High-Cost Healthcare Start-Up and Expansion Grant

Annual Report – Fiscal Year 2023-2024

Due: December 1, 2024

Legislative Requirement

Session Law 2023-134 Section 6.2

Report

The System Office shall submit an initial report to the Joint Legislative Education Oversight Committee by December 1, 2024, and an annual report thereafter for each year the System Office provides funds to community colleges from the Fund on the programs receiving the funds, which shall include at least the following information:

(1) The community colleges that received funds, the amount of funds, and the types of programs started.

(2) The use of funds by community colleges receiving awards, including costs associated with student instruction, faculty salaries, instructional supplies, related instructional equipment, and accreditation costs.

(3) Evaluation of the success of the new community college programs receiving funds.

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Section 1: High-Cost Healthcare Start-Up and Expansion Grant – Executive Summary

Introduction

North Carolina has a significant and growing workforce shortage in several key healthcare occupations, particularly nursing, diagnostic technicians, laboratory technicians, and mental health workers. A combination of factors drives these shortages:

- **Aging Population**: North Carolina's aging population is driving demand for healthcare services, particularly in long-term care, geriatrics, and chronic disease management, all requiring more healthcare workers.
- **Educational Bottlenecks**: Many healthcare programs face capacity issues due to limited faculty, high equipment costs, and accreditation requirements, which restrict the number of graduates entering the workforce.
- **Burnout and Attrition**: High levels of stress and burnout (particularly after the COVID-19 pandemic) and insufficient pay and benefits increase attrition among healthcare workers, particularly in high-demand roles like nursing, EMTs, and medical assistants.
- **Rural vs. Urban Disparities**: Workforce shortages are more acute in rural areas, making attracting and retaining healthcare professionals harder. This creates disparities in access to healthcare across different regions of the state.

Addressing these shortages will require a significant investment. In 2023, the North Carolina General Assembly appropriated $55 million in non-recurring funds to assist community colleges in starting new or expanding existing programs in high-demand healthcare occupations while strengthening the state's healthcare workforce pipeline. Funding would support curriculum or short-term workforce continuing education programs. Below is a breakdown of the funding appropriation.

Fiscal Year:	2023-2024	2024-2025	**Total Allocation**
Funding Cycle:	January 1, 2024 – June 30, 2025	July 1, 2024 – June 30, 2026	
▪ High-cost, Start-up Funds	$10 Million	$20 Million	$30 Million
▪ Expansion Funds	$10 Million	$15 Million	$25 Million
Total Allocation:	**$20 Million**	**$35 Million**	**$55 Million**

Purpose of Report

This report outlines critical, actionable strategies for how community colleges will leverage partnerships with healthcare employers, government agencies, and other strategic partnerships to expand access to high-demand healthcare programs, improve job placement outcomes, and support rural healthcare delivery. Most importantly, this report details how colleges will offer healthcare training programs aligned with employer needs, provide financial support for students, and create pathways to certification in critical healthcare roles.

The report is divided into three sections based on the Legislative requirements in Session Law 2023-134 Section 6.2. What follows are highlights of each of these reporting requirements.

Program Highlights

In response to a growing workforce shortage across critical healthcare roles, the North Carolina General Assembly allocated $55 million to the North Carolina Community College System (NCCCS) for healthcare program expansion. This legislative funding supports community colleges in creating and enhancing healthcare training programs aligned with industry demands, particularly in rural and economically distressed areas. This report highlights partnerships with healthcare employers, government agencies, and community stakeholders to expand training access, improve job placement, and strengthen rural healthcare delivery.

Requirement #1: Colleges Funded

- **Allocations by Colleges and Program Type**: To date, all 58 community colleges received funding totaling over $48.7 million across start-up and expansion initiatives, primarily in Nursing (33 colleges, $13.7 million) and Emergency Medical Services (EMS) (26 colleges, $10.3 million).
- **Allocations by Funding Year and Cycle**: To date, nearly 90% of the funds have been allocated, with 115 applications funded. The expansion funding has been exhausted. There is $6,239,255 remaining in Start-Up funding, which will be allocated in January 2025.
- **Allocations by Program Type**: Most funds targeted high-need areas like Nursing, EMS, Dental Assisting, and Medical Sonography, supporting workforce shortages in these fields.
- **Allocations by Tier 1 Counties**: The allocation of these funds had a significant impact on 21 Tier 1 rural counties, directing nearly 44% of resources toward economically distressed areas. This strategic distribution addresses workforce shortages in rural settings and enhances healthcare access in underserved communities.

Requirement #2: Use of Funds

- **Allocation Methodology**: Funds were awarded based on data-driven labor market assessments, prioritizing programs that address high workforce demands. Collaborative projects across regions and rural colleges were prioritized.
- **Request for Proposals (RFP) Template**:
    - Section 1 - Program Description: Colleges outlined program needs, focusing on high-demand healthcare fields. Proposals emphasized adding degree options, increasing access for underserved populations, and alleviating waitlists.
    - Section 2 - Industry Demand: Proposals demonstrated strong local employer engagement and alignment with labor market projections, with job growth between 5%-18% across targeted occupations.
    - Section 3 - Budget Justification: Colleges provided detailed budgets for faculty salaries, equipment, and accreditation, highlighting funding needs to ensure program success and compliance.
    - Section 4 - Sustainability Plan: Colleges proposed strategies like partnerships with healthcare employers and FTE generation to sustain program operations post-grant.

Key Trends

1. **Workforce Alignment**: Colleges designed programs to address acute shortages in Nursing, EMS, Radiology, and other critical fields. High employer engagement ensured that curricula aligned with real-world requirements.
2. **Access and Equity**: A substantial portion of funding was directed toward rural and Tier 1 counties, improving access to healthcare training and addressing disparities in healthcare delivery.
3. **Innovative Instructional Approaches**: Short-term credentials, stackable credentials, and hybrid programs were implemented to attract diverse student populations, including high school students, and working adults.
4. **Investments in Technology**: Advanced medical equipment and simulation technology were prioritized to prepare students for high-tech healthcare environments.

Requirement #3: Program Evaluation

- **Implementation Success**: Quarterly progress reports are required to track milestones, measure enrollment, and assess partnerships. Colleges will evaluate program success through a structured framework, focusing on effective fund usage and workforce outcomes.
- **Employer Engagement**: Robust partnerships with healthcare providers, including clinical placements and apprenticeships, play a critical role in enhancing workforce readiness. Direct recruitment pathways and advisory boards further ensure ongoing alignment with industry demands, maintaining a responsive and well-prepared talent pipeline.

In summary, the State's $55 million investment in the NC Community College System will address North Carolina's healthcare workforce needs and will align to employer expectations by:

1. **Fulfilling Workforce Gaps**: Programs target fields with critical shortages, such as Nursing, EMS, and Medical Imaging, supporting high-demand roles essential to healthcare access.
2. **Supporting Rural Healthcare Access**: Targeted allocations to Tier 1 counties aim to build a sustainable rural healthcare workforce.
3. **Ensuring Sustainability**: Colleges' sustainability plans focus on diverse funding sources and employer partnerships, ensuring these programs continue beyond initial funding.

Section 2: Legislative Reporting Requirements – Full Report

Reporting Requirement #1: Colleges Funded

On the following pages, five tables summarize the community colleges that received funds, the amount of funds received, and the types of programs started.

