February 8, 2023

H. Dele Davies, M.D.
Senior Vice Chancellor for Academic Affairs
Dean of Graduate Studies
University of Nebraska Medical Center
2022 Academic and Research Services
Omaha, NE 68198-7810
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Dear Dr. Davies:

I have received the request for establishing a new Doctor of Medical Science degree in the College of Allied Health Professions at the University of Nebraska Medical Center (UNMC). Based on the information provided, I understand this will fill a workforce need and advance the profession and practice of physician assistants.

I thank you for the thorough internal review of this program as it does not yet fall under one of our programmatic accreditors.

I concur with this decision and that it be forwarded to the Board of Regents.

Sincerely,

Jeffrey P. Gold, M.D.
Chancellor

University of Nebraska Medical Center
Jeffrey P. Gold, MD, Chancellor
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February 8, 2023

Jeffrey Gold
Chancellor, University of Nebraska Medical Center
Executive Vice President and Provost
University of Nebraska
3835 Holdrege Street
Lincoln, NE 68583

Dear Chancellor Gold:

I am forwarding you the materials related to establishing a new Doctor of Medical Science (DMSc) degree program, offered through the College of Allied Health Professions. The DMSc degree offers credentialed physician assistants, who wish to retain their primary role in health care delivery, and who have already obtained an entry-to-profession master's degree, the opportunity to gain additional knowledge and competencies to advance their practice, through an applied doctoral degree course of study.

While there is currently no accrediting body for this degree, the PA profession is at the forefront of recognizing the DMSc degree as the preferred post-professional degree for practicing physician assistants. It is anticipated that within the next several years, there will be many more of these types of programs as well as programmatic accreditation. UNMC will be at the forefront of furthering the physician assistant profession.

In preparation for submission, this proposal has had extensive review at the campus level. Recognizing it is a professional degree, but doctoral level with many competencies shared with other professions, a review committee consisting of members from the College of Allied Health Professions, College of Nursing, College of Public Health, and the Graduate Council reviewed all of the proposed course syllabi and the program proposal. The suggestions submitted by these reviewers have been incorporated into the final documents.

We are providing a proposal, letters of support, and other documents supporting need and demand for the program. This proposal has been reviewed by us, and it has our approval. We are requesting your review and approval, that of the Chief Academic Officers, and that it be reported to the Board of Regents at an upcoming meeting.

Sincerely,

H. Dele Davies, MD, MS, MHCM
Senior Vice Chancellor
University of Nebraska Medical Center

University of Nebraska Medical Center
New Major or Degree

I. Descriptive Information

Name of Institution Proposing New Major or Degree
University of Nebraska Medical Center
Name of Proposed Major or Degree
Doctor of Medical Science (DMSc)
Degree to be Awarded to Graduates of the Major
Doctor of Medical Science (DMSc)
Other Majors or Degrees Offered in this Field by Institution
No other DMSc degree programs exist at the University of Nebraska
CIP Code
51.9999 Health Professions and Related Clinical Sciences
Administrative Units for the Major or Degree
The degree will be administered and housed within by the College of Allied Health Professions (CAHP)
Proposed Delivery Site
University of Nebraska Medical Center (UNMC) Omaha campus; Online
Program will be Offered *[full program, not individual courses]*
_____ On-campus only ___X____Distance only ____Both (on-campus and distance)
Date Approved by the Governing Board
Proposed Date the New Major or Degree will be Initiated
Upon Approval

II. Details

A. Purpose of the Proposed Major or Degree

The College of Allied Health Professions (CAHP) at the University of Nebraska Medical Center (UNMC) proposes to establish a clinical doctorate program in medical sciences, the Doctor of Medical Sciences (DMSc), designed for practicing Physician Assistants (PA).

The DMSc degree offers credentialed physician assistants, who wish to retain their primary role in health care delivery, and who have already obtained an entry-to-profession master's degree, the opportunity to gain additional knowledge and competencies to advance their practice, through an applied doctoral degree course of study. This program is designed for the PA professional to enhance their career options within the field as well as to expand their level of clinical practice. The PA profession is at the national forefront of recognizing the DMSc degree as the post-professional degree of choice for practicing PA's.

B. Description of the Proposed Major or Degree

The CAHP proposes to develop a post-professional, or transitional, DMSc degree program tailored to meet the advanced

practice needs of PAs who have already completed an entry-level master's degree and have obtained credentials to practice in the field. The program of study would require students to complete didactic courses and field placement credits for a total of 40 credit hours (see page 3). Peer programs listed in Table 1 operate plans of study averaging 38 credit hours, therefore, the proposed DMSc plan of study is in alignment with competing programs and would remain marketable to prospective applicants. Didactic courses will comprise 24 credit hours and the *Field Placement* series (see description below) will comprise 16 credit hours. Didactic course work will be offered in a fully online, asynchronous format. Field placement experiences will be completed in the participant's home community under the guidance of DMSc faculty and an onsite clinical preceptor.

1. Core Competencies

The proposed DMSc curriculum consists of six program competencies. The competencies originate from a Physician Assistant Education Association (PAEA)[1] Task Force and Stakeholder Summit[2] and represent the desired skills, attributes, and behaviors of the DMSc graduate.

The six competency domains reaffirm a patient-centered care focus, elucidate the role of social determinants on individual and population health, emphasize communication and team-focused care, and recognize the larger systems that impact health and well-being. Interwoven within the core competencies is an application for scholarship, quality and safety of care delivery, and integration of technology. The six competencies are:

1. Patient-centered practice knowledge
2. Society and population health
3. Health literacy and communication
4. Interprofessional collaborative practice and leadership
5. Professional and legal aspects of health care
6. Health care finance and systems

2. Field Placement

Students will meet with an advisor at the time of acceptance to the program to identify field placement opportunities aimed at addressing their area of practice, Certificates of Added Qualifications (CAQs), or specialty credential goals.

The purpose of the field placements is to develop the student's expertise in evidenced-based patient care with the capacity to locate, evaluate, and apply new research advances to continuously deliver the highest level of patient care. The field placements will focus on the participant's area of practice and will guide the development of advanced clinical competencies based on the Accreditation Council for Graduate Medical Education (ACGME) approved competencies for medical residencies in the given area of medical practice (See Appendix I for one sample of competencies for a possible area of medical practice). The field placements may also be customized to permit the student to earn a portion of the required structured educational components for eligibility to apply for Certificates of Added Qualifications (CAQs) in the field. The CAQ is a credential that certified PAs can earn in seven specialties: Cardiovascular & Thoracic Surgery, Emergency Medicine, Hospital Medicine, Nephrology, Orthopaedic Surgery, Pediatrics, and Psychiatry.[3] The *Field Placement* series consists of guided and assessed experiential learning activities associated with the specific goals of the placement. Each applied course in the series will provide experiential learning opportunities for the participant to build upon their level of knowledge and skill mastery related to the established competencies.

The field placement credit hours may be customized to align with the student's interests and desire to pursue additional practice credentials through the acquisition of specialty-specific Continuing Medical Education (CME) credits or clock hours partially gained through the field placement practicum hours. Specific didactic courses have been mapped for students interested in pursuing a specialty credential through the CAQs, clinical fellowship programs, or a professional certificate (Applied Health Informatics, Healthcare Quality Improvement, or Teaching & Technology) following completion of the DMSc program.

3. Capstone Project

In addition to the didactic and field placements associated with the program competencies, the program of study will contain a *Capstone Project* series (I-III). The *Capstone Project* series is a cumulative series of courses that will cover the fundamental principles of evidence-based practice, quality or performance improvement, or clinical inquiry in regard to advancing practice on a specific topic of interest selected by the student. The *Capstone Project* series is an applied series, allowing for both the periodic assessment of knowledge, and the preparation of a final manuscript suitable for publication or presentation submission.

4. Plan of Study

Didactic Courses (24 Credit Hours Total)			
Course Number & Title (Credit Hour); Semester Offered (Depending Upon FT or PT Enrollment)	Course Description	CAQ or Professional Certificate Mapping	Competency Domain Mapping
MSC 701 Health Care Systems Theory and Practice for the Advanced Physician Assistant (3 CH); Fall	The *Healthcare Systems Theory and Practice* course provides advanced physician assistant students with a detailed overview of the significant types of healthcare systems' history and structure. The course will cover health care finance, resource allocation, quality assurance, patient safety, legal implication of care, and administration as these core operational tenets apply to the practice functions of the physician assistant. Students will enhance their practical, evidence-based approaches to improving the excellence and delivery of health care by understanding the system. The course will provide the students with the appropriate instruments to advance their professional and practical skills in the context of healthcare systems.	CAQ; Applied Health Informatics	Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
MSC 702 Physician Assistant Leaders and Their Organizations: Navigating Complexities in Healthcare Systems (3 CH); Summer	The *Physician Assistant Leaders and Their Organizations: Navigating the Complexities in Healthcare Systems* course will focus on the challenges that physician assistant leaders encounter in leading a team in a complex medical environment. The role of teams in organizations, the stages of team development, and actions that can support effective teams' development will be examined. Focus will be on the human side of organizational change. This will include an understanding of how or why individuals or groups react to change in a dynamic setting. The course will help the physician assistant student identify opportunities for enhancing the significant development and implementation of change based on the challenges.	CAQ; Teaching & Technology	Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
MSC 703 Quality Improvement in Advanced Physician Assistant Practice (3 CH); Spring	The *Quality Improvement in Advanced Physician Assistant Practice* course will have students apply principles of the field and science of quality improvement to healthcare settings. Topics covered will lay the groundwork for students to understand the complexity of quality improvement in practice including policies and regulations that affect quality, quality metrics and reporting, frameworks to conceptualize quality issues, quality improvement models, data management and analysis methods, considerations for adopting change to improve and sustain performance, and organizational and social influences on improvement.	CAQ; Healthcare Quality Improvement	Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
MSC 704 Application of Research and Statistical Methods to the Advanced Physician Assistant Practice (3 CH); Fall	The *Application of Research and Statistical Methods* course is specifically designed for physician assistant students to apply scientific research principles and performance improvement approaches to advanced practice. Research design, methodology, and ethics will guide the student's investigation of a clinical topic. Critical appraisal of medical publications will be reviewed for application and relevance through evidence-based medicine concepts and principles. The course's focus on statistics will be an application to clinical practice. The student will practice the skills necessary to complete a research and scientific writing experience, including selecting a topic relevant to physician assistant practice in a defined area.	CAQ	Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
MSC 705 Capstone Project I for the Advanced Physician Assistant	The *Capstone Project I* course is the first of a three-course series that will guide the student through clinical inquiry, evidenced-		Patient-centered practice knowledge, Society & population

