPO, NAS staff</td>
<td>Research, plan, and scope development for the expansion of wet lab space for Biology / Chemistry labs.</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Year 2 - 7/18 - 6/19</td>
<td>Math faculty, Basic Skills Coordinator</td>
<td>Offering MathPlus training for HS math instructors to expand on high school campuses.</td>
</tr>
<tr>
<td>Year 2&amp;3 - 7/18-6/20</td>
<td>Cabrillo, CSUMB &amp; Foothill College</td>
<td>Deepen partnership of guiding students from RN to BSN program; foster matriculation &amp; transfer to bachelor’s.</td>
</tr>
<tr>
<td>Year 2&amp;3 - 7/18-6/20</td>
<td>Research staff, ALH Faculty</td>
<td>Surveying students in cohort; data collection and analysis for evaluation.</td>
</tr>
<tr>
<td>Year 3 - 7/19 - 6/20</td>
<td>ALH faculty, IT, ALH Sim Lab Tech</td>
<td>Upgrade ALH Simulation lab with new equipment; use lab to expose HS and college students to clinicals.</td>
</tr>
<tr>
<td>Year 3 - 7/19 - 6/20</td>
<td>FPPO, NAS faculty and Dean, IT</td>
<td>Construct expansion of wet lab space with modern equip. &amp; pedagogy to build on learner strengths &amp; needs.</td>
</tr>
<tr>
<td>Year 3 - 7/19 - 6/20</td>
<td>NAS faculty, ALH Faculty, VPI</td>
<td>Add section of Bio 4 to accommodate priority enrollment for cohort; use technology to help students grasp material.</td>
</tr>
<tr>
<td>Year 3 - 7/19 - 6/20</td>
<td>Faculty &amp; staff (local and regional)</td>
<td>Convene to discuss evaluation of pathway development &amp; intervention methods to motivate URM students.</td>
</tr>
<tr>
<td>Year 3 - 7/19 - 6/20</td>
<td>ALH faculty &amp; staff, Marketing</td>
<td>Develop printed &amp; online materials on ALH Pathway model &amp; process to develop a pipeline of HS students academically &amp; emotionally prepared for ALH careers.</td>
</tr>
</tbody>
</table>

**Risk Mitigation**

No matter how well designed, a project of this scope has some inherent risks and challenges. First, the achievement gap between students’ high school academic performance and college readiness can be vast and difficult to reverse in a short period of time to address years of academic struggle – particularly in areas of math, science and language. Taking the Allied Health Career Cohort through a transformational Foundation course that is designed to hone skills in cooperation, collaboration and self-efficacy, URM students begin to grasp their working styles, learn how to work in a team environment, and receive observational feedback and encouragement by their peers as they work through course material.

While this project is designed to address specific bottlenecks, it might prove more difficult to expand prerequisite course sections to accommodate demand from high school students. Yet, college leadership is committed to leveraging funding to close the funding gap and meet student demands for expanded biology and chemistry courses and pursuing career and academic courses of study. Another concern is that a number of high school students may not be psychologically ready to pursue the rigor of an accelerated Allied Health program while still in secondary school. Furthermore, perceptions among parents, high school counselors, and peers can be hard to change in the short-term and will require tenacity on behalf of Allied Health faculty and partners to proactively seek out these students and address with the appropriate intervention. With consultation from experienced counselors, we’ve explored an education plan that is realistic for high school students to move through an accelerated program of ALH study. Career exposure, assessment and evaluation will be key to determining the various interventions that are effective in increasing motivation among these students in their career pursuit.
4. **How does this innovation align with other efforts you are undertaking, and how does it relate to other efforts in higher education in California? (1 page)**

This innovation is strongly aligned with other initiatives at Cabrillo College and across California that are designed to support URM students as they transition to college, succeed in the coursework for their chosen career pathways, and graduate into careers with family-supporting wages and ladders that lead to financial stability.

For over a year, the Cabrillo campus has embarked on an educational campaign on ‘Guided Pathways’ - an ‘integrated, institution-wide approach to student success based on intentionally designed, clear, coherent and structured educational experiences, informed by available evidence, that guide students effectively and efficiently from his/her point of entry to attainment of high quality postsecondary credentials and careers with value in the labor market.” Cabrillo leadership including the Board of Trustees, Faculty Senate, Cabinet, and the College Planning Council (CPC) have all provided their support and approval to apply to the California Guided Pathways Project, a grant designed to provide technical assistance to the college including the provision of an environment for learning how to implement this model system-wide on our campus.

Discussions are already underway with other campus initiatives such as Student Success and Support Program (SSSP), Student Equity, Basic Skills Initiative (BSI), and Strong Workforce to integrate their plans and activities and add ‘Guided Pathways’ to their collaborative thinking and planning. Many of the innovative ideas suggested in this application align closely with the Guided Pathways initiative that Cabrillo College is about to embark on.