- Table 1: Colleges Funded with Program Type and Allocation
- Table 2: Allocations by Funding Year and Cycle
- Table 3: Allocations by Program Type
- Table 4: Allocations Targeting Tier 1 Counties
- Table 5: Allocations Targeting Tier 1 Counties by Occupations

Table 1: Allocations by College and Program Type

College	Total Grants	Total Allocation		FY 2023-2025 Start-Up	FY 2023-2025 Expansion	FY 2024-2026 Start-Up	FY 2024-2026 Expansion
Alamance CC	3	$1,400,000		Nursing	----	Veterinary Medical	EMS
Asheville-Buncombe TCC	2	$1,150,000		----	----	Behavioral Health	Nurse Aide
Beaufort CC	1	$400,000		----	----	----	Nursing
Bladen CC	1	$400,000		----	----	----	EMS
Blue Ridge CC	2	$900,000		Respiratory Therapy	----	----	EMS
Brunswick CC	2	$719,297		--------	Nursing	----	Dental Assisting
Caldwell CCTI	2	$846,590		----	Medical Sonography	----	EMS
Cape Fear CC	3	$1,300,000		----	Nursing	Neurodiagnostic Tech	CT/MRI
Carteret CC	3	$1,349,840		Surgical Tech	----	Dental Assisting	Nursing
Catawba Valley CC	2	$909,040		----	Nursing	----	----
Central Carolina CC	3	$1,253,902		----	Nursing	Physical Therapy	Nurse Aide
Central Piedmont CC	2	$900,000		----	Nursing	Radiography	----
Cleveland CC	3	$1,300,000		Medical Sonography	Nursing	----	Radiography
Coastal Carolina CC	1	$400,000		----	Nursing	----	----
CO Albemarle	1	$239,746		Dental Assisting	----	----	----
Craven CC	2	$495,553		----	Surgical Tech	----	Nursing
Davidson-Davie CC	2	$900,000		Radiography	----	----	EMS
Durham TCC	1	$398,141		----	----	----	EMS
Edgecombe CC	2	$465,064		----	Respiratory Therapy	----	Nurse Aide
Fayetteville TCC	3	$1,499,797		----	Respiratory Therapy	Cardiovascular	Nursing
Forsyth Tech CC	2	$800,000			----	Central Sterile Process	Nursing
Gaston College	3	$1,580,860		Surgical Technology	EMS	Medical Sonography	
Guilford TCC	2	$900,000		Medical Sonography			Nursing
Halifax CC	2	$900,000		----	Nursing	Dental Assisting	----
Haywood CC	1	$400,000		----	EMS	----	----
Isothermal CC	2	$900,000		----	----	Dental Hygiene	EMS
James Sprunt CC	1	$399,997		----	EMS	----	----
Johnston CC	3	$1,400,000		Respiratory Therapy		Surgical Technology	Nurse Aide
Lenoir CC	1	$396,729			Nursing	----	----
Martin CC	3	$1,295,560			Physical Therapy	Nursing – ADN/PN	EMS
Mayland CC	2	$997,336		Dental Assisting		Medical Lab Tech	----
McDowell TCC	2	$735,300		----	Nursing	Human Services	----
Mitchell CC	2	$800,000		----	----	Dental Assisting	Nursing
Montgomery CC	2	$784,760		----	----	EMS	Nursing
Nash CC	1	$400,000		----	EMS	----	----
Pamlico CC	1	$336,000		----	----	----	Nurse Aide
Piedmont CC	4	$1,800,000		Nursing	Nursing	Medical Sonography	EMS
Pitt CC	2	$607,737		EMS	Dental Assisting	----	----
Randolph CC	2	$800,000		----		Mammography	Radiography
Richmond CC	2	$712,816		----	Surgical Technology	----	Surgical Tech
Roanoke-Chowan CC	2	$900,000		Nursing	----	----	EMS
Robeson CC	2	$1,000,000		Medical Sonography	----	Dental Assisting	----
Rockingham CC	1	$398,623		----	Nursing	----	----
Rowan-Cabarrus CC	2	$652,132		----	Nursing	----	EMS
Sampson CC	2	$800,000		----	EMS	----	Nursing
Sandhills CC	2	$871,000		----	----	EMS	Medical Assisting
South Piedmont CC	4	$1,799,700		Surgical Tech	Nursing	Physical Therapy Ast	EMS
Southeastern CC	2	$900,000		----	----	Nursing – ADN/PN	EMS
Southwestern CC	2	$1,000,000		Dental Assisting	----	Dental Hygiene	----
Stanly CC	1	$494,100		Nursing	----	----	----
Surry CC	1	$400,000		----	----	----	Nursing
Tri-County CC	2	$900,000		----	----	Sonography	Nursing
Vance-Granville	2	$900,000		----	----	Central Sterile Process	Nursing
Wake TCC	2	$900,000		Respiratory Therapy	----	----	EMS
Wayne CC	2	$680,099		EMS	Nurse Aide	----	----
Western Piedmont CC	2	$863,424		----	Nursing	----	EMS
Wilkes CC	1	$500,000		----	----	Dental Hygiene	----
Wilson CC	2	$627,602		----	EMS	----	EMS

Total Allocations: **115** **$48,760,745**

Table 2: Allocations by Funding Year and Cycle

	Grand Total		College Count		Allocation	
	Start-Up	**Expansion**	**Start-Up**	**Expansion**	**Start-Up**	**Expansion**
FY 2023-2025	**48**	**$19,640,045**	**21**	**27**	**$9,697,215**	**$9,942,830**
Addendum	11	$5,258,965	11		$5,258,965	
Round 1	18	$7,135,322	5	13	$2,233,546	$4,901,776
Round 2	19	$7,245,758	5	14	$2,204,704	$5,041,054
FY 2024-2026	**67**	**$29,120,700**	**28**	**39**	**$14,063,530**	**$15,057,170**
Round 3	39	$15,980,577	12	27	$5,684,760	$10,295,817
Round 4a (Aug)	7	$3,000,000	3	4	$1,400,000	$1,600,000
Round 4b (Sept)	10	$4,916,770	5	5	$2,728,770	$2,188,000
Round 4c (Oct)	4	$1,723,353	1	3	$750,000	$973,353
Round 4d (Nov)	7	$3,500,000	7		$3,500,000	
Grand Total	**115**	**$48,760,745**	**49**	**66**	**$23,760,745**	**$25,000,000**

Table 3: Allocations by Program Type

Program Type	Total Allocation	Total College Count	Start-Up Allocation	Total College Count	Expansion Allocation	Expansion Allocation
Nursing - ADN and/or PN	$13,681,380	33	$3,491,418	7	$10,189,962	26
Emergency Medical Services	$10,311,629	26	$1,740,065	4	$8,571,564	22
Dental Assisting	$3,571,472	9	$3,137,082	7	$434,390	2
Medical Sonography	$3,196,872	6	$2,750,000	5	$446,872	1
Surgical Technology	$2,809,226	7	$2,096,410	5	$712,816	2
Radiography	$2,300,000	5	$1,500,000	3	$800,000	2
Respiratory Therapy	$2,127,386	5	$1,500,000	3	$627,386	2
Nurse Aide Level 1 and 2	$2,033,450	6			$2,033,450	6
Dental Hygiene	$1,500,000	3	$1,500,000	3		
Physical Therapy Assistant	$1,391,330	3	$995,770	2	$395,560	1
Central Sterile Processing	$900,000	2	$900,000	2		
Behavioral Health Programs (Regional)	$750,000	1	$750,000	1		
Cardiovascular (Invasive-Non-Invasive)	$500,000	1	$500,000	1		
Human Service Technology	$500,000	1	$500,000	1		
Medical Lab Technology	$500,000	1	$500,000	1		
Neurodiagnostic Technology	$500,000	1	$500,000	1		
Sonography, Cardiovascular	$500,000	1	$500,000	1		
Veterinary Medical Tech	$500,000	1	$500,000	1		
Computed Tomography & MRI	$400,000	1			$400,000	1
Mammography	$400,000	1	$400,000	1		
Medical Assisting	$388,000	1			$388,000	1
Grand Total:	$48,760,745	115	$23,760,745	49	$25,000,000	66

Table 4: Allocations Targeting Tier 1 Counties

In North Carolina, counties are classified with a Tier 1 designation if they are among the 40 most economically distressed areas. This tiering system is implemented by the North Carolina Department of Commerce to focus economic support and incentives on regions facing the greatest financial challenges. The tier levels (1, 2, and 3) are determined by several factors, including unemployment rates, median household income, population growth, and adjusted property tax base. Below is a summary of the funding allocated to colleges that serve at least one Tier 1 County in their area.