Practice (2 CH); Spring	based practice, or performance improvement approaches applied to physician assistant practice. The course series will begin with the advanced physician assistant student identifying a project topic of interest relevant to the profession. The students will produce a manuscript of publishable quality for knowledge translation to communities of interest by the end of the capstone project three-course series.		health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
MSC 706 Capstone Project II for the Advanced Physician Assistant Practice (2 CH); Spring, Summer	The *Capstone Project II* course is the second of a three-course series that will guide the student through clinical inquiry, evidenced-based practice, or performance improvement approaches applied to physician assistant practice. This course will build on the MSC 705 outcomes by critically reviewing and interpreting scientific literature as it applies to practice. The course project will be executed by developing a systematic review of the literature with a critical application of the student's topic of interest through a manuscript draft. This manuscript draft will be further modified in MSC 707 to the level that the students will be able to produce a paper of publishable quality for knowledge translation to communities of interest by the end of the scholarly project course series.		Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
MSC 707 Capstone Project III for the Advanced Physician Assistant Practice (2 CH); Fall	The *Capstone Project III* course is the third and final course of a three-course series that will guide the student through clinical inquiry, evidenced-based practice, or performance improvement approaches applied to physician assistant practice. This course will build on the MSC 705 and MSC 706 outcomes by finalizing the manuscript. The students will produce a manuscript of publishable quality for knowledge translation to communities of interest by the end of the scholarly project course series.		Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
CAHP 750 Interprofessional Global Health (3 CH); Summer	The course presents interprofessional global health competencies, addressing issues including human rights, environment, culture, collaboration, and professional growth through the lens of an advanced practice physician assistant. The course provides learners with the foundation to engage as global citizens to positively impact the health of all people and communities.	CAQ	Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
MSC 708 Health Security and Medical Operations for Advanced Physician Assistant Practice (3 CH); Fall	This course explores the health security and medical operation challenges commonly faced by advanced practice physician assistants. The course will cover legal, ethical, risk management and safety considerations. The principles and practical application of laws and regulations affecting operational decisions of advanced health care physician assistants will be discussed and applied to real-world scenarios.	CAQ	Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
Fieldwork Placement Courses (16 Credit Hours Total)			
MSC 709 Field Placement I (4 CH); Fall, Summer	The *Field Placement I* course is the first of a four-semester applied practicum series conducted under the guidance of a preceptor. The field placement course is designed to integrate the DMSc student into an educational experience to include all aspects of the practice of medicine unique to the specific practice setting for the advanced physician assistant. The course provides opportunities for the student to develop competent and proficient levels of mastery within the chosen area of medical practice.	CAQ	Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
MSC 710 Field Placement II (4 CH); Fall, Spring	The *Field Placement II* course is the second of a four-semester applied practicum series conducted under the guidance of a preceptor. The field placement course is designed to integrate the DMSc student into an educational experience to include all aspects of the practice of medicine unique to the specific practice setting for the advanced physician assistant. The course provides opportunities for the student to develop competent and proficient levels of mastery within the chosen area of medical practice.	CAQ	Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
MSC 711 Field Placement III (4 CH); Spring, Summer	The *Field Placement III* course is the third of a four-semester applied practicum series conducted under the guidance of a preceptor. The field placement course is designed to integrate the DMSc student into an educational experience to include all aspects of the practice of medicine unique to the specific practice setting for the advanced physician assistant. The course provides opportunities for the student to develop competent and proficient	CAQ	Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance &

	levels of mastery within the chosen area of medical practice.		systems
MSC 712 Field Placement IV (4 CH); Fall	The *Field Placement IV* course is the fourth and final of a four-semester applied practicum series conducted under the guidance of a preceptor. The field placement course is designed to integrate the DMSc student into an educational experience to include all aspects of the practice of medicine unique to the specific practice setting for the advanced physician assistant. The course provides opportunities for the student to develop competent and proficient levels of mastery within the chosen area of medical practice.	CAQ	Patient-centered practice knowledge, Society & population health, Health literacy & communication, Interprofessional collaborative practice & leadership, Professional & legal aspects of health care, Health care finance & systems
Total Program of Study	**40 Credits Hours Total**		

The full-time cohorts will begin each fall semester, completing the program of study in approximately four semesters (or roughly 16 months). For those students choosing part-time enrollment, enrollment will begin each fall semester with completion of the program in study in approximately seven semesters (or roughly 28 months). (See Appendix F for a proposed schedule of courses for the full-time and part-time student scenario). The proposed plan of study along with the courses were reviewed by an internal advisory committee comprised of clinically or academically trained doctoral faculty in the CAHP along with three members of the UNMC Graduate Council to include the Associate Dean for Graduate Studies. This internal advisory committee provided feedback to ensure the plan of study and the courses are appropriate to the aims of the degree as well as the level of rigor to substantiate the doctoral degree awarded.

C. Rationale for Developing a Doctor of Medical Science Degree

The decision to propose the development of a DMSc degree was based on the following factors.

Advancements in Healthcare Delivery Nationally and in Nebraska

In 2017, the PA profession introduced a concept referred to as the "*Optimal Team Practice* (OTP)"[2] approach. The approach emphasizes the PA profession's commitment to working in teams with physicians within the healthcare system to efficiently deliver accessible, high-quality care. In support of this initiative, in 2017 the American Academy of PAs (AAPA) revised its *Guidelines for State Regulation of PA Practice*[4] to begin work with legislative and other administrative bodies to change statutes to operationalize this approach.

The proposed practice model and accompanying scope of practice changes necessitate the addition of advanced education for existing master's educated PAs. Practicing PAs present with greater capacity to lead health care teams, assume greater responsibilities for individualized patient care, and lead public health efforts or the management of health care delivery systems. These increased responsibilities call for a robust and appropriate advanced education for the post-professional candidate.

In response to the American Academy of PAs (AAPA) adoption of *Optimal Team Practice* (OTP),[2] in 2020 the Nebraska legislature introduced and passed LB772 which changed many policies related to the PA profession in Nebraska. Specifically, LB772:

- Modernized the statutory mandates for the PA-physician employment relationship;
- Amended statutory language to more accurately reflect the current state of physician-PA relationships; and
- Clarified that a PA may render services in a setting that is geographically remote from the supervising physician

Evidence of Support – Peer Programs, Needs Assessment, Survey Outcomes

Letters of support from existing DMSc programs, graduate survey data, and a feasibility study from what was formerly NU Online (see Appendices C, G, and H) all provide supporting evidence for the value and need for a DMSc degree. There is a workforce demand and established interest from graduates of master's level PA programs substantiating the need for the development of the DMSc degree. Practicing PAs are seeking opportunities for formalized education and

training to advance their clinical competencies and professional development.

Practicing Physician Assistants who desire doctoral-level training in their profession have few suitable options in the current educational marketplace. Those seeking research-based content typically gravitate toward the Doctor of Education (EdD), the Doctor of Health Sciences (DHSc), or the traditional Ph.D. Emerging DMSc programs now provide a pathway for advanced practice-based content and field work experiences focused on elevating clinical practice without the requirement of a residency, however at present, only nine such programs exist in the U.S. (See Table 1).

Existing Structure of the CAHP

The CAHP currently houses five entry-level master's degree health profession education programs in the Department of Medical Sciences (diagnostic cytology, genetic counseling, medical nutrition, perfusion science, and physician assistant studies), and has recently had a new Master of Respiratory Care degree program approved that will also be housed in this department. The proposed DMSc degree will also be housed in the Department of Medical Sciences. The DMSc will benefit from this organizational arrangement, affording the opportunity for shared faculty, staffing resources, and any existing applicable coursework.

CAHP Role and Responsibility

The mission and obligation of the CAHP is to offer allied health profession education programs that both provide opportunities for students from Nebraska to pursue careers in the allied health professions and graduate the highest quality allied health workforce to meet the healthcare delivery needs of the citizens of Nebraska, the region, and the country. To fulfill this mission, the CAHP programs are, and must continue to be, at the "cutting edge" of both health professions education pedagogy and the evolution of the allied health professions. For example, in 2004, UNMC became one of the first public institutions to offer the Doctor of Physical Therapy (DPT) degree, now the required, standard degree offered by all US accredited physical therapy education programs.

A number of health professions have developed entry-level or applied post-professional clinical doctorates including audiology, nursing, physical therapy, athletic training, occupational therapy, and public health, as well as non-health-related fields such as public administration, education and business. Based on the extensive feasibility study undertaken to prepare this proposal, the CAHP believes there is substantiated evidence to offer a post-professional DMSc program that would adequately address the present demand within the PA profession where the master's level practitioners are aiming to advance their practice competencies through a transitional, next-level dedicated doctoral degree.

D. Accreditation

Currently, there is no programmatic or specialized accreditation body accrediting the DMSc degree. An internal advisory committee comprised of clinically or academically trained doctoral faculty in the CAHP along with three members of the UNMC Graduate Council to include the Associate Dean for Graduate Studies will review the DMSc program self-study report on a five-year cycle. The report will be structured according to the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) and Graduate Council templates to ensure key standards and program effective goals are reviewed and analyzed. Moreover, a qualified external body will review the plan of study and provide feedback prior to implementation. Finally, in working with the UNMC Office of Academic Affairs, the program administrators will facilitate an ongoing program review according to the Board of Regents, Nebraska Coordinating Commission for Post-Secondary Education, and Higher Learning Commission (HLC) standards.

The proposed plan of study, credit hours, and degree length was designed in accordance with existing DMSc, or DMSc-like (DScPAS, DPA), programs across the nation (See Table 1). These degree programs were some of the first programs offered to graduates of entry-level physician assistant programs. It is fully anticipated that the number of peer degree programs will continue to increase.

Table 1. Existing Post-Professional Doctorate Programs Related to Advancing Practice for Physician Assistants

Institution	Focus	Credit Hours	Degree Awarded	Est. Length of Time to Complete Program
AT Still University	Education, Leadership, Clinical	36	DMSc	2-3 years
Baylor University	Emergency Medicine, Clinical Orthopedics, General Surgery/Intensivist	36	DScPAS	1-2 years
Butler University	Business & Leadership	50	DMS	3 years
Lincoln Memorial University	Advanced Medial Skills and Knowledge Base	45	DMS	1-2 years
Massachusetts College of Pharmacy and Health Science	Health System Administration, Educational Leadership, Global Health	24	DScPAS	1-2 years
Rocky Mountain University of Health Professions	Healthcare Leadership and Administration, Advanced Clinical Practice, Healthcare Professions Education, Psychiatry	36	DMSc	1-2 years
Southern Illinois University	Education, Clinical	37	DMSc	1 year
Touro University Worldwide	Advanced Professional Practice, Research	42	DPA	2 years
University of Lynchburg	Advanced Professional Practice, PA Education Concentration	37	DMSc	1-2 years

E. Admissions

The DMSc program will conduct a holistic review of all applications, considering both academic and non-academic experiences. Enrollment in the program will be competitive. The admissions committee of the program, composed of program faculty and administration, will evaluate the qualifications of each applicant and make the final selections for admission. Applicants must have a master's degree, such as a Master of Physician Assistant Studies degree, or equivalent degree designed for the PA. Applicants must provide proof of an active state license where applicable and/or certification in the field of practice, such as through the Physician Assistant National Certifying Examination (PANCE). Preference for admission will be for applicants with a minimum of two years of patient care, educational experience, or completion of a fellowship program.

The DMSc program will have the support of the college's Office of Enrollment Management and Student Affairs for recruitment and admissions functions.

Upon matriculation, all students will be assigned an academic advisor, who will evaluate academic progress during the first year. The academic advisor also plays a role in assisting the advisee in understanding departmental, college, and university policies and procedures. The academic advisors will be faculty member(s) in the CAHP, assigned at the beginning of the program to provide advisement on coursework based on the student's area of practice.

III. Review Criteria

A. Centrality to UNMC Role and Mission

UNMC and Nebraska Medicine's joint mission is "to lead the world in transforming lives to create a healthy future for all individuals and communities through premier educational programs, innovative research, and extraordinary patient care." The DMSc degree program supports the University's mission by producing transformative academic and practice leaders with expertise in evidence-based patient care, education, and leadership.

The development of this post-professional DMSc degree is congruent with many of the goals and objectives set forth in the updated UNMC Strategic Goals and Strategies. Specifically, Goal 1, "Establish UNMC and its educational programs as the most learner-centered university in health professions and interprofessional education," and Goal 3, "Establish UNMC and our clinical partners as an academic health system providing the highest-quality care that is recognized for outstanding patient outcomes and a compassionate and patient-centered care experience."