In addition to the Guided Pathways initiative, Cabrillo College is working on improving basic skills among the majority of our students - including many of the URM students targeted in this proposal. The following are several examples of efforts currently underway on campus funded through the Basic Skills and Student Outcomes Transformation (BSSOT) Program:

- The Multiple Measures Assessment Project (MMAP) which includes the adoption of multiple measures for considering both high school grades and assessment test scores for placement in English, Math and ESL courses. This project targets some of the same URM students as the Allied Health Career cohort will seek to serve and will provide further resources to support their academic success in Allied Health prerequisite courses.
- Integration of student support services into several Career Technical Education (CTE) programs that will include Supplemental Instruction (SI), proactive counseling, study skills workshops, and peer tutoring / mentoring efforts.
- Instructional redesign of gateway transfer-level and below transfer-level English courses, in which faculty members from the English department are exploring instructional redesign and/or accelerated pathways for the English basic skills and transfer-level sequence.
- Expansion of Supplemental Instruction (SI), tutorials, and Math PLUS - a free one-week intensive math review for students, based on the award-winning Math Jam offered at Pasadena City College.
5. How could this innovation be scaled up within the setting in which you work and replicated in other areas in California? (1 page)

As noted above, while many Cabrillo College departments are involved in efforts to help students transition successfully to college, obtain their degrees, and attain their career goals, these interventions have not been applied systematically across an entire pathway and to multiple but related disciplines and careers.

Improving the entire Allied Health pathway from high school to community college to a four-year university for URM students makes sense as an initial focus because there is such a sustained demand for employees in Allied Health fields, and because these are local, high-wage careers. However, this approach would be relevant within Cabrillo to other career pathways and to other California community colleges and universities.

In addition to being scaled up to other majors and degrees, the program could be scaled to other high schools in Santa Cruz County and beyond. Because the project proposes researching and evaluating an Allied Health degree, this too could provide insights about how the pathway model could be enhanced, with benefits to a much broader cross-section of students (e.g., those interested in STEM careers that are not necessarily related to Allied Health).

The focus on parental engagement and commitment, the links to high school guidance and counseling staff, peer support through a cohort that moves through a sequence of courses in tandem, and connections to employers through job shadowing and other mechanisms offer potential for scaling this innovation across majors and degrees.

Cabrillo’s prior work with its evidence-based Academy of College Excellence (ACE) program, Math Plus, and other student success initiatives demonstrate a consistent track record of designing and implementing pilot programs, learning and improving on the pilot, evaluating and documenting results, and then deploying more broadly to larger cohorts of students and/or departments.

Like Cabrillo, other community colleges are likely to have existing relationships with a similar set of partners – ROPs, CSU/UC institutions, health careers academies, local school districts, and programs to support URM (and other) student achievement. All of these partnerships could be strengthened, expanded, or otherwise harnessed for similar efforts in other parts of the state.

As part of this project, Allied Health faculty and Cabrillo staff plan to closely evaluate and understand the value of the intervention methods that have been designed to motivate URM students toward student success in Allied Health careers as well as the process of engaging K-16 partners in a cohesive delivery of career exploration, student support, guidance, and instruction. The dissemination of this project information will occur through the delivery of a workshop whereby Allied Health faculty, counselors and administrators share lessons learned in project design and implementation, the project’s impact on student success, and describe how a similar project could be replicated on other college campuses.
6. What evidence suggests that this innovation would be effective in addressing the problem identified in your response to Item 1 and implemented successfully? (1 page)

Evaluations of guided pathway approaches have demonstrated that they harness the talents of low-income students in ways that help them succeed in college and their chosen careers, reducing academic achievement and subsequent income gaps. For example, a study of the City University of New York (CUNY) Accelerated Studies in Associate Programs (ASAP) found that students in the program had a three-year graduation rate of 52%, compared to a comparison cohort.\(^3\)

Cabrillo’s student success initiatives point to findings about both the obstacles that students face, leading to attrition from majors and college itself, as well as potential solutions. For example, the immersion in math that Math Plus students experience has increased math pass rates significantly, with 68% of Math Plus attendees passing math (15% higher than the college average).

Anecdotally and from initial data analyses, we know that younger students are more likely to complete courses and persist in their career pathways, possibly because older students are more likely to be challenged with family responsibilities that tilt them towards earning income instead of staying in school. We also know that performance in prerequisite courses is a strong predictor of later academic success. The proposed project incorporates both of these data points, focusing on a cohort of high school students with an accelerated career pathway, and supporting prerequisite performance with high school dual enrollment, tutoring, and on-campus support.

According to research from the RP Group on the educational paths that college students take through transfer and baccalaureate degrees in professions such as nursing, students who begin as concurrently enrolled high school students show shorter times to degree and transfer. This project is targeting students who will be incentivized to attend college full time. The research further states that full time students more quickly achieve associate degrees and transfers in Nursing\(^4\).

In addition to evidence-based practice underlying the project design and a close match between solutions and student barriers, Cabrillo’s proposed Accelerated Allied Health pathway project draws upon other factors that position the project for success and sustainability. Chief among these is the collaboration across Allied Health programs, whose chairs and faculty have worked together intensively and productively to design this program and others, and will continue to do so as they explore the option of an Allied Health degree. In addition to the close collaboration within Cabrillo’s Allied Health departments and with colleagues throughout the campus, the project team also enjoys close partnerships with local health employers, who have been active for many years in a Health Careers Partnership, as well as local high schools, who share Cabrillo’s mission of helping all students achieve their academic, career, and personal development goals.