Tier 1 Counties	Total Allocation	Total Grants	College	Start-Up	Expansion
Beaufort, Hyde, Tyrrell, Washington	$400,000	1	Beaufort CC	----	Nursing
Bladen	$400,000	1	Bladen CC	----	EMS
Onslow	$400,000	1	Coastal Carolina CC	----	Nursing
Chowan, Gates, Pasquotank	$239,746	1	CO Albemarle	Dental Assisting	----
Edgecombe	$465,064	2	Edgecombe CC	----	Respiratory Therapy Nurse Aide
Cumberland, Hoke	$1,499,797	3	Fayetteville TCC	Cardiovascular	Nursing Respiratory Therapy
Halifax, Northampton	$900,000	2	Halifax CC	Dental Assisting	Nursing Dental Assisting
Rutherford	$900,000	2	Isothermal CC	Dental Hygiene	EMS
Duplin	$399,997	1	James Sprunt CC	----	EMS
Greene, Jones, Lenoir	$396,729	1	Lenoir CC		Nursing
Bertie, Martin	$1,295,560	3	Martin CC	Nursing – ADN/PN	EMS Physical Therapy
Mitchell	$997,336	2	Mayland CC	Dental Assisting Medical Lab Technology	
Nash	$400,000	1	Nash CC	----	EMS
Caswell	$1,800,000	4	Piedmont CC	Nursing Medical Sonography	EMS, Nursing
Pitt	$607,737	2	Pitt CC	EMS	Dental Assisting
Richmond, Scotland	$712,816	2	Richmond CC	----	Surgical Technology
Hertford, Northampton	$900,000	2	Roanoke-Chowan CC	Nursing	EMS
Robeson	$1,000,000	2	Robeson CC	Medical Sonography Dental Assisting	----
Rockingham	$398,623	1	Rockingham CC	----	Nursing
Sampson	$800,000	2	Sampson CC	----	EMS, Nursing
Hoke	$871,000	2	Sandhills CC	EMS	Medical Assisting
Anson	$1,799,700	4	South Piedmont CC	Surgical Tech Physical Therapy Asst.	Nursing EMS
Columbus	$900,000	2	Southeastern CC	Nursing	EMS
Cherokee, Graham	$900,000	2	Tri-County CC	Medical Sonography	Nursing
Vance, Warren	$900,000	2	Vance-Granville	Central Sterile Processing	Nursing
Wayne	$680,099	2	Wayne CC	EMS	Nurse Aide
Wilson	$627,602	2	Wilson CC	----	EMS
Tier 1 Impact:	**$21,591,806**	**52**			
Percentage of Total	44%	45%			
Total All Grantees	$48,760,745	115			

Table 5: Allocations Targeting Tier 1 Counties by Occupations

Below is a list of occupations targeted in Tier1 Counties.

Occupations	Total Allocation	Total College Count	Start-Up Allocation	Count of College	Expansion Allocation	College Count
Nursing - ADN and/or PN	6,595,352	15	2,000,000	4	4,595,352	11
Emergency Medical Services	5,982,904	15	1,355,305	3	4,627,599	12
Dental Assisting	1,850,779	5	1,737,082	4	113,697	1
Surgical Technology	1,212,516	3	499,700	1	712,816	2
Medical Sonography	1,000,000	2	1,000,000	2		
Physical Therapy Assistant	895,560	2	500,000	1	395,560	1
Respiratory Therapy	627,386	2			627,386	2
Nurse Aide Level 1 and 2	539,309	2			539,309	2
Dental Hygiene	500,000	1	500,000	1		
Central Sterile Processing	500,000	1	500,000	1		
Sonography, Cardiovascular	500,000	1	500,000	1		
Cardiovascular Technology	500,000	1	500,000	1		
Medical Lab Technology	500,000	1	500,000	1		
Medical Assisting	388,000	1			388,000	1
Grand Total	**21,591,806**	**52**	**9,592,087**	**20**	**11,999,719**	**32**

Reporting Requirement #2: Use of Funds

Allocation Methodology and RFP Template

The primary objective of the planning process was to create a strategic approach for allocating funds to tackle workforce shortages in North Carolina effectively. The NCCCS System Office aimed to ensure that the funded proposals aligned with its Strategic Plan, which emphasized increasing enrollment, enhancing student outcomes, and satisfying local employment demands.

To achieve this, proposals must be supported by data-driven labor market assessments and developed in collaboration with employers to foster sustainable workforce development opportunities for both communities and students. Additional preference was awarded to collaborative, cross-regional projects and initiatives involving rural colleges in Tier 1 counties.

Proposals were required to address critical challenges previously identified by colleges when launching or expanding programs. These included compliance with regulatory and accreditation standards and adaptation to technological advancements to ensure program sustainability.

According to Session Law 2023-134 Section 6.2(d), colleges that received start-up funding were required to match a portion of the overall cash costs of the program using non-state funds. The matching amount depended on the college's total full-time equivalent (FTE) enrollment. Out of the 58 colleges, 34 were obligated to provide matching funds, while 24 were exempt.

The Request for Proposals (RFP) application template was structured into four essential sections for a successful submission: program design, industry demand, budget justification, and sustainability planning.

According to research that outlined the financial benchmarks needed for initiating and sustaining the viability of healthcare training programs, allowable expenditures were determined. The following expenditures were permitted: salaries related to the program, instructional materials and supplies, equipment for the program, staff travel, curriculum development, accreditation expenses, facility preparation, and professional development.

The RFP was released in November 2023, and colleges were able to apply for one start-up program and one expansion program per funding cycle. Below are the maximum funding limits for both grant initiatives.

Grant Programs	Single College Award Ceiling	Regional Partnership Award Ceiling
1. Start-up Funds	$500,000	$750,000
2. Expansion Funds	$400,000	$600,000

There were five opportunities for colleges to submit proposals. The review team was a representative group of System Office staff and a part-time project consultant hired in January 2024 with experience in NCCCS as a Chief Academic Officer and nursing educator. In total, 115 proposals were funded, and four were regional collaborations.

Comprehensive Overview of College Proposals

The following is a comprehensive overview of the funded proposals, organized by the four sections of the Request for Proposals (RFP).

Section 1: Description of the Proposed Program

This section of the RFP was a needs assessment. Colleges had to describe their proposed program. If the proposal was a new program requiring start-up funds, it must address how it met the high-cost definition. If it was a request to expand an existing program, the proposal had to address one or more of the key drivers for expanding: Add new degree options (CU), add a new course (CE), increase student access/enrollment, outreach to target/underserved populations, or address current waiting list. Below is a summary of the key drivers for the need for funding.

Workforce Shortage

According to reports from all proposals, North Carolina's healthcare sector is witnessing significant growth driven by a rising demand for services, an aging population, and advancements in healthcare technology. To address these challenges, there is a need for a larger workforce equipped with enhanced skills. Data from the NC Department of Commerce Labor & Economic Analysis Division (LEAD) further corroborates these observations. Here are some statistics.

- Between 2024 and 2034, North Carolina's healthcare sector is projected to grow by 15%, adding over 60,000 new jobs. This growth is driven by the fact that over 20% of North Carolina's population will be 65 or older by 2030, increasing the demand for healthcare services. Emerging technologies are transforming care delivery and creating a demand for new skill sets among healthcare professionals.
- Below are key occupations with workforce shortages:
    - **Registered Nurses (RNs)**

      North Carolina faces a critical shortage of registered nurses (RNs). The demand for RNs is rising due to the state's aging population and increased healthcare needs, but not enough new graduates are entering the workforce to replace retiring nurses or meet the growing demand. Contributing Factors include an aging population with chronic illnesses requiring more complex care; high turnover rates, especially due to burnout from high workloads during and after the pandemic; and insufficient nursing faculty to train the next generation of nurses, limiting enrollment in nursing programs.

    - **Licensed Practical Nurses (LPNs)**

      North Carolina also has a growing shortage of LPNs, particularly in long-term care settings, nursing homes, and rural areas. LPNs are crucial for providing routine care, but fewer students are enrolling in LPN programs as many pursue RN degrees. Contributing factors include increasing demand for LPNs in home health and assisted living facilities, driven by the state's aging population, competitive salaries, and career progression opportunities in other healthcare roles, making LPN programs less attractive to potential students.

    - **Emergency Medical Technicians (EMTs) and Paramedics**

      North Carolina is experiencing a shortage of EMTs and paramedics, especially in rural and underserved areas. Emergency services have seen an uptick in demand, but recruitment and retention remain challenging. Contributing factors include high levels of stress and burnout, compounded by long hours, low pay, and the job's physical demands. Insufficient funding for EMS agencies leads to limited capacity to hire and retain paramedics.

- **Radiologic and MRI Technologists**

  North Carolina is seeing a rising demand for radiologic and MRI technologists due to the increasing use of diagnostic imaging in medical care. However, there is a shortage of trained professionals in this field. Contributing factors include a high demand for outpatient care centers, hospitals, and diagnostic labs due to advances in medical imaging technologies. Limited capacity of educational programs to expand enrollment due to faculty shortages and the high equipment cost.

- **Surgical Technologists**

  Surgical technologists are in short supply in North Carolina, particularly in hospitals and ambulatory surgical centers, where demand increases as outpatient procedures become more common. Contributing factors include: the growth of outpatient surgery and elective procedures and difficulty recruiting and retaining surgical technologists due to competition with other healthcare roles offering higher pay and career advancement opportunities.