The development of a DMSc degree addresses many of the objectives listed in the new Strategic Plan, including the following objectives:

1.1. Provide an innovative, competency-based and individualized curriculum.
1.4. Actively recruit those faculty needed to expand UNMC's current & future programs.
1.6. Prepare UNMC health profession learners to assume leadership roles.
3.1. Build relationships with our clinical partners to improve patient health outcomes.
3.2. Utilize interprofessional practice to provide optimal patient care environments.
3.5. Assure timely access to UNMC clinical care services.
3.10. Strengthen incentives to recruit and retain clinical faculty of diverse backgrounds.

B. Relationship of the DMSc Proposal to the NU Five Year Strategy

The NU strategic framework consists of five key goals: Access, Affordability, and Attainment; Workforce Development; Culture, Diversity, and Inclusion; Partnerships; and Efficiency and Effectiveness. The DMSc proposal is aligned with the NU strategic framework in many ways.

Access, Affordability, and Attainment: The DMSc program provides new educational opportunities to Nebraskans as it offers a fully remote learning platform with synchronous and asynchronous activities. It is anticipated that most, if not all, of the DMSc students will be working health care professionals and unable to enroll in a traditional on-campus degree program. There is no geographic barrier with a distance program, and students can access courses at any time and from nearly anywhere, either as a part-time or full-time student. The students will have the flexibility to complete the program over a period of five years.

Workforce Development: The DMSc degree is competency-based and responsive to the needs of prospective employers. DMSc graduates will have the skills and knowledge to succeed as leaders in health care organizations. The DMSc program provides an opportunity for health care professionals who have been practicing in the field to advance their knowledge, skills and opportunities. The remote learning platform allows professionals to obtain a quality education without the need to interrupt employment commitments or travel to a campus classroom. The program responds to requests from students and employers to advance the skills of the existing workforce.

Culture, Diversity, and Inclusion: The DMSc program will foster an environment where the participants feel valued and welcomed. The program will continuously refine policies and procedures to more fully support participants as led by the College of Allied Health Professions under the direction of the CAHP Diversity and Inclusion Collaborative Governance Committee. The program will continuously evaluate the admissions process to promote a holistic approach for accepting participants into the program.

***Partnerships*:** The DMSc program will invest time in cultivating partnerships that will advance program outcomes. The program will collaborate with the State's employers to provide ongoing education to practicing healthcare professionals in both rural and urban locales to sustain the workforce's knowledge, skills, and readiness for change. The DMSc program will foster a collaborative model to connect participants, educators, and practitioners, whenever appropriate, in designing and implementing instructional material.

***Efficiency and Effectiveness**:* The DMSc program will be highly effective and efficient in meeting the growing needs for skilled health care professionals because of its emphasis on stakeholder-driven competency-based education. The program is designed to leverage the University of Nebraska system's existing resources to minimize program expenses. The DMSc program's effectiveness will be assessed through rigorous review procedures conducted throughout the program of study. A long-term plan will be developed to sustain and expand the projected program assets, including the faculty and information technology infrastructure. The program will maintain a 5-year rolling balanced budget.

C. Consistency with the Comprehensive Statewide Plan for Post-Secondary Education

Providing a DMSc degree is consistent with the vision and major statewide goals outlined in the Nebraska Coordinating Commission for Postsecondary Education *Comprehensive Statewide Plan for Postsecondary Education (Plan).* The proposed DMSc program supports a number of the statewide goals and outcomes outlined in the *Plan,* including:

- ***Be responsive to the workforce development and ongoing training needs of employers and industries to sustain a knowledgeable, trained, and skilled workforce in both rural and urban areas of the state (3-1).*** The DMSc plan of study is intentionally designed to elevate the role of master's prepared physician assistants, by providing the course content and field placement activities needed to advance the level of practicein the field. The DMSc degree not only aims to address the workforce expectations for advanced practice competencies, but also provides the training to any geographic region through the distance education platform.

- ***Serve the state by preparing individuals for productive, fulfilling lives and by developing and nurturing the citizens and future leaders of Nebraska (3-7).*** The DMSc program will serve the state and country by preparing individuals for productive, fulfilling lives by developing and nurturing the citizens and future leaders of Nebraska and beyond. The DMSc program emphasizes the development of advanced clinical practice, education, and leadership and administration to prepare practitioners with a cross-disciplinary skill set. The proposed DMSc program addresses core competencies for the health care environment through didactic coursework and applied field placement courses.

- ***Assess evolving needs and priorities in a timely manner and will be prepared to change and adopt new methods and technologies to address the evolving needs and priorities of the students and people of Nebraska (1-9).*** The DMSc program will deliver a high-quality educational experience that demonstrates improvement in participant outcomes. For example, all learning and evaluation tools will be linked to program competencies, and participants, faculty and prospective employers will be regularly surveyed to ensure that the program's competencies are responsive to the changing healthcare landscape in Nebraska and nationally.

- ***Be effective in meeting the needs of students and the state, will be efficient in its expenditure of the state's resources, and will be accountable for developing and sustaining exemplary teaching, learning, research, and public service (4-7).*** The program is designed to leverage the existing resources of the University of Nebraska system in order to minimize program expenses. Also, the DMSc program is not duplicative of other programs in the state of Nebraska.

D. Evidence of Need and Demand

National Demand

According to the Department of Labor, Bureau of Labor Statistics nationally the demand for entry-level PAs is expected to increase by 31% during the ten-years from 2019-2029. This projected rate of growth is characterized by the Bureau of Labor Statistics as "much faster than the average"[5]. Currently, the PA profession requires all graduates from accredited programs to earn a master's degree. As noted above, the evolving role of PAs in the delivery of team-based healthcare requires advanced knowledge and competencies, and many practicing PAs are seeking to advance their education and credentials.

Alumni and Regional Demand

In 2020, the UNMC Physician Assistant Education Program sent out a community interest survey to 4,875 current PA students and alumni from the UNMC program and the Interservice Physician Assistant Program (UNMC is the degree-granting institution for the U.S. Department of Defense PA program). The survey generated 666 responses (13.7% response rate) (See Appendix G). Of those responses, 58% of respondents indicated that they were interested in seeking DMSc degree (See Table 2).

Forty-five percent were interested in starting the program within 1-2 years (of the survey) and 29% within 3-6 years. As of this year, all entry-level PA programs must confer a graduate degree (all are at the master's degree level) in order to obtain or retain accreditation by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA)[6]. There are currently 254 entry-level PA educational programs accredited in the U.S., with 52 new programs having applied for accreditation. The ARC-PA predicts growth to 306 entry-level programs by 2023. There are currently four such PA programs in Nebraska offering the entry-level master's degree (UNMC with campuses in Omaha and Kearney, Creighton University, Union College, and the College of Saint Mary).

Given the survey respondents strong interest in enrolling in the DMSc degree, the local master's degree programs pipeline (See Table 2), the expanding number of entry-level programs nationally, and the fact that to date, there are currently only eight institutions in the nation offering an online post-professional graduate degree for PAs, the projected demand for the UNMC DMSc program is projected to be very high. See Appendix C for letters of support.

NU Digital Learning (formerly NU Online) conducted a feasibility analysis related to the proposed PA DMSc degree titled in the report as Physician Assistant Doctorate (See Appendix H). The key insights providedby the analysis included:

- The Physician Assistant profession is projected to grow substantially over the next ten years.
- Job posting data from the past 3 years shows an increasing demand for professionals holding a doctorate degree.
- Job postings for Physician Assistants are most prevalent in New York, California and Pennsylvania, consequently, the program should be designed to accommodate out of state students.
- Degree completions are growing at a much faster rate than providers offering the programs, indicating high demand, consequently, additional programs are needed to accommodate the number of students.
- Tuition at the University of Nebraska Medical Center is very competitive among peer programs.

Table 2. Projected Demand from Local and Regional Master's Degree Programs for PA

Institution	Location	Annual Enrollment	Predicted Potential Enrollment (*using 58% as the multiplier*)
University of Nebraska Medical Center	NE	66	38
IPAP (UNMC Accredited Program)	NE/TX	210	121
Creighton University	NE	40	23
Union College	NE	30	17
College of Saint Mary	NE	40	23
Colorado Mesa University	CO	28	16
University of Colorado	CO	44	26
Rocky Vista University	CO	36	21
Red Rocks Community College	CO	32	19
University of Iowa	IA	25	15
Des Moines University	IA	50	29
Northwestern College	IA	32	19
St. Ambrose University	IA	30	17
University of Dubuque	IA	30	17
Wichita State	KS	48	28
University of South Dakota	SD	25	15
Total Enrollment from Surrounding States		**766**	**444**

The College of Allied Health Professions believes there is a tremendous opportunity for UNMC to be a leader in offering a post-professional degree based on current trends within the PA profession by offering a transitional degree bridging the entry-level master's to that of the advanced practice doctorate.

E. Avoidance of Unnecessary Duplication

None of the higher education institutions listed in Table 1 offering a similar degree as the proposed DMSc are in Nebraska or surrounding states. The structure of the proposed DMSc further appeals to master-prepared PA professionals through its distance-learning format. The CAHP has for many years offered online degree-advancement programs in clinical perfusion, medical laboratory science, physician assistant studies, and radiography. While these degree programs do not increase the number of personnel in these respective fields, they do afford current practitioners the opportunity to maintain employment in their communities while acquiring advanced knowledge. Given the CAHP's experience and success in offering degree advancement programs and considering that no DMSc degree programs are currently offered in Nebraska or the contiguous states, this proposal meets a strong demand for the DMSc degree not otherwise offered in the region.

F. Adequacy of Resources

Faculty and Staff Resources

The funding model for the program includes a dedicated 1.0 FTE Program Director and 4 faculty. In addition,

administrative staff will be dedicated to supporting the program, and incremental staffing increases are planned for the CAHP shared staff model.

The CAHP organizes administrative personnel in one of four offices designed to provide comprehensive services to all students and faculty within the CAHP. These offices include academic affairs, business affairs, enrollment management and student affairs, and research affairs. Existing personnel in these offices will provide additional administrative support for the DMSc Program. There is instructional technology support housed within the college as well as from the UNMC IT department. In addition, the Director of E-Learning & Instructional Designer at UNMC holds a courtesy faculty appointment in the CAHP.

An advisory board comprised of faculty within the CAHP, clinical managers, clinical preceptors, and other patient care partners guided the development of the curriculum. The advisory board will remain intact to continue to monitor the implementation of the DMSc degree as well as any quality improvement efforts. The DMSc degree program will be supported by a Program Director, existing CAHP faculty with any new hires, the Department of Medical Sciences, and administrative support personnel. A program committee will be used to provide remediation support and advisement. The CAHP's Office of Enrollment Management & Student Affairs staff will manage the recruitment and admissions processes. The CAHP's Office of Academic Affairs will support the program in accreditation, accommodations, curriculum mapping, and assessment best practices.

Instructional Equipment, Informational & Library Resources

Given the distance delivery of the program, the resources of the Leon S. McGoogan Health Sciences Library will be vitally important. As one of the nation's major health science libraries, it serves the information needs of UNMC students, faculty, and staff, as well as licensed Nebraska health professionals and residents of the state. The library provides timely access to high quality collections of print and electronic materials, including over 45,000 print volumes and an extensive collection of anatomical models. The library website serves as the gateway to electronic information resources. Online journals, books, bibliographic and other databases are available, and many resources may be accessed using mobile devices. Online resources include more than 36,000 journal titles and over 62,000 full-text books.