---


7. **What information will you use to assess the success of this innovation in addressing the program’s goals, and how will that assessment be used to inform future efforts?**

Several types of data and information will help inform the ongoing evaluation of the pilot program’s success and contribute to adjustments that will strengthen and sustain the program in the future. Working closely with Cabrillo’s Planning and Research Office (PRO), the project team will provide formative evaluation data by using a SQL data warehouse to track the progression of students towards milestones to highlight areas of attrition or success. This information will be combined with qualitative data from surveys and interviews to assess the fidelity of implementation, the impact of initiatives on non-cognitive aspects of the student experience, and assure compliance with state regulations. The summative evaluation phase will employ quasi-experimental techniques such as multivariate regression, propensity score matching (PSM), and survival analysis to compare cohort participant outcomes to those of non-participants, controlling for differences in background variables. Findings from these statistical analyses will be used to determine program effects and ensure program efficacy.

Specific data points and measures include:

- The College Student Inventory (CSI), which uses non-cognitive indicators of student success to identify trigger points for students. As an early-alert survey, the CSI provides greater insight into students’ academic motivations, areas of risk, and receptivity to specific student support services. The cost of CSI assessments for cohort students is included in the budget.
- A longitudinal study to evaluate how students have changed (in terms of academic achievement, beliefs, confidence, etc.) over the life of the program.
- Qualitative interview and/or focus group data from students (e.g., regarding anxiety, expectations for the future, cohort experiences, the role of parents/families).
- Cohort students’ BA/MA aspirations, identified through Allied Health faculty interaction and mentoring, and pursuit of advanced degrees over time;
- Prerequisite unit accumulation, program completion rates and attrition along the pathway compared to the current status quo;
- Program completion intervals, with reduced years from start to finish as per program design and for completing prerequisites;
- Completion of ancillary certificates (at pre-degree drop-off points), including a survival curve analysis to learn where students drop off along the pathway;
- Reduced URM vs. non-URM disparities in known gap areas such as repeated attempts to pass Biology 4 or licensure exam pass rates for nursing; and
- Decreased student debt.
8. What resources or commitments do you currently have to support this innovation, and how will implementation of this innovation be sustainable over the long-term? (1 page)

A variety of resources and commitments support this effort at different levels. This one-time innovation funding will be devoted to creating the infrastructure to support an Allied Health pathway with initial investments in curriculum and program review and development, marketing materials, expanded wet laboratory space, convening of partners, and the exploration and development of an Allied Health degree. These efforts would not take place as comprehensively or quickly without an infusion of funds. However, once launched, we are confident that the additional streams of funding and activity described below will support the Allied Health pathway as a lasting, sustainable feature of Cabrillo’s contributions to connecting local URM high school students to the fulfilling, high-wage careers that allow them to remain in the region.

A Leading from the Middle (LFM) group at Cabrillo has spent over a year leading a campus-wide initiative for Guided Pathways, which is another important pillar of support for this proposed work. The group has generated greater interest and enthusiasm for the Guided Pathways approach across the campus, with Cabrillo’s Board of Trustees passing a supporting resolution to apply for Guided Pathways funding at the January 2017 Board meeting, following the Faculty Senate’s lead in passing a similar resolution in December 2016. If successful, the Guided Pathways initiative would align with SSSP, Equity, BSI, and Strong Workforce funding – as well as this innovation funding stream. This would be done to fully incorporate strategic pathways thinking and implementation into every aspect of Cabrillo’s environment by helping students clarify the path, start and stay on the path, and learn at every juncture along the way. The Accelerated Allied Health Pathway project and potential degree innovations would be central to this approach, and serve as a pilot to other departments on campus seeking to develop pathways.

The nursing tenured faculty position that would enable the expansion of nursing student spots at the college will continue to be supported by Strong Workforce Program (SWP) funds. The Allied Health Student Success Coordinator and the Allied Health counselor (adjunct) would be funded by seeking out other funding sources such as Song-Brown, HRSA, or Perkins. Other ideas include seeking out funding from SSSP, Equity, or additional Strong Workforce funding. Use of the Allied Health Simulation Lab IT technician would continue to be funded by existing grant funds such as the Monterey Peninsula Foundation and a Retention and Remediation grant. Another potential source of internal funding is Cabrillo’s Student Success and Support Program (SSSP), which supports a broader student success agenda by focusing on orientation, assessment and educational planning/ counseling. A future Allied Health degree offers the potential of boosting enrollment and reducing backlogs in prerequisite courses, making the Allied Health pathway accessible to more students.

The Cabrillo Foundation, along with local and regional health employers, are part of a long-term sustainable plan to support this initiative and sustain scholarships and cohort development. They are being approached about expanding the scholarship component of the Allied Health Career Cohort after the innovation funding period.