- **Medical Assistants**

  Medical assistants are in high demand across North Carolina due to their versatile roles in various healthcare settings. Still, there is a shortage of trained professionals to fill the growing number of positions. Contributing factors include growth in outpatient care and primary care settings where medical assistants are integral to patient flow, competition with other healthcare roles offering higher pay, and insufficient capacity to meet demand.

- **Diagnostic Medical Sonographers**

  Diagnostic medical sonographers are in short supply, especially in rural areas of North Carolina. Sonography is increasingly used for diagnostic purposes in multiple medical specialties, driving up demand. Contributing factors include the growing use of non-invasive diagnostic imaging for early detection of conditions, including in prenatal care, cardiology, and oncology. Training programs are costly and constrained by clinical placement availability, which limits program size and results in fewer graduates meeting industry demands.

- **Psychiatric Technicians and Aides**

  The demand for psychiatric technicians and aides is rising, particularly due to increased awareness and diagnosis of mental health conditions. However, North Carolina is experiencing a shortage of workers in this field. Contributing factors include rising demand for mental health services, particularly in community-based settings, driven by increased recognition of mental health issues and limited training programs, and low pay, which discourage individuals from entering the field.

- **Medical Laboratory Technologists and Clinical Laboratory Technicians**

  There is a critical shortage of laboratory technologists in North Carolina, particularly as diagnostic testing becomes more essential for in-patient care. Contributing factors include increased demand for diagnostic and lab testing in hospitals, diagnostic labs, and outpatient centers. There is also a nationwide shortage of lab professionals, driven by a lack of training programs, low enrollment rates, and high retirement rates in the field.

Workforce Skill Requirements

As healthcare continues to evolve with greater specialization, colleges must enhance their training programs by incorporating more hands-on and immersive experiences alongside innovative teaching techniques to bolster clinical skills. Securing funding that aligns with these emerging needs is crucial for the success of new or expanded training initiatives that address the skill demands of high-demand jobs. The following are key strategies suggested by colleges. ***The healthcare programs funded by these grants are projected to produce more than 3,500 additional graduates***, filling critical positions in hospitals, clinics, and other healthcare facilities across the state.

Instructional Delivery

- **Offer Short-term Training Leading to Industry Recognized Credentials**

  Short-term training is more accessible to a broader demographic, including working adults, career changers, and those seeking advancement without committing to long-term academic programs. Short-term programs allow individuals to enter the workforce more quickly than traditional degree programs. They are cost-effective solutions for building a skilled workforce and meeting urgent labor market demands.

  - Colleges proposed offering the following short-term training programs for the following occupations: dental assisting, surgical technicians, emergency medical technicians, central sterile processing technicians, nurse aides, behavioral health technicians, and medical assistants.
  - Colleges proposed offering short-term workforce training for roles requiring specialized post-secondary credentials, enabling individuals with an associate degree in Radiography to broaden their competencies across diverse imaging modalities. This includes specialized certifications in areas such as mammography, computed tomography, magnetic resonance imaging, cardiovascular/vascular interventional radiography, and vascular sonography.

- **Create Accelerated and Stackable Credential Programs**

  In response to the increasing need for skilled healthcare professionals, colleges proposed various innovative educational programs to facilitate career growth and simplify the journey toward advanced qualifications.

  - Offer bridge programs, such as LPN-to-RN or NA-to-LPN pathways, to attract individuals already working in healthcare to pursue higher qualifications.
  - Design programs where students can earn entry-level certifications and then "stack" these credentials towards more advanced certifications or degrees. Stackable programs can be particularly effective for high-demand roles and career progression.
  - Offer accelerated tracks for critical occupations like Nurse Aides, Behavioral Technicians, and Medical Assistants. These programs could help train professionals in the workforce more quickly to meet immediate needs.

- **Offer Flexible and Hybrid Training Programs**

  Implementing innovative training approaches that increase access to training opportunities is essential. Colleges proposed implementing these strategies:

  - Offer hybrid programs that combine online coursework with hands-on labs or clinical placements for roles that can be trained partly online.
  - To address shortages in rural areas, establish mobile training units or satellite campuses for clinical training in collaboration with local health providers. This approach could reduce travel barriers for rural students and allow them to complete clinical requirements closer to home.

- **Create Partnerships with High Schools**

  Colleges have partnered with local public schools to provide healthcare programming to high school students. Here are the key trends related to this grant initiative.

  - Colleges are partnering with high schools to create healthcare career pathways, offering students early exposure to healthcare careers through specialized programs. These pathways often include coursework in health sciences, introductory medical courses, and practical experience. High school students can explore various healthcare professions, including nursing, medical assisting, and allied health careers, to help them make informed decisions about their future education and career paths.
  - Colleges are working with high schools to establish dual enrollment pathways within the Career and College Promise (CCP) program. CCP allows high school students to earn college credits in healthcare-related fields before graduation, enabling them to accelerate their education and enter healthcare training programs more quickly.
  - Apprenticeships and pre-apprenticeships for high school students are becoming common, providing hands-on experience in healthcare settings such as hospitals, clinics, or nursing homes. These programs are designed to give students practical skills, and a head start in healthcare careers, with the opportunity to continue their training after graduation.

- **Invest in Faculty Recruitment and Development**

  Investments in faculty are critical to enhancing learning and better preparing students for careers in high-demand fields. Colleges proposed implementing the following strategies to strengthen their educational offerings and ensure a skilled workforce for the future.

  - Offering competitive wages and flexible hours is essential for attracting, retaining, and motivating healthcare faculty. This enables institutions to maintain high educational standards, supports faculty job satisfaction, and aligns with the growing demands of the healthcare industry, benefiting both students and the institution.
  - Investing in ongoing professional development ensures faculty stay up to date with industry standards and technological advancements. This is especially valuable for clinical and technical fields.
  - Offering part-time or adjunct faculty arrangements to attract working professionals who cannot commit to full-time teaching but can bring practical expertise to the classroom.

Instructional Resources

- **Technology and Equipment**

  The healthcare field is evolving rapidly, making investments in advanced equipment and digital tools essential for training programs. Colleges need simulation tools, diagnostic devices, telemedicine equipment, and technology-driven tools (e.g., virtual reality simulators for surgery or emergency medicine) to provide realistic training. Alongside traditional resources, digital and cloud-based platforms for accessing medical records or telehealth training are increasingly sought after. Many colleges have requested simulation labs that replicate clinical environments and industry-standard software to prepare students for real-world healthcare applications.

- **Simulation-Based and Hands-On Training**

  There is a growing emphasis on simulation-based training to offer realistic, hands-on experience in a controlled, risk-free environment. Investments in high-fidelity simulators for nursing, EMTs, medical imaging, or surgical technician training are essential. Expansion of training programs often requires integrating simulation-based learning into curricula, which can involve specialized faculty preparation and accreditation. Colleges requested simulation labs with advanced equipment such as manikins for trauma response, robotic surgery simulators, and diagnostic imaging devices. Continuous investment in software upgrades was necessary for their systems. These high-fidelity manikins simulate vital signs, breathing, bleeding, childbirth, cardiac arrest, and other complex medical scenarios. The simulators are often programmable to respond dynamically to students' actions. Students can practice responding to realistic,

life-threatening situations, such as trauma, without risking patient safety. This improves their ability to handle high-pressure scenarios upon entry into the workforce.

- **Artificial Intelligence (AI)**

  AI is becoming more prevalent in healthcare, from diagnostics to personalized medicine. Colleges must incorporate AI to teach healthcare workers how to interpret AI-generated data and integrate AI tools into clinical practice, particularly in radiology, pathology, and predictive analytics. AI is being used to enhance simulation scenarios by providing real-time data analysis, adaptive responses, and more complex simulations. AI-driven simulations can adjust patient responses based on student actions or predict how a patient's condition will evolve in real time. This gives students more dynamic learning experiences, offering a deeper understanding of patient outcomes and medical decision-making. Colleges requested funding for curriculum development and professional development on AI.

- **Mobile Simulation Units**

  Some training programs deploy mobile simulation labs to reach rural or underserved areas. These mobile units are fully equipped with simulation technology and bring the learning experience directly to community colleges or hospitals in remote locations, ensuring equitable access to high-quality training. Colleges requested mobile simulation units to enable programs to expand their reach, train more students in underserved areas, and address the healthcare workforce gap in rural regions.

- **Telehealth Training**

  With the rise of telehealth services, healthcare professionals are increasingly being trained to deliver care remotely. Training programs now teach clinicians how to use telemedicine platforms, conduct virtual consultations, and maintain patient confidentiality in digital environments. Colleges requested funding for equipment, curriculum development and professional development.