Librarians are available to assist with the use of the library and its collections, including assistance developing search strategies for the online databases, completing online searches, authorship level of participation in preparation of systematic reviews on request, retrieving factual information and verifying citations, and storing online references using bibliographic management software. In addition, the library offers one-on-one or group instruction in locating and managing information. Requests for these services may be submitted in person, by telephone or email, or sent via text or chat. The UNMC Office of Academic Affairs administers the E-Gallery. Housed in the Leon S. McGoogan Health Sciences Library, the ever-expanding library of e-Learning modules is available to students anytime and anywhere.

In recent years, the CAHP has made significant investments in technology to support the growing demand for distance education, to facilitate curriculum revision, including "flipped classroom" and hybrid delivery models, and to provide students opportunities for hands-on learning through simulation training. Audio visual (AV) and information technology (IT) components in excess of $1,000,000 have been purchased and installed in Bennett Hall, Wittson Hall, and the Michael F. Sorrell Center for Health Science Education.

Physical Resources

The DMSc degree within the College of Allied Health Professions will be administered on the UNMC campus in Omaha, and will include the Director's office, and faculty office space. These offices and conference rooms are conducive to work associated with planning, scholarly activities, and student counseling. The CAHP also has research laboratories, classrooms, and graduate student offices in the Center for Healthy Living, as well as laboratory space in Wittson Hall. These areas are equipped with all necessary technology for providing synchronous and asynchronous distance education. Program activities will be administered online or virtually with limited need for physical space. If the need

arises for on-campus student or faculty consultation, various conference rooms and/or individual faculty/committee members' offices will be utilized.

Budget Projections

Proposed enrollment is based on the Higher Learning Commission accreditation standards and projected faculty resources. The program proposes to enroll 20 full-time students who will complete the program in four semesters, and up to 30 part-time students who will complete the program in seven semesters for an annual ongoing enrollment of 100 students at full implementation. The enrollment projections are conservative based on the national survey sent to potential enrollees as well as current enrollment trends in competitor programs. Tuition revenue generated by the DMSc degree program will be sufficient to cover projected expenses after the first year. The CAHP has resources generated by auxiliary activities to cover the first-year deficit of $148,909. After the second year, the degree program will generate a modest positive cash flow. The CAHP proposes charging $710 per credit hour (assuming first cohort enrollment in FY 2024) for the program which is competitive with comparable programs outside of the University of Nebraska system. Revenue projections are presented in Table 3. Table 4. presents detailed tuition and fees calculations. Table 5. presents the projected expenses.

Table 3. Projected Revenue Sources for the Doctor of Medical Science Degree

	2024 Year 1	2025 Year 2	2026 Year 3	2027 Year 4	2028 Year 5	**Total**
Existing Funds [1]	$148,909					$148,909
Required New Public Funds [2]	0	$0	0	0	0	$0
1. State Funds						$0
2. Local Tax Funds (community colleges)						$0
Tuition and Fees [3]	$567,600	$893,426	$1,085,724	$1,263,862	$1,449,911	$5,260,523
Other Funding [4]						$0
1						$0
2						$0
3						$0
Total Revenue	$716,509	$893,426	$1,085,724	$1,263,862	$1,449,911	$5,409,432

[1] Funds from college auxiliary activities will be used to cover the shortfall in revenue during the first year of the program.

[2.] No new public funds are required.

[3] Tuition generation is based on the $710 per credit hour inflated at 2.5% per year. Fees are limited to the NU Online per credit hour fee of $35. and a UNMC 5% tax on online programs.

[4] N/A

Table 4. Tuition and Fees Revenue Calculations for the Doctor of Medical Science Degree

	Academic Year				
	2024	2025	2026	2027	2028
# FT Students matriculating annually taking 31 CH	20	20	20	20	20
# FT yr 2 students taking 9 CH		20	20	20	20
# PT students taking 18 CH yr 2	10	15	20	25	30
# PT students taking 16 CH yr 1		10	15	20	25
# PT students taking 6 CH yr 3			10	15	20
CH generated	800	1230	1460	1660	1860
Tuition generated ($710/CH)	$ 568,000	$ 895,133	$ 1,089,078	$ 1,269,223	$ 1,457,695
NU Online course fee @ $35/CH	$ 28,000	$ 43,050	$ 51,100	$ 58,100	$ 65,100
UNMC online program fee 5%	$ (28,400)	$ (44,757)	$ (54,454)	$ (63,461)	$ (72,885)
Total Revenue	$ 567,600	$ 893,426	$ 1,085,724	$ 1,263,862	$ 1,449,911

Projecting 20 full-time students and 10 part-time students in AY 24, increasing parttime enrollment by 5 students per year until full enrollment of 30 parttime students per cohort is achieved in 2027.

Table 5. Projected Expenses for the Doctor of Medical Science Degree

	Year 1		Year 2		Year 3		Year 4		Year 5		**Total**	
Personnel	**FTE**	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	**FTE**	**Cost**
Faculty [1]	2.5	$409,600	3	$498,560	3.25	$551,368	4.00	$689,210	4	$706,440		$2,855,178
Professional [2]	0											$0
Graduate assistants												$0
Support staff	1.5	$94,060	1.5	$104,304	2.00	$193,588						$712,684
Subtotal	4	$503,660	4.5	$602,864	5.25	$744,956						$3,567,862
Operating												
General Operating [3]		$195,449		$252,570		$272,085		$314,064		$309,806		$1,343,974
Equipment [4]		$0		$0		$0		$0		$0		$0
New or renovated space [5]		$0		$0		$0		$0		$0		$0
Library/Information Resources [6]						$0		$0		$0		$0
Other [7] Adjunct stipends		$17,400		$35,670		$54,810		$74,820		$95,700		$278,400
Subtotal		$212,849		$288,240		$326,895		$388,884		$405,506		$1,622,374
Total Expenses		$716,509		$891,104		$1,071,852		$1,217,293		$1,293,479		**$5,190,236**

[1] Includes a 1.0 FTE Program Director and 3 additional faculty. Salaries are inflated at 2.5% per year.

[2.] NA

[3] Includes additional funds for marketing and recruiting for the new program in the first four years as well as general office supplies, professional development, miscellaneous expenses.

[4] Program is delivered online, no new equipment needs are anticipated.

[5.] Program will be delivered online, no renovations or additional space is required.

[6] No new resources are anticipated.

[7] Some instruction will be provided by courtesy and adjunct faculty who will be paid stipends. Stipends are inflated at 2.5% per year.

IV. Conclusion

The Doctor of Medical Science (DMSc) plan of study is designed to promote health care delivery and leadership by providing advanced education and training to practicing physician assistants who seek to further their professional development and clinical expertise by building upon existing knowledge and expanding clinical aptitude. This fully asynchronous 40-credit hour post-professional program of study provides working students with an opportunity to advance their professional practice and leadership competencies through a distance education platform.

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Appendix A: Additional Details for Distance Programs Only

A. About the Program

1. Program Description –

The program will be operated through distance education. The didactic courses will be 100% asynchronous. The Field Placement Series will be fulfilled at the location of the Field Placement experience. Students will not be required to come to the UNMC campus. There is no Doctor of Medical Science program offered through UNMC that is face-to-face. This will be the first UNMC Doctor of Medical Science degree.

2. Licensure and Accreditation –

This program does not lead to licensure. The Doctor of Medical Science students will enter the program as credentialed and licensed Physician Assistants.

Currently, there is no programmatic or specialized accreditation body accrediting the DMSc degree. An internal advisory committee comprised of clinically or academically trained doctoral faculty in the CAHP along with three members of the UNMC Graduate Council to include the Associate Dean for Graduate Studies will review the DMSc program self-study report on a five-year cycle. The report will be structured according to the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) and Graduate Council templates to ensure key standards and program effective goals are reviewed and analyzed. Moreover, a qualified external body will review the plan of study and provide feedback prior to implementation. Finally, in working with the UNMC Office of Academic Affairs, the program administrators will facilitate an ongoing program review according to the Board of Regents, Nebraska Coordinating Commission for Post-Secondary Education, and Higher Learning Commission (HLC) standards.

3. Marketability and Duplication

In 2020, the UNMC Physician Assistant Education Program sent out a community interest survey to 4,875 current PA students and alumni from the UNMC program and the Interservice Physician Assistant Program (UNMC is the degree-granting institution for the U.S. Department of Defense PA program). The survey generated 666 responses (13.7% response rate) (See Appendix G). Of those responses, 58% of respondents indicated that they were interested in seeking DMSc degree (See Table 2).

Forty-five percent were interested in starting the program within 1-2 years (of the survey) and 29% within 3-6 years. As of this year, all entry-level PA programs must confer a graduate degree (all are at the master's degree level) in order to obtain or retain accreditation by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA)[6]. There are currently 254 entry-level PA educational programs accredited in the U.S., with 52 new programs having applied for accreditation. The ARC-PA predicts growth to 306 entry-level programs by 2023. There are currently four such PA programs in Nebraska offering the entry-level master's degree (UNMC with campuses in Omaha and Kearney, Creighton University, Union College, and the College of Saint Mary).

Given the survey respondents strong interest in enrolling in the DMSc degree, the local master's degree programs pipeline (See Table 2), the expanding number of entry-level programs nationally, and the fact that to date, there are currently only eight institutions in the nation offering an online post-professional graduate degree for PAs, the projected demand for the UNMC DMSc program is projected to be very high. See external letters of support included in the proposal.

NU Digital Learning (formerly NU Online) conducted a feasibility analysis related to the proposed PA DMSc degree titled in the report as Physician Assistant Doctorate (See Appendix H). The key insights providedby the analysis included:

- The Physician Assistant profession is projected to grow substantially over the next ten years.
- Job posting data from the past 3 years shows an increasing demand for professionals holding a doctorate degree.
- Job postings for Physician Assistants are most prevalent in New York, California and Pennsylvania, consequently, the program should be designed to accommodate out of state students.
- Degree completions are growing at a much faster rate than providers offering the programs, indicating high demand, consequently, additional programs are needed to accommodate the number of students.
- Tuition at the University of Nebraska Medical Center is very competitive among peer programs.

B. Curriculum:

1. Faculty and Instruction

Faculty on Record – Shaun Horak until additional faculty are hired.

Projected Size of Cohort – The program proposes to enroll 20 full-time students who will complete the program in four semesters, and up to 30 part-time students who will complete the program in seven semesters for an annual ongoing enrollment of 100 students at full implementation.

Projected Course Enrollment Cap – Approximately 30, Depends upon learning assessments of the course. If enrollment hits capacity, then would secure a teaching assistant

Courses – Asynchronous is the only registration option. If students outside of the DMSc wish to enroll, they can request permission of course instructor. Courses in the plan of study are all DMSc-based and fall within the program's administration. Traditional 14-17 week semester for the delivery format will be used.

Course Number & Title (Credit Hour); Semester Offered (Depending Upon FT or PT Enrollment)
Didactic Courses (24 Credit Hours Total) – Required Courses; All Asynchronous
MSC 701 Health Care Systems Theory and Practice for the Advanced Physician Assistant (3 CH); Fall
MSC 702 Physician Assistant Leaders and Their Organizations: Navigating Complexities in Healthcare Systems (3 CH); Summer
MSC 703 Quality Improvement in Advanced Physician Assistant Practice (3 CH); Spring
MSC 704 Application of Research and Statistical Methods to the Advanced Physician Assistant Practice (3 CH); Fall
MSC 705 Capstone Project I for the Advanced Physician Assistant Practice (2 CH); Spring
MSC 706 Capstone Project II for the Advanced Physician Assistant Practice (2 CH); Spring, Summer
MSC 707 Capstone Project III for the Advanced Physician Assistant Practice (2 CH); Fall
MSC 708 Health Security and Medical Operations for Advanced Physician Assistant Practice (3 CH); Fall
CAHP 750 Interprofessional Global Health (3 CH); Summer
Field Placement Courses (16 Credit Hours Total) – Required Courses; Courses are delivered asynchronously but the learning components within the course require participation in required learning experiences conducted at the location of the placement.
MSC 709 Field Placement I (4 CH); Fall, Summer
MSC 710 Field Placement II (4 CH); Fall, Spring
MSC 711 Field Placement III (4 CH); Spring, Summer
MSC 712 Field Placement IV (4 CH); Fall
Total Program of Study = 40

2. Program Requirements

No residential requirements. Students may enroll as Full-Time or Part-Time status. Applied learning will be required with participation at the location of the Field Placement, which is varied by student preference and local

opportunities to secure a "preceptor" for the placement. Program leaders will work with the student and the supervisor of the placement in advanced of placement.

3. Completion Plan

The full-time cohorts will begin each fall semester, completing the program of study in approximately four semesters (or roughly 16 months). For those students choosing part-time enrollment, enrollment will begin each fall semester with completion of the program in study in approximately seven semesters (or roughly 28 months).

DMSc Plan of Study – Proposed Schedule for FT Students (4 Semesters; 16 Months)		
Year One		
Fall Semester (10 Hours)	Spring Semester (9 Hours)	Summer Semester (12 Hours)
MSC 701 – Health Care Systems Theory and Practice for the Advanced Physician Assistant (3)	MSC 703 – Quality Improvement in Advanced Physician Assistant Practice (3)	MSC 702 – PA Leaders & Their Organizations: Navigating the Complexities (3)
MSC 704 – Application of Research and Statistical Methods to the Advanced Physician Assistant Practice (3)	MSC 710 – Field Placement II (4)	CAHP 750 – Interprofessional Global Health (3)
MSC 709 – Field Placement I (4)	MSC 705 - Capstone Project I (2)	MSC 711 – Field Placement III (4)
		MSC 706 – Capstone Project II (2)
Year Two		
Fall Semester (9 Hours)	Spring Semester	Summer Semester
MSC 708 – Health Security and Medical Operations Applied to Advanced Physician Assistant Practice (3)		
MSC 712 – Field Placement IV (4)		
MSC 707 – Capstone Project III (2)		

DMSc Plan of Study – Proposed Schedule for PT Students (7 Semesters; 28 Months)		
Year One		
Fall Semester (6 Hours)	Spring Semester (5 Hours)	Summer (7 Hours)
MSC 701 – Health Care Systems Theory and Practice for the Advanced Physician Assistant (3)	MSC 703 – Quality Improvement in Advanced Physician Assistant Practice (3)	MSC 702 – PA Leaders & Their Organizations: Navigating the Complexities (3)
MSC 704 – Application of Research and Statistical Methods to the Advanced Physician Assistant Practice (3)	MSC 705 - Capstone Project I (2)	MSC 709 – Field Placement I (4)
Year Two		
Fall Semester (7 Hours)	Spring Semester (6 Hours)	Summer (3 Hours)
MSC 708 – Health Security and Medical Operations Applied to Advanced Physician Assistant Practice (3)	MSC 711 – Field Placement III (4)	CAHP 750 – Interprofessional Global Health (3)
MSC 710 – Field Placement II (4)	MSC 706 – Capstone Project II (2)	

Year Three		
Fall Semester (6 Hours)	Spring Semester	Summer Semester
MSC 712 – Field Placement IV (4)		
MSC 707– Capstone Project III (2)		

4. Accessibility

No prerequisite courses are required. For those courses that use quizzes or exams, the assessments will be created for remote learning using technology such as Canvas or ExamSoft with either no live proctoring expectations or lock down browser and recording. Assessments will be scheduled with clear due dates and times, specifying the time zone. Computer requirements for onboarding students will be required. Live lectures are not a key component of the learning experience for the DMSc curriculum. Rather, activities such as required readings, discussion posts, and recorded lectures will be used. ADA compliance will be handled through Universal Design for Learning best practices and partnering with the UNMC Accessibility Services team.

C. Recruitment and Admissions

The DMSc program will conduct a holistic review of all applications, considering both academic and non-academic experiences. Enrollment in the program will be competitive. The admissions committee of the program, composed of program faculty and administration, will evaluate the qualifications of each applicant and make the final selections for admission. Applicants must have a master's degree, such as a Master of Physician Assistant Studies degree, or equivalent degree designed for the PA. Applicants must provide proof of an active state license where applicable and/or certification in the field of practice, such as through the Physician Assistant National Certifying Examination (PANCE). Preference for admission will be for applicants with a minimum of two years of patient care, educational experience, or completion of a fellowship program.

The DMSc program will have the support of the college's Office of Enrollment Management and Student Affairs for recruitment and admissions functions.

Upon matriculation, all students will be assigned an academic advisor, who will evaluate academic progress during the first year. The academic advisor also plays a role in assisting the advisee in understanding departmental, college, and university policies and procedures. The academic advisors will be faculty member(s) in the CAHP, assigned at the beginning of the program to provide advisement on coursework based on the student's area of practice.

The full-time cohorts will begin each fall semester, completing the program of study in approximately four semesters (or roughly 16 months). For those students choosing part-time enrollment, enrollment will begin each fall semester with completion of the program in study in approximately seven semesters (or roughly 28 months).

Transfer – Transfers will be evaluated on an individual basis. The program committee will look at the transcripts, course descriptions, applicability to the DMSc plan of study, and make determinations on what can be transferred in. The credits for transfer would need to be at the graduate level and demonstrate rigor. A cap on the number of transferable credits would be set at nine semester credit hours.

Recruitment – Plan for recruitment is to use alumni database of the master's level PA graduates, professional outlets such as conferences, listserves, and society networks. Additionally, the program would look to the UNMC marketing expertise for distance education. Because the program is offered via distance, materials will be intentional about the distance education delivery component as well as the part-time and full-time enrollment options.

Enrollment Goals – 30 initially then growing to 35 within five years through strategic marketing campaigning. As budgetary thresholds are met or exceeded and a pattern for enrollment growth established, the program can investigate the feasibility of new hires. The Office of Business Affairs within the College of Allied Health Professions meets with

programs individually on an annually basis to discuss projections.

D. Student Support Services

1. Learner Orientation

The College of Allied Health Professions currently has two very successful fully online interprofessional programs. There is an established and effective template for successfully onboarding online students. Many times, an Orientation Canvas course is developed specifically for the online cohorts. The College has a Director of Distance Education who supports all programs within the college. All the same student success services that are available to on campus students would be offered to the remote students (ADA, Counseling, Library Resources, for example). Ensuring academic honesty is thread throughout the development of the course and the learning activities. Measures such as login password protected access and lockdown assessments are just two strategies ensure academic honesty. All students must abide by the Student Code of Conduct. Students will be provided with access to the program, college, and university policies and procedures with expectations for conduct.

2. Advising

Upon matriculation, all students will be assigned an academic advisor, who will evaluate academic progress during the first year. The academic advisor also plays a role in assisting the advisee in understanding departmental, college, and university policies and procedures. The academic advisors will be faculty member(s) in the CAHP, assigned at the beginning of the program to provide advisement on coursework based on the student's area of practice. In the current master's degree PA program, the advisor to student ratio is roughly 1 advisor to 8 students. That ratio will likely be a target for the DMSc program. Students connect virtually through email, phone call, appointments, live video conferencing. The advisors and program director will monitor progression. Graduation outcomes will be tracked through an annual report as well as through a five-year review. Graduation rates are managed and maintained by the Office of Enrollment Management & Student Affairs.

3. Program Coordination

The program will identify a program coordinator once the degree is approved. Typically, the program coordinator will serve as a liaison between the student and program to ensure the student has the guidance and information, they need to be successful. With this, the coordinator may provide some assistance with the online management systems and communication with the field placement supervisors.

E. Evaluation/Assessment

An internal advisory committee comprised of clinically or academically trained doctoral faculty in the CAHP along with three members of the UNMC Graduate Council to include the Associate Dean for Graduate Studies will review the DMSc program self-study report on a five-year cycle. The report will be structured according to the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) and Graduate Council templates to ensure key standards and program effective goals are reviewed and analyzed. Moreover, a qualified external body will review the plan of study and provide feedback prior to implementation. Finally, in working with the UNMC Office of Academic Affairs, the program administrators will facilitate an ongoing program review according to the Board of Regents, Nebraska Coordinating Commission for Post-Secondary Education, and Higher Learning Commission (HLC) standards. The college will also require programmatic effectiveness data on an annual basis such as retention rate, satisfaction rates, etc.

F. Resources

With programs in the college already operating fully online, there is a successful pathway established.

Appendix B: Abstract of Proposal

Purpose of the Proposed Degree

The College of Allied Health Professions (CAHP) at the University of Nebraska Medical Center (UNMC) proposes to establish a clinical doctorate program in medical sciences, the Doctor of Medical Sciences (DMSc), designed for practicing Physician Assistants (PA).

The DMSc degree offers credentialed physician assistants, who wish to retain their primary role in health care delivery, and who have already obtained an entry-to-profession master's degree, the opportunity to gain additional knowledge and competencies to advance their practice, through an applied doctoral degree course of study. This program is designed for the PA professional to enhance their career options within the field as well as to expand their level of clinical practice. The PA profession is at the national forefront of recognizing the DMSc degree as the post-professional degree of choice for practicing PA's.

Evidence of Needs and Demand

The evolving role of PAs in the delivery of team-based healthcare requires advanced knowledge and competencies, and many practicing PAs are seeking to advance their education and credentials. Alumni survey responses and a NU Digital Learning feasibility analysis both suggest a strong interest for the advanced degree. With a number of regional master's degree PA programs, the online degree structure, and limited options for an advanced professional degree, there is a solid pipeline for enrollment in the DMSc degree through UNMC.

DMSc Core Competencies

The proposed DMSc curriculum consists of six program competencies. The competencies originate from a Physician Assistant Education Association (PAEA)[1] Task Force and Stakeholder Summit[2] and represent the desired skills, attributes, and behaviors of the DMSc graduate.

The six competency domains reaffirm a patient-centered care focus, elucidate the role of social determinants on individual and population health, emphasize communication and team-focused care, and recognize the larger systems that impact health and well-being. Interwoven within the core competencies is an application for scholarship, quality and safety of care delivery, and integration of technology. The six competencies are:

1. Patient-centered practice knowledge
2. Society and population health
3. Health literacy and communication
4. Interprofessional collaborative practice and leadership
5. Professional and legal aspects of health care
6. Health care finance and systems

Description of the Proposed Major or Degree

The CAHP proposes to develop a post-professional DMSc degree program tailored to meet the advanced practice needs of PAs who have already completed an entry-level master's degree and have obtained credentials to practice in the field. The program of study would require students to complete didactic courses and field placement credits for a total of 40 credit hours. Didactic courses will comprise 24 credit hours and the *Field Placement* series will comprise 16 credit hours. Didactic course work will be offered in a fully online, asynchronous format. Field placement experiences will be completed in the participant's home community under the guidance of DMSc faculty and an onsite clinical preceptor.

Mapping Future Opportunities

The field placement courses may be customized to permit the student to earn a portion of the required structured educational components for eligibility to apply for Certificates of Added Qualifications (CAQs) in the field. The CAQ is a credential that certified Physician Assistants can earn in seven specialties: Cardiovascular & Thoracic Surgery, Emergency Medicine, Hospital Medicine, Nephrology, Orthopaedic Surgery, Pediatrics, and Psychiatry.[3] Specific didactic courses have been mapped for students interested in pursuing a specialty credential through the CAQs, clinical fellowship programs, or a professional certificate (Applied Health Informatics, Healthcare Quality Improvement, or Teaching & Technology) following completion of the DMSc program.