- **Team-Based Care Practices**

  As the healthcare landscape increasingly embraces a team-based care approach, there is a heightened focus on improving communication skills, with students from various healthcare fields training alongside one another. Educational programs should create curricula that integrate multiple disciplines, such as nursing, pharmacy, and physical therapy, to foster team-based care competencies. This enhanced coordination may necessitate additional faculty or staff, particularly in larger programs with overlapping areas of study. Institutions require collaborative learning environments where different programs, including nursing, respiratory therapy, and medical imaging, can collaborate effectively. There is also a need for investment in training faculty to facilitate interprofessional teamwork effectively. Colleges have sought funding for equipment, curriculum design, and opportunities for professional development.

Student Support Services

- **Outreach and Awareness for In-Demand Careers**

  Enhancing outreach and awareness for in-demand healthcare and social services careers is vital. The colleges proposed the following strategic approaches to engage, educate, and empower future professionals

  - Collaborate with high schools through the Career and College Promise (CCP) Program to offer career exploration programs, job shadowing, and health science courses that introduce students to high-demand fields.
  - Use social media, local media, and community events to raise awareness about healthcare and social services career opportunities, emphasizing pathways for job stability, growth, and competitive earnings.
  - Focus on recruiting underrepresented populations, including veterans, minority groups, and career-switchers, to enter healthcare and social services fields. Multiple funding resources will provide scholarships, targeted recruitment, and support programs.

Approvals and Accreditations

- **State Board Approval Process**

  In North Carolina, the curriculum standards for community colleges are designed to ensure educational programs align with statewide objectives for quality, relevance, and workforce needs. These guidelines are established by the North Carolina Community College System (NCCCS) and help colleges provide consistent, high-quality educational experiences across different programs. To implement a curriculum program, colleges must obtain approval from the State Board of Community Colleges. Additionally, certain programs may need accreditation from specific agencies to ensure that students qualify for licensure or certification. For short-term workforce continuing education, any program or course must be listed in the approved State Board combined course library. Here are some key insights:

  - All colleges received State Board approval to offer their proposed curriculum programs. Note that some institutions used grant funds to obtain required industry program accreditation.
  - For workforce continuing education, there was an approved course in the combined course library corresponding to the training requested by colleges. Also, some colleges were seeking approval from relevant regulatory agencies.

- **Accreditation and Credentialling Agencies**

  Accreditation is critical as both students and employers prioritize programs that adhere to high educational standards. Colleges must allocate funds for initial accreditation and renewal processes, including site visit expenses, document preparation, and external review fees. To align with the changing requirements set by accrediting organizations, institutions may need to revise, update, or expand their curricula. Colleges have sought funding to enhance curriculum development and to support non-instructional staff in reviewing and establishing processes that ensure compliance with accreditation standards. Additionally, financial resources are required to cover the costs associated with renewing accreditation and certification. Below is a sample list of regulatory agencies that the college will collaborate with to ensure programs meet the essential criteria for preparing students for certification exams and professional practice.

  - NC Board of Nursing
  - NC Department of Health and Human Services
    - Division of Health Service Regulation
    - Office of Emergency Medical Services
    - Division of Mental Health, Developmental Disabilities, and Substance Abuse Services
  - NC Addiction Specialist Professional Practice Board
  - NC Board of Physical Therapy Examiners
  - NC Respiratory Care Board
  - NC Social Work Certification and Licensure Board
  - Dental Assisting National Board Examination
  - Commission on Dental Accreditation
  - Commission on Accreditation of Allied Health Education Programs
  - Commission on Accreditation in Physical Therapy Education
  - Certification Board for Sterile Processing and Distribution
  - American Registry of Radiologic Technologists
  - American Registry of Diagnostic Medical Sonographers
  - Cardiovascular Credentialing International, Inc
  - Central Sterile Processing and Distribution Technician
  - American Society of Clinical Pathologists
  - American Association of Medical Assistants
  - American Board of Registration for Electroencephalographic and Evoked Potential Technologists
  - National Board for Respiratory Care
  - National Board on Certification in Surgical Technology and Surgical Assisting
  - National Center for Competency Testing - Surgical Technologist

Section 2: Industry Demand

Proposals were required to include supporting documentation for their selected occupational area, encompassing projected employment growth, anticipated job openings, and average or median wages. The Grant Review Team aimed to evaluate whether the proposal effectively addressed labor market shortages, updated skill requirements, and established a pipeline of skilled workers. Also, they sought to assess engagement and support from local and regional employers, workforce and economic development partnerships, college advisory boards, and community stakeholders. Below are tables and related information summarizing the labor market data presented in the funding application.

- Employment Projections
- NC Star Job Ranks
- Employer Engagement
- Employer and Stakeholder Partnerships

Employment Projections

The table below provides a comprehensive overview of anticipated trends within various occupational areas, highlighting essential data such as projected employment growth, job openings, and wage estimates. This information is crucial for understanding the evolving labor market and the demand for skilled professionals in different sectors. By analyzing these projections, colleges identified key opportunities that align with workforce development initiatives, ensuring that training programs are responsive to the needs of local and regional economies.

Based on the data provided, the employment projections underscore significant demand across various healthcare occupations, requiring a steady pipeline of skilled professionals through 2030. Key roles include registered nurses, home health and personal care aides, and mental health professionals. Statistical highlights include growth rates for emerging healthcare roles ranging from 5% to 18%, reflecting the high need for healthcare workers across a spectrum of specialties. Wage rates are competitive, particularly in roles requiring higher education and specialized skills, thus aligning with training needs identified in North Carolina.

SOC	Description	2024 Jobs	2030 Jobs	2024 - 2030 % Change	Avg. Hourly Earnings	Avg. Annual Openings
21-1015	Rehabilitation Counselors	90,503	95,422	5%	$23.28	8,247
21-1018	Substance Abuse, Behavioral Disorders, and Mental Health Workers	431,478	496,085	15%	$28.89	48,755
21-1021	Child, Family, and School Social Workers	369,960	396,935	7%	$28.46	33,828
21-1022	Healthcare Social Workers	196,523	216,636	10%	$32.42	20,717
21-1023	Mental Health and Substance Abuse Social Workers	123,388	137,063	11%	$30.71	11,314
29-1141	Registered Nurses	3,344,457	3,593,909	7%	$45.42	231,331
29-1292	Dental Hygienists	217,556	235,854	8%	$43.21	17,972
29-1299	Healthcare Diagnosing or Treating Practitioners, All Other	35,597	37,596	6%	$59.54	2,429
29-2018	Clinical Laboratory Technologists and Technicians	354,620	380,154	7%	$30.22	27,797
29-2031	Cardiovascular Technologists and Technicians	59,728	63,623	7%	$33.79	4,510
29-2032	Diagnostic Medical Sonographers	87,550	98,127	12%	$42.80	6,533
29-2033	Nuclear Medicine Technologists	18,241	18,963	4%	$45.71	1,009
29-2034	Radiologic Technologists and Technicians	231,404	248,003	7%	$36.18	15,503
29-2035	Magnetic Resonance Imaging Technologists	44,401	48,116	8%	$41.64	3,125
29-2036	Medical Dosimetrists	5,128	5,396	5%	$63.39	293
29-2042	Emergency Medical Technicians	172,412	185,163	7%	$20.72	14,958
29-2043	Paramedics	119,495	126,956	6%	$27.62	7,110
29-2053	Psychiatric Technicians	129,792	142,237	10%	$20.99	13,234
29-2055	Surgical Technologists	116,562	125,085	7%	$29.93	8,692
29-2061	Licensed Practical Nurses	669,642	716,477	7%	$29.23	61,133
29-9093	Surgical Assistants	21,604	22,955	6%	$31.34	1,590
31-1128	Home Health and Personal Care Aides	4,306,585	5,060,782	18%	$16.05	811,754
31-1131	Nursing Assistants	1,440,688	1,526,746	6%	$19.04	226,749
31-1133	Psychiatric Aides	37,582	39,096	4%	$19.71	6,112
31-2021	Physical Therapist Assistants	111,697	131,982	18%	$31.66	19,902
31-9092	Medical Assistants	812,524	909,397	12%	$20.84	125,289
31-9093	Medical Equipment Preparers	70,242	75,057	7%	$22.79	10,543

NC Star Job Ranks

The Star Jobs ranking in North Carolina assesses various occupations by considering multiple factors that impact their overall appeal and potential. These rankings serve as a guide for colleges to steer students toward careers that are in high demand. The occupational training programs backed by this grant have received a star ranking of 3 to 5, indicating that the selected fields are not only high demand but also justify the Legislature's investment. Below are some key insights:

- **5-Star Occupations**: Registered Nurses, representing high growth, substantial openings, and critical demand in all regions.
- **4-Star Occupations**: Medical Assistants, Dental Hygienists, and Radiologic Technologists, each showing strong demand and steady wage growth, reinforcing the value of targeted training programs.
- **3-Star Occupations**: Specialized roles such as Nuclear Medicine Technologists and Cardiovascular Technicians, indicating stable yet niche fields.

Occupation Description	Star Rating	Job Demand (Growth Rate & Openings)	Job Stability
Registered Nurses	5	Very high growth, numerous openings	High stability and essential demand
Dental Hygienists	4	Steady growth, moderate demand	High stability in dental services
Healthcare Diagnosing Practitioners	3	Steady demand	High
Clinical Laboratory Technicians	3	Moderate growth	Moderate, high in healthcare settings
Cardiovascular Technologists and Technicians	3	Moderate demand, specialized field	High in healthcare settings
Diagnostic Medical Sonographers	4	High demand	High due to essential imaging role
Nuclear Medicine Technologists	3	Moderate demand, specialized	High
Radiologic Technologists and Technicians	4	High demand, consistent growth	High
Magnetic Resonance Imaging Technologists	4	High demand, niche specialization	High
Medical Dosimetrists	3	Steady demand	High, but limited roles
Emergency Medical Technicians	3	Moderate demand	Moderate to high
Paramedics	3	Moderate growth	High, especially in rural areas
Surgical Technologists	4	High demand	High in surgical settings
Licensed Practical Nurses	4	High growth	High
Surgical Assistants	3	Moderate demand	High in surgical care
Home Health and Personal Care Aides	3	Very high growth, high demand	High, especially in elder care
Nursing Assistants	3	High growth	High
Physical Therapist Assistants	4	High demand, steady growth	High in physical therapy practices
Medical Assistants	4	High growth, high demand	High
Medical Equipment Preparers	3	Steady demand	High
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	4	High growth, high demand	High stability due to demand
Child, Family, and School Social Workers	3	Steady growth, consistent demand	High stability in public and social services
Healthcare Social Workers	4	High growth, significant demand	High stability, particularly in healthcare
Mental Health and Substance Abuse Workers	4	High growth, high demand	High, due to mental health needs

Note: These ratings are based on data from the North Carolina Department of Commerce and are subject to change as labor market conditions evolve.

Employer Engagement

Employer engagement is critical in building a skilled healthcare workforce. It ensures that training programs produce workforce-ready graduates who meet the specific needs of the healthcare industry. Below are examples of how colleges plan to engage with employers.

- **Co-Developed Curriculum**

  Employers are increasingly collaborating with colleges to co-develop curricula that directly align with industry needs. They often develop specific competencies to meet the needs of their facilities. This ensures that students acquire the skills and certifications that are immediately relevant to the healthcare job market.

- **Partnerships for Clinical Simulation Labs**

  Employers are partnering with colleges to develop clinical simulation labs that allow students to practice in a controlled, high-tech environment before entering real-world clinical settings. This collaboration enhances training quality and prepares students for high-stakes healthcare roles.

- **Work-Based Learning Opportunities**

  Employers offered internships, apprenticeships, clinical placements, and co-op programs. This hands-on experience allows students to apply classroom knowledge in real-world healthcare environments, making them more job-ready upon graduation.

- **Industry Advisory Boards**

  Colleges have existing healthcare-specific advisory boards with membership, including local employers, healthcare professionals, and industry experts. These boards guide program development, review curriculum content, and ensure training aligns with industry demands.

- **Joint Funding and Scholarship Programs**

  Employers are engaged in offering scholarships, specialized equipment funding, and simulation lab resources. This financial collaboration helps educational institutions enhance their facilities and attracts more students to high-demand healthcare programs.

- **Direct Recruitment Pipelines**

  Employers are partnering with colleges to create direct recruitment pathways for graduates. These partnerships often include guaranteed job placements, preferred hiring, or fast-track recruitment for students who complete specific healthcare programs.

Employer and Stakeholder Partnerships

The success of this initiative depends significantly on strong collaborations with employers that connect education to the workforce. By involving local and regional businesses, we gain essential insights into industry requirements and emerging trends, which helps ensure that training programs are tailored to the skills needed in the job market.

Strengthening partnerships between educational institutions, businesses, and community organizations fosters a solid pipeline of qualified professionals prepared to meet the challenges of a rapidly changing workforce.

Below is a list of key healthcare employers collaborating with colleges. Many have multiple locations throughout the state. This list does not include all local and state government agencies that employ graduates.

- Atrium Health
- Autism Society of North Carolina
- Cape Fear Valley Medical Center
- CarolinaEast Health System
- CaroMont Health:
- Carteret County Health Department Dental Clinic
- Carteret Health Care
- Catawba Valley Medical Center
- Cone Health
- Daymark Recovery Services
- Duke Health
- Duke Raleigh Hospital
- ECU School of Dentistry
- ECU Health
- FirstHealth
- Franklin Regional Medical Center
- Granville Health System
- Johnston Health
- Maria Parham Hospital
- North Carolina Department of Health and Human Services
- Novant Health Medical Center
- Person Memorial Hospital
- RHA Health Services
- UNC Health
- Vaya Health
- WakeMed Health & Hospitals
- Warren General Hospital
- Local County Government Agencies
- Mission Health

Section 3: Budget

Healthcare training programs are often expensive, particularly the cost associated with specialized equipment, faculty salaries, and other program-specific needs. Below is an overview of expenditures that will be supported with grant funds.

Faculty Salaries

There is frequently a lack of qualified healthcare educators, particularly in nursing, where there is a strong demand for experienced faculty. This shortage results in higher salaries being necessary to attract the right talent. Many healthcare professionals who take on educational roles could easily pursue lucrative clinical positions, such as advanced practice nurses or specialized technologists.

Healthcare faculty members often need advanced qualifications, including clinical experience, certifications, and in many cases, doctoral degrees. Their expertise in education and practice is crucial for training future healthcare workers, making them highly valued and, therefore, expensive to recruit and retain. Besides classroom educators, healthcare programs often require clinical supervisors who monitor and evaluate students in real healthcare settings. These supervisors are paid healthcare professionals, adding to overall faculty costs.

To successfully recruit and retain these experts as faculty, colleges must offer competitive salaries that are on par with or close to those in clinical practice. Grant funds will be utilized to support the wages and benefits for both instructional and non-instructional staff. Additionally, to incentivize faculty recruitment, colleges can allocate funding for professional development, ensuring educators remain informed about the latest medical advancements. This requires ongoing training and certification updates, and colleges can help cover these costs, contributing to the overall financial commitment.

Equipment and Instructional Tools and Resources

Healthcare training programs can be expensive, primarily due to the costs associated with specialized equipment and specific curriculum requirements. Here is a comprehensive list of equipment and instructional resources requested by colleges. Providing funding for these items would improve functionality and relevance across various healthcare training programs, facilitating hands-on learning, scenario-based training, and simulations that reflect real-world environments—critical components for preparing students for in-demand healthcare careers. Notably, approximately 65% ($35,750,000) of the total $55 million allocation will focus on equipment and instructional resources.

This equipment list will improve instructional delivery for both instructors and students. These resources enable students to develop crucial practical skills in a structured educational environment, closely aligning with the demands and challenges they will face in the healthcare sector. This direct link between training and real-world application empowers students with the confidence and skills needed to excel in patient care and collaborate effectively with their employers.

Note: This list is long and provides insight into how it will be used in the classroom and how that learning relates to the job's skill requirements. Also, it represents the needs of 58 colleges, 115 applications, and a variety of occupational training programs.

Equipment Requests	Justification
High-Fidelity Patient Simulators	**Purpose**: Simulate real patient responses for emergency scenarios and critical care. **Classroom Use**: Used to practice patient assessment, life support, and emergency response in realistic environments. **Job Translation**: Prepares students for high-pressure situations, enhancing their confidence and competence in patient care.