Resources & Budget

The funding model for the program includes a dedicated 1.0 FTE Program Director and 3.25 faculty. In addition, administrative staff will be dedicated to supporting the program, and incremental staffing increases are planned for the CAHP shared staff model. The CAHP organizes administrative personnel in one of four offices designed to provide comprehensive services to all students and faculty within the CAHP. These offices include academic affairs, business affairs, enrollment management and student affairs, and research affairs. Existing personnel in these offices will provide additional administrative support for the DMSc Program.

The program proposes to enroll 30 students the first year with an incremental annual increase of an addition five students for a yearly ongoing enrollment of 35 students at full implementation. The enrollment projections are conservative based on the national survey sent to potential enrollees. Tuition revenue generated by the DMSc degree program will be sufficient to cover projected expenses after the first year. The CAHP has resources generated by auxiliary activities to cover the first-year deficit of $226,403. After the second year, the degree program will generate a modest positive cash flow.

Summary

The Doctor of Medical Science (DMSc) plan of study is designed to promote health care delivery and leadership by providing advanced education and training to practicing physician assistants who seek to further their professional development and clinical expertise by building upon existing knowledge and expanding clinical aptitude. This asynchronous 40-credit hour post-professional program of study provides working students with an opportunity to advance their professional practice and leadership competencies through a distance education platform.

January 12, 2023

Shaun Grammer, DMSc, PA-C
Program Director, Physician Assistant Education
984300 Nebraska Medical Center
Omaha, NE 68198-4300

Dear Dr. Grammer,

The College of Allied Health Professions (CAHP) Curriculum Committee has reviewed and approved the plan of study proposed for the Doctor of Medical Science (DMSc) degree to be offered at the University of Nebraska Medical Center through the College of Allied Health Professions.

Because there is no programmatic accreditation established to formally recognize the plan of study for the DMSc degree, the Office of Academic Affairs within the College of Allied Health Professions created an adhoc review committee comprised of doctorally-trained educators tasked to review this advanced practice plan of study for working Physician Assistants. The adhoc review team was made up of allied health and graduate studies professors with experience in reviewing advanced clinical practice and graduate level curricula. A robust review by the committee was conducted and recommendations were integrated at the course and program levels. Therefore, all proposed courses for the DMSc degree are now developed and at a level of rigor and quality to meet the established program competencies for the doctoral degree.

Moreover, until a route for programmatic accreditation has been established, the DMSc program leadership will be required to conduct a programmatic review on a five-year cycle. This review will be conducted by an adhoc review committee preferably the same committee members that conducted the course review. A templated self-study report will be provided to complete the five-year cycle reviews. Additionally, both the CAHP and UNMC Offices of Academic Affairs may request annual reports or ongoing program effectiveness data (such as graduate/employer satisfaction rates, job placement rates) to monitor outcomes and make any recommendations for program improvement. The program will also need to track, assess, and report any requested items generated through the Higher Learning Commission (HLC) accreditation.

As the Assistant Dean for Academic Affairs for the College of Allied Health Professions and Chair of the Curriculum Committee, I support your efforts to advance the DMSc proposal. I believe the DMSc plan of study will provide a valuable opportunity for practicing Physician Assistants to advance their clinical competencies and pursue additional credentialing and certificate pathways through an online academic platform.

Sincerely,

Tammy L. Webster, PhD
Professor
CAHP Curriculum Committee Chair
CAHP Assistant Dean for Academic Affairs

January 27, 2023

David Jackson, PhD
Vice Provost
University of Nebraska
3835 Holdrege
Lincoln, NE 68583-0743

Dear Dr. Jackson:

I am writing in support of the development of a new professional program, Doctor of Medical Science in the College of Allied Health Professions (CAHP) at the University of Nebraska Medical Center (UNMC). Specifically, I want to address the budget for the proposed program.

Should the proposal to develop a Doctor of Medical Science program be approved, the CAHP and UNMC have separate funding to support the initial year of the startup of the program. The funding is available from college auxiliary activities, not from funds committed to supporting our existing programs. The start-up of the program would have no negative financial impact on other programs in the CAHP. Tuition revenue for the proposed program is expected to commence with the first cohort of 20 full-time and 10 part-time students, anticipated in the Fall of 2025, and ultimately the program will generate tuition revenue sufficient to cover associated expenses.

The mission of UNMC and the CAHP, as Nebraska's only public academic health science center, is to offer health professions education programs to serve both the students and ultimately the citizens of Nebraska and the region. The CAHP is committed to educating the most highly qualified allied health workforce and believes there is a need in Nebraska and the region for professionals with a Doctor of Medical Science, and that this need will only increase in the years ahead.

As such, we are committed to the development of the proposed program, and the investment required to ensure the highest level of success.

Sincerely,

Kyle P. Meyer

Kyle P. Meyer, PhD, MS, PT, FASAHP
Dean

University of Nebraska Medical Center
College of Allied Health Professions
984000 Nebraska Medical Center | Omaha, NE 68198-4000 | unmc.edu

University of Lynchburg

Doctor of Medical Science
School of PA Medicine

Shaun Horak, DMSc, PA-C, DFAAPA
University of Nebraska Medical Center
42nd and Emile, Omaha, NE 68198

Dr. Horak and Board of Regents,

I am writing this letter of support for the University of Nebraska Medical Center's proposed Doctor of Medical Science (DMSc) Program. As the Founding Director and creator of the Doctor of Medical Science at the University of Lynchburg in Lynchburg Virginia I am proud that my alumni institution is seriously exploring the value of this program. The PA profession is a major contributor to access and affordability within the healthcare industry and must stay competitive and evidenced-based to contribute at the highest level. As I am sure most people are aware the PA profession is the last medicine practitioner to have the opportunity to advance their education with a doctorate degree. Our physician colleagues both MD and DO are doctorally educated and so are our nurse practitioner colleagues with the Doctor of Nurse Practice degree. Outside of medicine and moving towards health sciences professions like physical therapy, occupational therapy, audiology, optometry, speech pathologist, athletic trainers, and nurse anesthetists are all offered doctorate level educations. The creation of the DMSc degree is an essential offering to keep the PA profession contributing to team-based care at the highest level.

The DMSc also expands the traditional educational foundation of the PA and moves to a more extensive and impactful knowledge of healthcare administration, leadership, strategic planning, and public health. The University of Nebraska Medical Center DMSc curriculum is appropriate and impactful for both clinically practicing PAs and administrative PAs. The healthcare landscape is constantly changing and both practicing PAs and administrative PAs must change and adapt to meet the demand. The DMSc is an important resource for PAs seeking a more in depth executive-level understanding of clinical care along with healthcare compliance. A doctorate degree is not a new concept in the PA Profession and has been in discussion since the early 2000s. During this discussion and debate numerous other health science degrees have advanced leaving the PA profession limited at a master's degree offering.

The University of Lynchburg announced the creation and launch of the Doctor of Medical Science degree in 2014 and has been enrolling students since it went live in 2015. The demand for the degree has been supported by all demographics and age groups within the profession. The University of Lynchburg DMSc program has 592 graduates and an additional

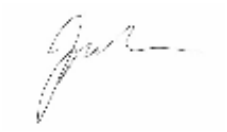
University of Lynchburg

433 current students. The DMSc program has provided both exit survey and graduate surveys and both have reported that our graduates appreciate the content and it has immediate real world application. The doctorate work translates into expanded knowledge that helps PAs provide quality care along with expanding leadership and administrative opportunities.

Thank you for allowing me to express my appreciation and support for the DMSc degree offering at the University of Nebraska Medical Center. In summary, the PA profession is a substantial contributor to healthcare in this nation and additional educational opportunities for PAs will only work to strengthen their clinical care and leadership capabilities.

Thank you for your consideration of this letter of support. Please let me know if additional information is needed.

Respectfully,



Jeremy M. Welsh, DHSc, JD, MPAS, PA-C, DFAAPA
Founding Program Director, Doctor of Medical Science
Dean, School of PA Medicine
Senior Associate Dean College of Health Sciences
Professor
University of Lynchburg
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BUTLER UNIVERSITY
COLLEGE of PHARMACY and HEALTH SCIENCES
4600 Sunset Avenue | Indianapolis, Indiana 46208 | 317-940-9322 | Fax: 317-940-6172 | www.butler.edu

September 16, 2020

Board of Regents
University of Nebraska Medical Center

Dear Board Members:

I am writing this letter to express my support for the proposed Doctor of Medical Science Program at your institution. My perspective on this is informed by my work in PA education, including as a program director for an entry level PA program. My college also has a Doctor of Medical Science Program that is completing its first year, and I am currently enrolled as a student. This letter will include perspectives from all three of these viewpoints.

The PA profession needs more doctorate-level representation. This will allow us to have greater parity with the numerous other medical professionals whose training includes a doctoral degree, allowing PAs the ability to compete for leadership positions within universities and hospital systems. As the Doctor of Medical Sciences degree is relatively new, your institution would be towards the front of the pack by adopting this now.

This is also important for you to consider implementing doctoral degree training now from the standpoint of demand. Our doctoral program exceeded estimated enrollments from the beginning, which has been a boon to the college. Since our program is 100% online, we have students from all over the country that have registered – the majority of whom are not alumni and were not associated with Butler prior to matriculating. The demand is there, but as more programs become available (which is guaranteed to take place, and quickly), there will be more competition. Establishing your program as one of quality early in the race will give you a stronger reputation going into that competitive phase.

The proposed program includes several tracks that will appeal to different types of students. This is a strength of the proposal. The number of credits, course content, practicum, and duration of study all seem reasonable to me. As you know, this type of program is not subject to the same exacting accreditation standards that govern entry-level PA programs. This proposal embraces that latitude and creates different, unique, and valuable training experiences for students with different career goals.

In summary, I support this proposed Doctor of Medical Sciences Program. It is timely, there is a market need for it that should generate interest and demand, and is well-considered and designed.

If there is anything else that I can provide in order to further your consideration of this proposal, please do not hesitate to ask.

Yours Sincerely,

Christopher Roman, PA-C
Program Director
Department of PA Studies
croman@butler.edu

ROCKY MOUNTAIN UNIVERSITY of HEALTH PROFESSIONS

September 13, 2020

To Whom It May Concern:

I am the founding director of the Doctor of Medical Science (DMSc) program at Rocky Mountain University of Health Professions. Prior to my current position, I oversaw the DMSc program at the University of Lynchburg as the Director of Doctoral Education. The physician assistant (PA)-specific DMSc degree is a relatively new degree offering with the first programs having launched approximately 3 years ago. As of early 2020, there were five DMSc programs with enrolled students. Between the five programs, there were over 500 students enrolled at that time. This is evidence that there is a demand for DMSc programs among PAs.

I have reviewed the overview of the curriculum for the proposed DMSc program at the University of Nebraska Medical Center and I find it comparable to the curricula of the DMSc programs at Rocky Mountain University of Health Professions and the University of Lynchburg which were approved by each institution's respective regional accrediting body. It is my opinion that if the University of Nebraska Medical Center invests a sufficient amount of resources in developing and marketing a DMSc program, it will likely be successful.