Equipment Requests	Justification
Hospital Beds with Side Rails and Adjustable Heights	**Purpose**: Essential training in patient care, transfers, and bed positioning. **Classroom Use**: Students learn patient positioning, safe transfer techniques, and adjusting beds for comfort and safety. **Job Translation**: Ensures that students can effectively assist patients with mobility and provide a comfortable, secure environment.
Ambulance or Mobile Simulation Vehicle	**Purpose**: To replicate the environment of an ambulance for EMT training. **Classroom Use**: To provide a mobile setting to practice emergency care and patient transport in a confined space. **Job Translation**: To familiarize students with the layout and space constraints of ambulances, preparing them for on-the-road care.
Gurney/Stretcher with Locking Mechanism	**Purpose**: Used for patient lifting, transferring, and securing during transport. **Classroom Use**: Teaches safe patient handling and loading techniques. **Job Translation**: Builds necessary skills for technicians to ensure safe patient handling in emergency settings.
ECG Machines and Holter Monitors	**Purpose**: Record heart rhythms and monitor cardiac function. **Classroom Use**: Students practice setting up ECG leads and interpreting cardiac rhythms. **Job Translation**: Essential for assessing cardiovascular conditions and diagnosing arrhythmias.
Centrifuges (Standard and Refrigerated Models)	**Purpose**: Separates blood and bodily fluids for laboratory analysis. **Classroom Use**: Students learn sample handling, preparation, and separation techniques. **Job Translation**: Trains lab technicians to perform accurate fluid separations crucial for diagnostic testing.
Vital Signs Monitors	**Purpose**: Provide real-time feedback on patient vitals like blood pressure, heart rate, and oxygen saturation. **Classroom Use**: Used to practice monitoring and interpreting patient vital signs. **Job Translation**: Teaches core EMT and nursing skills needed to assess patient stability.
Oxygen Supply System and Delivery Devices	**Purpose**: Allows students to practice administering oxygen therapy. **Classroom Use**: Provides training in setup, administration, and oxygen delivery monitoring. **Job Translation**: Essential for EMTs and healthcare providers managing respiratory distress in emergencies.
Microscopes (Compound and Fluorescent)	**Purpose**: Used for examining cells, tissues, and microorganisms. **Classroom Use**: Students learn cellular analysis techniques for diagnostics. **Job Translation**: Prepares lab technicians to identify infections and cellular abnormalities.
Ultrasound Machine with Doppler Capabilities	**Purpose**: Enables imaging for structural and blood flow analysis. **Classroom Use**: Teaches students how to capture and interpret ultrasound images. **Job Translation**: Equips sonographers and cardiovascular techs with skills in non-invasive imaging for diagnostics.
Cardiac Catheterization Lab Simulator	**Purpose**: Simulates invasive procedures like angiography and stent placement. **Classroom Use**: Offers hands-on training in catheter-based techniques. **Job Translation**: Familiarize students with procedures in catheterization labs for cardiovascular care.
Bag-Valve Masks (BVMs) with Adult, Pediatric, and Infant Sizes	**Purpose**: Provides manual ventilation for respiratory emergencies. **Classroom Use**: Teaches students airway management and ventilation across all age groups. **Job Translation**: Essential for EMTs and nursing aides managing patients with compromised breathing.
Biochemistry Analyzers	**Purpose**: Analyzes blood and body fluids for biochemical markers. **Classroom Use**: Teaches students biochemical testing methods. **Job Translation**: Equips lab technicians with skills for diagnosing metabolic and biochemical conditions.

Equipment Requests	Justification
Electrophysiology (EP) Recording System	**Purpose**: Monitors heart electrical activity for arrhythmias. **Classroom Use**: Used to practice reading and interpreting heart rhythms. **Job Translation**: Prepares cardiovascular techs to support arrhythmia diagnosis and treatment.
Phlebotomy Kits (Needles, Tubes, Arm Manikins)	**Purpose**: Trains students in blood collection techniques. **Classroom Use**: Provides hands-on practice with venipuncture and specimen handling. **Job Translation**: Ensures lab technicians and nursing aides can perform safe, efficient blood draws.
Defibrillators (AED and Manual)	**Purpose**: Provide training in defibrillation and resuscitation. **Classroom Use**: Students learn to use AEDs and manual defibrillators for cardiac emergencies. **Job Translation**: Essential for EMTs and healthcare providers responding to cardiac arrest.
IV Start Kits and Fluid Bags	**Purpose**: Used for training in intravenous therapy and fluid administration. **Classroom Use**: Allows students to practice IV insertion and fluid management. **Job Translation**: Equips EMTs and nursing aides with IV skills needed in patient care.
Simulation Software with Case-Based Scenarios	**Purpose**: Offers interactive training in diagnostic and treatment scenarios. **Classroom Use**: Allows students to practice critical thinking in various healthcare scenarios. **Job Translation**: Prepares students for real-life decision-making and diagnostics in clinical settings.
EHR Software Training System	**Purpose**: Teaches students to document patient care digitally. **Classroom Use**: Used for practice in entering and managing patient records. **Job Translation**: Familiarize students with EHRs for effective patient data management.
Patient Lifting Aids and Gait Belts	**Purpose**: Provides training in safe patient transfer techniques. **Classroom Use**: Teaches lifting, mobility support, and patient safety. **Job Translation**: Ensures nursing aides and EMTs can safely assist patients with mobility challenges.
Spectrophotometers and Colorimeters	**Purpose**: Used for biochemical analysis in clinical labs. **Classroom Use**: Students learn to measure absorbance for biochemical testing. **Job Translation**: Equips lab technicians to perform precise biochemical tests for diagnostics.
Doppler Ultrasound Systems	**Purpose**: Allows for vascular assessments in sonography and cardiovascular programs. **Classroom Use**: Teaches non-invasive assessment techniques for blood flow and vessel health. **Job Translation**: Essential for diagnosing vascular health and blood flow issues.
Manual and Electronic Blood Pressure Monitors	**Purpose**: Provides training in blood pressure measurement. **Classroom Use**: Students practice accurate blood pressure assessment. **Job Translation**: Essential for monitoring patient vitals across healthcare settings.
Sterilization Equipment (Autoclaves)	**Purpose**: Teaches students sterilization and infection control. **Classroom Use**: Provides training in cleaning and disinfecting medical tools. **Job Translation**: Ensures lab technicians maintain hygiene standards to prevent infections.
Realistic Airway Management Trainers	**Purpose**: Used for airway management and intubation practice. **Classroom Use**: Teaches airway maintenance techniques for respiratory emergencies. **Job Translation**: Prepares EMTs and nurses for managing airways in critical scenarios.

Equipment Requests	Justification
Spinal Immobilization Equipment	**Purpose**: Provides trauma stabilization for spinal injuries. **Classroom Use**: Used to practice spinal immobilization techniques for safe patient transport. **Job Translation**: Essential skill for EMTs in trauma care and patient transport.
Portable Pulse Oximeters	**Purpose**: Measures oxygen saturation in patients. **Classroom Use**: Teaches students quick assessment of patient oxygen levels. **Job Translation**: Provides essential information in emergencies and routine assessments.
Cardiac Monitor Simulators	**Purpose**: Monitors and simulates cardiac activity. **Classroom Use**: Teaches rhythm monitoring and heart rate interpretation. **Job Translation**: Prepares cardiovascular techs to monitor heart health in clinical settings.
Radiation Safety Equipment (Lead Aprons, Dosimeters)	**Purpose**: Protects students from radiation exposure during imaging. **Classroom Use**: Teaches radiation safety in imaging and cath labs. **Job Translation**: Ensures technicians work safely in environments with radiologic exposure.
Training Manikins with Intravenous and Intraosseous Access	**Purpose**: Provides practice with IV and IO procedures. **Classroom Use**: Allows students to practice intravenous access and fluid administration. **Job Translation**: Prepares EMTs and nurses for emergencies requiring IV or IO access.
Backboards and Restraints for Trauma Simulation	**Purpose**: Simulates trauma patient handling and restraint techniques. **Classroom Use**: Used for trauma response training. **Job Translation**: Prepares EMTs to stabilize and transport trauma patients safely.
Ambulatory Blood Pressure Monitors	**Purpose**: Monitors blood pressure over extended periods. **Classroom Use**: Teaches students long-term monitoring methods. **Job Translation**: Used in outpatient and clinical settings to track hypertension.
Interactive Anatomical Models (Heart, Vessels, Lungs)	**Purpose**: Provides detailed anatomy reference. **Classroom Use**: Enhances anatomical knowledge for multiple disciplines. **Job Translation**: Supports technicians in understanding the origins of specimens and images they interpret.
Ventilator Simulators	**Purpose**: Train students in mechanical ventilation for patients with respiratory distress. **Classroom Use**: Used for ventilator setup, troubleshooting, and monitoring. **Job Translation**: Essential for EMTs and respiratory technicians managing critical care.
Video Recording and Feedback System for Simulation Review	**Purpose**: Provide feedback on student performance in simulated scenarios. **Classroom Use**: Enables review and feedback on technical and communication skills. **Job Translation**: Improves student confidence and competence by reinforcing best practices and areas for improvement.
Medication Dispensing Systems	**Purpose**: Replicates medication administration processes found in hospitals. **Classroom Use**: Familiarizes students with managing, dispensing, and tracking medications. **Job Translation**: Prepares students for accuracy and accountability in medication handling.
Electronic Health Record (EHR) Software	**Purpose**: Introduces students to digital patient records. **Classroom Use**: Training on recording, updating, and accessing patient information. **Job Translation**: Essential for efficient and accurate patient data management in clinical settings.

Equipment Requests	Justification
X-Ray and Ultrasound Simulators	**Purpose**: Enables students to understand machine operations, positioning, and safety protocols without radiation exposure. **Classroom Use**: Simulations of imaging techniques to develop technical skills in a safe environment. **Job Translation**: Provides foundational skills to operate radiology equipment, contributing to patient safety and image accuracy.
Operating Room Simulators and Surgical Instrument Sets	**Purpose**: Realistic operating room setup, complete with surgical tools and simulation for sterile procedures. **Classroom Use**: Students practice surgical skills, including sterilization, handling instruments, and assisting in surgeries. **Job Translation**: Builds familiarity with surgical tools and protocols, ensuring competence in assisting surgeons in real operations.
Endoscopic Simulators	**Purpose**: Allows hands-on practice with endoscopic procedures used in minimally invasive surgeries. **Classroom Use**: Develops technical skill in handling scopes and understanding procedural nuances. **Job Translation**: Essential for surgical techs assisting with laparoscopic and endoscopic procedures in hospitals and outpatient centers.
Dental Chairs and Units with Handpieces, Suction, and Lighting	**Purpose**: Replicates an operatory setup where dental assistants work alongside dentists. **Classroom Use**: Teaches students how to position patients, manage instruments, and provide chairside assistance. **Job Translation**: Builds familiarity with operatory settings, enabling smooth collaboration with dentists during procedures.
X-Ray Machines and Digital Radiography Software	**Purpose**: Provides hands-on experience in taking and processing dental radiographs. **Classroom Use**: Students practice taking intraoral and extraoral X-rays, safety protocols, and reading X-rays. **Job Translation**: Ensures dental assistants are proficient in radiographic techniques and patient safety, key to supporting accurate diagnoses in clinical practice.
Dental Model Typodonts and Manikins	**Purpose**: It simulates real mouths for practicing various procedures like suctioning, isolating teeth, and assisting with impressions. **Classroom Use**: It allows students to practice techniques without the pressure of working on a live patient. **Job Translation**: It familiarizes students with procedures, building their confidence and skills to assist effectively during patient care.
Sterilization Equipment (Autoclaves)	**Purpose**: Trains students in the sterilization and infection control process. **Classroom Use**: Educates students on cleaning, disinfecting, and sterilizing instruments to meet infection control standards. **Job Translation**: Infection control knowledge is crucial for ensuring patient safety in dental practices.
Dental Imaging Equipment and Intraoral Cameras	**Purpose**: Trains students in taking accurate X-rays and images for assessments and patient education. **Classroom Use**: Practice capturing detailed oral images, reading radiographs, and understanding diagnostic processes. **Job Translation**: Proficiency in imaging allows hygienists to contribute valuable diagnostic information, improving patient care quality.
Periodontal and Preventive Care Models	**Purpose**: Provides visual aids and hands-on practice for teaching patients oral hygiene and periodontal care. **Classroom Use**: Educates students on periodontal assessment, probing techniques, and explaining preventive care. **Job Translation**: Builds skills in educating patients on oral hygiene and preventive measures, supporting long-term patient health.

Accreditation and Compliance

Healthcare programs are required to adhere to strict accreditation standards to guarantee quality and compliance with industry regulations. This typically involves frequent accreditation assessments, modifications to the curriculum, and ongoing faculty development to align with the criteria established by accrediting organizations.

These activities can be costly and demand significant resources. Additionally, maintaining accreditation necessitates hiring extra administrative personnel, securing insurance, and recruiting specialized faculty. Colleges can utilize grant funding to support these efforts.

Training facilities must meet specific standards for safety, sanitation, and accessibility, which can drive up costs for design, construction, and operation. For example, spaces used for nursing or radiologic technology training may need to adhere to stringent healthcare regulations.

Section 4: Sustainability Plan

Key Strategies

Maintaining healthcare education programs after initial grant funding concludes is essential for achieving lasting impact. Here are five key strategies suggested by colleges:

1. **Generating Full-Time Equivalents (FTE**): Increasing student enrollment can create operational revenue for colleges.

2. **Partnering with Healthcare Employers and Local Providers**: Collaborating with healthcare organizations, industry associations, and local providers can secure ongoing funding and resources. By highlighting how these programs address workforce needs, healthcare organizations might offer financial contributions, equipment, or sponsorships for students.

3. **Diversifying Funding Sources**: Looking beyond traditional grants to include sponsorships, endowments, and public-private partnerships can reduce dependency on FTE. Smaller, diversified grants can create a reliable revenue stream and lessen the risk of funding shortages.

4. **Adapting Program Curricula**: Regularly reviewing and adjusting program content to match changing industry standards and local workforce requirements is vital. Introducing flexible, stackable credentials or modular courses can help attract more students, maintain ongoing enrollment, and adapt to labor market dynamics, ensuring the program remains relevant and sustainable.

Reporting Requirement #3: Program Evaluation

Framework for Measuring Success

The evaluation framework will center around three key questions:

1. Did the college implement its proposed program effectively?
2. Did the college utilize its allocated funding efficiently?
3. What positive outcomes were achieved regarding program implementation and workforce development?

Colleges will be required to submit a progress report quarterly. The Grant Review Team will collect and analyze this information to ensure that colleges make headway toward the objectives outlined in their applications. Additionally, the System Office Senior Leadership Team will update the overall status.

Each college will have a designated Team Leader offering ongoing technical assistance. A dedicated email address has also been established for colleges to send any inquiries they may have.

Included below is the evaluation framework and questionnaire that will facilitate the assessment of the grant's success, along with an outline of the related reporting template.

	Reporting Requirement	**Key Topics**
1.	Colleges Funded & Program Type	○ College Full Name ○ Proposed Program/Occupational Area ○ Academic Level: CE and/or CU ○ Funding Allocation
2.	College Use of Funds	○ Budget Allocation ○ Use of Funds
3.	Program Evaluation	○ Grant Implementation ○ Program/Course Deliverables ○ Employer and Partnership Engagement

Template – Quarterly Progress Report

Reporting Requirement #1: Colleges Funded & Program Type

1. Complete the chart below:

College Full Name: _____

Proposed Program/Occupational Area: _____

Academic Level: CE and/or CU: _____

Funding Allocation: $ _____

Reporting Requirement #2: College Use of Funds

Budget Allocation

1. Please complete the budget template along with a justification of expenditures in each category.
2. What was your Total Match Requirement?
3. What is the funding source(s) for meeting your match requirements? How are you tracking/ documenting this requirement?

Use of Funds

1. How many instructional and non-instruction staff will be paid out of these grant funds and are they new or existing?
2. If grant funds were budgeted to purchase equipment and/or instructional supplies & materials, give an overview of what has/will be purchased.
3. If grant funds were budgeted to pay for curriculum development, what type of materials/documents has/will be produced? Can they be shared with other colleges?
4. If grant funds were budgeted to pay for accreditation costs, what is the accrediting body? Where are you in the process?
5. If grant funds were budgeted for faculty preparation and professional development, provide a brief overview of the types of activities/training the faculty has/will be attending.

Legislative Reporting Requirement #3 Program Evaluation – Measures of Success

Grant Implementation

1. Provide 2-4 milestones, challenges, and/or lessons learned related to the implementation of your grant project.
2. Attach 1-3 success stories, PSA/articles published, photos taken, and/or links to social media posting about your grant project.

Program/Course Deliverables

1. What courses have/will be offered?
2. What strategies did you use to align the learning objectives to meet employer demands?
3. What are the current or projected enrollment and FTE statistics?

Employer and Partnership Engagement

1. Describe how your grant project has/will impact and/or address the workforce pipeline in your service area.
2. List the employers/associations engaged in your grant project. Provide a brief overview of their roles and/or contributions, both financial and in-kind.
3. What internal/external partnerships have/will be engaged in your grant project? Provide a brief overview of their roles and/or contributions, both financial and in-kind.