Respectfully,

Bartley Rust, DHSc, PA-C
DMSc Program Director

[illegible] East 1700 South, Provo, UT [illegible]
[illegible]
rmu.edu

Appendix F: Proposed Course Scheduling

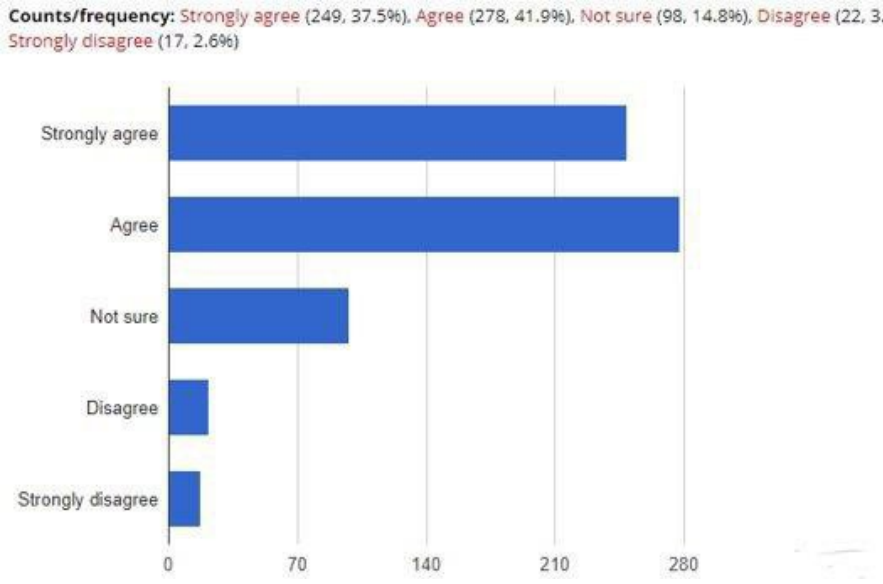
DMSc Plan of Study – Proposed Schedule for FT Students (4 Semesters; 16 Months)		
Year One		
Fall Semester (10 Hours)	Spring Semester (9 Hours)	Summer Semester (12 Hours)
MSC 701 – Health Care Systems Theory and Practice for the Advanced Physician Assistant (3)	MSC 703 – Quality Improvement in Advanced Physician Assistant Practice (3)	MSC 702 – PA Leaders & Their Organizations: Navigating the Complexities (3)
MSC 704 – Application of Research and Statistical Methods to the Advanced Physician Assistant Practice (3)	MSC 710 – Field Placement II (4)	CAHP 750 – Interprofessional Global Health (3)
MSC 709 – Field Placement I (4)	MSC 705 - Capstone Project I (2)	MSC 711 – Field Placement III (4)
		MSC 706 – Capstone Project II (2)
Year Two		
Fall Semester (9 Hours)	Spring Semester	Summer Semester
MSC 708 – Health Security and Medical Operations Applied to Advanced Physician Assistant Practice (3)		
MSC 712 – Field Placement IV (4)		
MSC 707 – Capstone Project III (2)		

DMSc Plan of Study – Proposed Schedule for PT Students (7 Semesters; 28 Months)		
Year One		
Fall Semester (6 Hours)	Spring Semester (5 Hours)	Summer (7 Hours)
MSC 701 – Health Care Systems Theory and Practice for the Advanced Physician Assistant (3)	MSC 703 – Quality Improvement in Advanced Physician Assistant Practice (3)	MSC 702 – PA Leaders & Their Organizations: Navigating the Complexities (3)
MSC 704 – Application of Research and Statistical Methods to the Advanced Physician Assistant Practice (3)	MSC 705 - Capstone Project I (2)	MSC 709 – Field Placement I (4)
Year Two		
Fall Semester (7 Hours)	Spring Semester (6 Hours)	Summer (3 Hours)
MSC 708 – Health Security and Medical Operations Applied to Advanced Physician Assistant Practice (3)	MSC 711 – Field Placement III (4)	CAHP 750 – Interprofessional Global Health (3)
MSC 710 – Field Placement II (4)	MSC 706 – Capstone Project II (2)	
Year Three		
Fall Semester (6 Hours)	Spring Semester	Summer Semester
MSC 712 – Field Placement IV (4)		
MSC 707– Capstone Project III (2)		

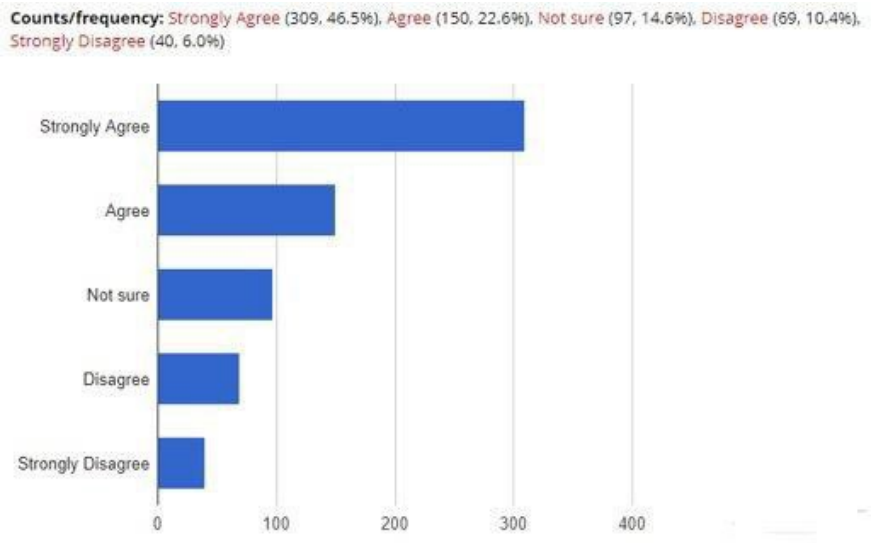
Appendix G: Alumni Survey Results

The survey results from the 666 respondents concluded:

A description of UNMC's proposed clinical doctorate was provided at the beginning of this survey. How well does the proposed program description meet your expectations for what a clinical doctorate for P.A.s should be?

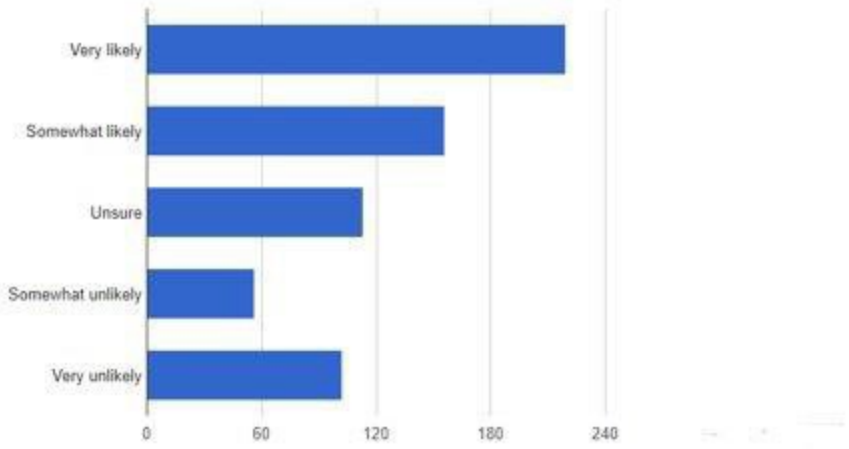


To what degree do you agree with the statement, "The Physician Assistant profession should be at the clinical doctorate level, like other similar professions (E.G., Physical Therapy, Occupational Therapy, Pharmacy, Nurse Practitioner, etc.)?



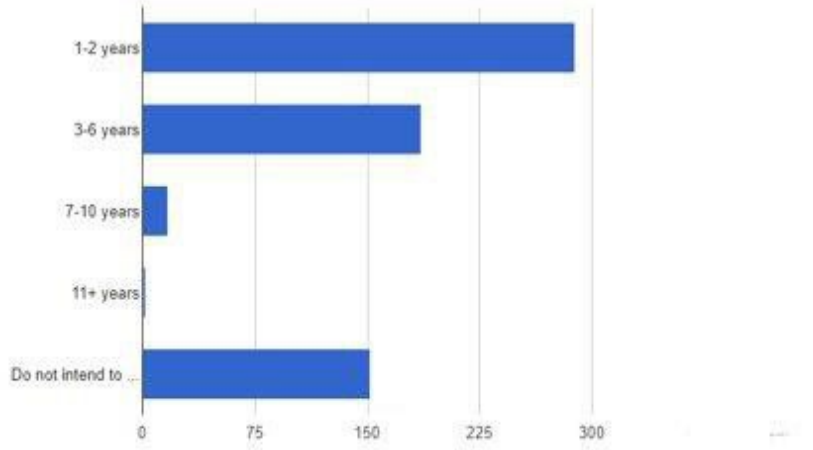
How likely are you to seek a clinical doctorate in your professional career?

Counts/frequency: Very likely (219, 33.9%), Somewhat likely (156, 24.1%), Unsure (113, 17.5%), Somewhat unlikely (56, 8.7%), Very unlikely (102, 15.8%)



If you intend to obtain a clinical doctorate, how soon might you start a program of study?

Counts/frequency: 1-2 years (289, 44.7%), 3-6 years (186, 28.8%), 7-10 years (17, 2.6%), 11+ years (2, 0.3%), Do not intend to obtain a clinical doctorate (152, 23.5%)



Online Program Feasibility Analysis

Physician Assistant Doctorate

University of Nebraska Medical Center

University of Nebraska Online
KEARNEY | LINCOLN | OMAHA | MEDICAL CENTER

Completed 5/7/2021 by University of Nebraska Online

Executive Summary

The purpose of this Online Program Feasibility Analysis is to provide insight in comparable program offerings and workforce demand for the strategic development of online programs by the University of Nebraska.

Key Insights

- The occupation of Physician Assistants is projected to grow substantially over the next ten years.
- Job posting data from the past 3 years shows an increasing demand for professionals holding a doctorate degree.
- Job postings for Physician Assistants are most prevalent in New York, California and Pennsylvania. The program should be designed to accommodate out of state students.
- Degree completions are growing at a much faster rate than providers offering the program indicating high demand. Additional programs are needed to accommodate the number of students.
- Tuition at the University of Nebraska Medical Center is very competitive among peer programs.

University of Nebraska Online
KEARNEY | LINCOLN | OMAHA | MEDICAL CENTER

Program Contributions to the NU Online Portfolio

The proposed Physician Assistant (PA) doctorate degree is unique to the NU Online portfolio. Current doctorate offerings are focused for public health practitioners whereas the proposed program would allow all PA's to further their education to meet the increasing demand for those with doctorate degrees in the workforce. As there are no duplicative programs already existing on the NU Online website, the program can be listed on online.nebraska.edu.

Similar programs currently listed on online.nebraska.edu:

Public Health Practice, DrPH

Public Health Practice, DrPH (Epidemiology)

University of Nebraska Online

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Occupational Outlook

Nebraska Projections: % Change 2018-2028
Source: NDOL

Physician Assistants **+29.57%**

Health Specialties Teachers, postsecondary **+5.54%**

National Projections: % Change 2019-2029
Source: US BLS

Physician Assistants **+31.3%**

Health Education Specialists **+11.4%**

Number of unique job postings with **doctorate / professional degree** listed as preferred education level for **Physician Assistants**.
Source: Emsi

	Jan 2017 – Jan 2018	Jan 2018 – Jan 2019	Jan 2019 – Jan 2020
Physician Assistants (USA job postings)	11,613	12,728 (**+10%**)	15,880 (**+25%**)
Physician Assistants (NE job postings)	54	68 (**+26%**)	72 (**+6%**)

The occupation of Physician Assistant is projected to grow both in Nebraska and nationally. Job posting data from the past 3 years shows an increasing demand for professionals holding a doctorate level degree.

University of Nebraska Online
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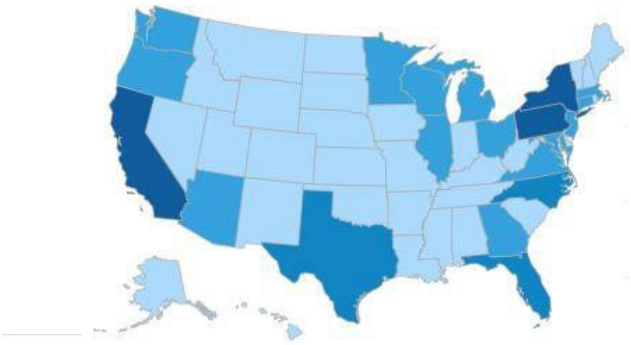
Occupational Outlook

Physician Assistant Occupation. Source: Emsi.

Job Postings by Location



City	Total Job postings *Jan 2017 – Jan 2020*
New York, NY	50,585
Los Angeles, CA	17,155
Philadelphia, PA	16,495
Seattle, WA	18,866
Houston, TX	12,153
Boston, MA	15,683
Washington, DC	9,080
Chicago, IL	10,280
Dallas, TX	11,999
Portland, OR	17,216

Top Listed Skills in Job Postings

Jan 2017 – Jan 2020. Source: Emsi

- Family Medicine
- Primary Care
- Urgent Care
- Basic Life Support
- Nursing
- Surgery
- Advanced Cardiovascular Life Support (ACLS)
- Orthopedics
- Emergency Medicine
- Pediatrics

Median Advertised Salary - **USA**

Jan 2017 – Jan 2020. Source: Emsi

$54.12 / hr

Median Advertised Salary – **NE**

Jan 2017 – Jan 2020. Source: Emsi

$55.26 / hr

Job postings in Nebraska advertise an average salary $1.14 over the national average.

University of Nebraska Online

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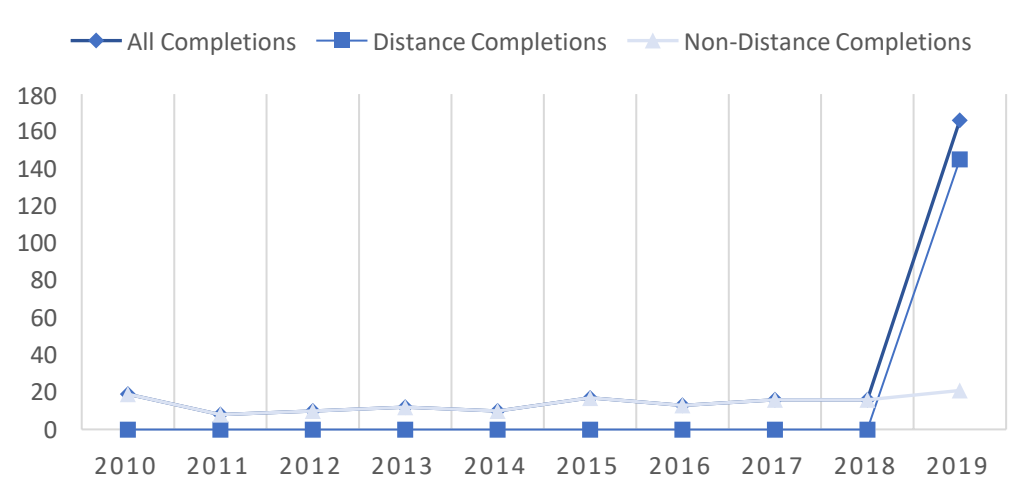
National Degree Completion Trends

- Based off CIP Code **51.0912 Physician Assistant**

***information on this page reflects institutions reporting program data to this IPEDs' CIP Code. Other peer programs may exist but be reported under other CIP Codes.*

National Completion Trends

Filtered by **doctoral** completions. Source: Emsi.



Completions by Institution

Source: Emsi, IPEDS. Data is for online and campus programs.

University of Lynchburg: **137 completions** (82.5% market share)

Baylor University: **21 completions** (12.6% market share)

MCPHS University: **8 completions** (4.8% market share)

Lincoln Memorial University: **0 completions**

Degree Completions Compound Annual Growth Rate (CAGR)

Filtered by **doctoral** completions. Source: Emsi, IPEDS.

	2014	2015	2016	2017	2018	2019	CAGR
Completions	10	17	13	16	16	166	+75%
Providers	1	1	1	1	2	4	+32%

Completions are growing at a much faster rate than providers indicating high demand for this program. Additional programs are needed to accommodate the number of students.

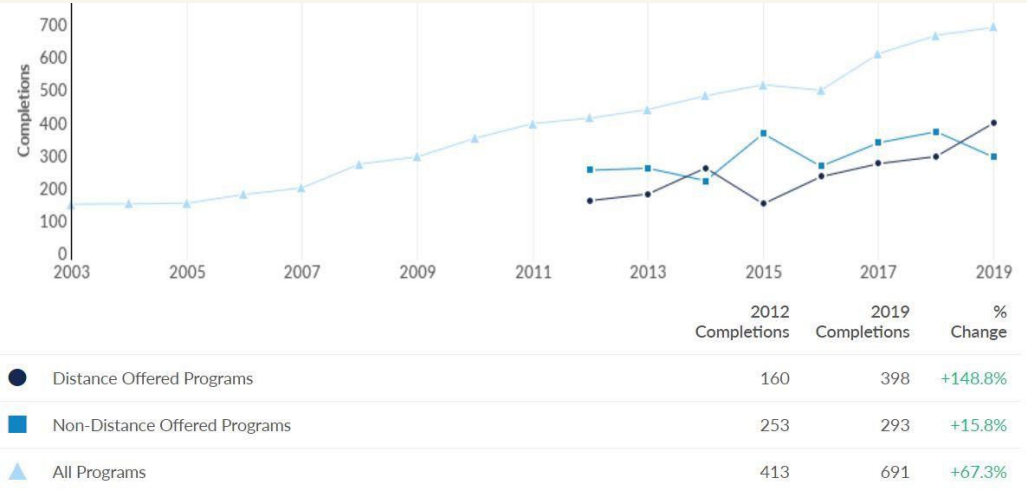
National Degree Completion Trends

- Based off CIP Codes: **51.00** Health Services/Allied Health/Health Sciences, General; **51.07** Health & Medical Administrative Services; **51.14** Medical Clinical Sciences / Graduate Medical Studies

  ***information on this page reflects institutions reporting program data to these IPEDs' CIP Codes. Other peer programs may exist but be reported under other CIP Codes.*

National Completion Trends

Filtered by **doctoral online** completions. Source: Emsi.



	2012 Completions	2019 Completions	% Change
Distance Offered Programs	160	398	+148.8%
Non-Distance Offered Programs	253	293	+15.8%
All Programs	413	691	+67.3%

2019 Online Completions by Institution – Top 5

Source: Emsi, IPEDS. This data is for online only completions.

AT Still University of Health Sciences: **67 completions** (16.8% market share)

Capella University: **53 completions** (13.3% market share)

Walden University: **52 completions** (13.1% market share)

University of Phoenix-Arizona: **44 completions** (11.1% market share)

University of North Carolina at Chapel Hill: **30 completions** (7.5% market share)

Degree Completions Compound Annual Growth Rate (CAGR)

Filtered by **distance offered doctoral** completions. Source: Emsi, IPEDS.

	2014	2015	2016	2017	2018	2019	CAGR
Completions	260	150	233	273	295	398	+9%
Providers	15	15	13	14	18	24	+10%

Completions and providers are growing at similar rates indicating ongoing demand for doctorate degree level programs in healthcare.

Tuition Scan

Online doctorate degrees for Physician Assistants

University	Degree / Certificate	Degree	Credit Hours	Resident Tuition Per Credit Hour 2020-2021	Non-Resident Tuition Per Credit Hour 2020-2021	Distance/ Online/ Digital Fee*	Tech Fee*	Library Fee*	Other Fees*	Resident Tuition & Fee Totals 2020-2021	Non-Resident Tuition & Fee Totals 2020-2021	Website
AT Still University	Medical Science	DMSc	36	$600.00	$600.00		$32.00			$632.00	$632.00	ATSU Tuition
University of Lynchburg	Medical Science	DMSc	12 months	$606.00	$606.00				$85.00 / term	$606.00	$606.00	UL Tuition
University of Nebraska Medical Center	**Medical Science**	**DMSc**		**$655.00**	**$655.00**	**$35.00**	**$11.00**	**$6.25**		**$707.00**	**$707.00**	**UNMC Tuition**
Touro University	Physician Assistant	DPA	42	$700.00	$700.00					$700.00	$700.00	TU Tuition
Lincoln Memorial University	Medical Science (Blended)	DMS	45	$810.00	$810.00				$380.00 / term	$810.00	$810.00	LMU Tuition
MCPHS University	Physician Assistant Studies	DScPAS	24	$990.00	$990.00				$500 / semester			MCPHS Tuition
Baylor University	Emergency Medicine	DScPAS-EM	18 months	$1,785	$1,785					$1,785	$1785	BU Info

**Tuition highlighted in orange are per credit hour estimates from Emsi. Tuition per credit hour not listed on those program's websites.

Orthopaedic Surgery Milestones

The Accreditation Council for Graduate Medical Education

ACGME

Implementation Date: July 1, 2021
Second Revision: April 2021 First
Revision: August 2013

Orthopaedic Surgery Milestones

The Milestones are designed only for use in evaluation of residents in the context of their participation in ACGME-accredited residency programs. The Milestones provide a framework for the assessment of the development of theresident in key dimensions of the elements of physician competence in a specialty or subspecialty. They neither represent the entirety of the dimensions of the six domains of physician competency, nor are they designed to be relevant in any other context.

Orthopaedic Surgery Milestones

Work Group

Stephen Albanese, MD

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Eugene Jang, MD, MS

Charles Orth, DO, FAOAO

Patrick Osborn, MD Afshin

Razi, MD

James Roberson, MD

James Taylor, DMan, MHA, MBA

Ann Van Heest, MD

The ACGME would like to thank the following organizations for their continued support in thedevelopment of the Milestones:

American Board of Orthopaedic Surgery American

Osteopathic Academy of Orthopedic Surgery

American Osteopathic Association Council

of Orthopaedic Residency DirectorsReview

Committee for Orthopaedic Surgery

Understanding Milestone Levels and Reporting

This document presents the Milestones, which programs use in a semi-annual review of resident performance, and then report to the ACGME. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME Competencies organized in adevelopmental framework. The narrative descriptions are targets for resident performance throughout their educational program.

Milestones are arranged into levels. Tracking from Level 1 to Level 5 is synonymous with moving from novice to expert resident inthe specialty or subspecialty. For each reporting period, the Clinical Competency Committee will review the completed evaluationsto select the milestone levels that best describe each learner's current performance, abilities, and attributes for each subcompetency.

These levels *do not* correspond with post-graduate year of education. Depending on previous experience, a junior resident may achieve higher levels early in his/her educational program just as a senior resident may be at a lower level later in his/her educational program. There is no predetermined timing for a resident to attain any particular level. Residents may also regress inachievement of their milestones. This may happen for many reasons, such as over scoring in a previous review, a disjointed experience in a particular procedure, or a significant act by the resident.

Selection of a level implies the resident substantially demonstrates the milestones in that level, as well as those in lower levels (seethe diagram on page vi).

Additional Notes

Level 4 is designed as a graduation *goal* but *does not* represent a graduation *requirement*. Making decisions about readiness for graduation and unsupervised practice is the purview of the program director. Furthermore, Milestones 2.0 include revisions and changes that preclude using Milestones as a sole assessment in high-stakes decisions (i.e., determination of eligibility for certification or credentialing). Level 5 is designed to represent an expert resident whose achievements in a subcompetency are greater than the expectation. Milestones are primarily designed for formative, developmental purposes to support continuous qualityimprovement for individual learners, education programs, and the specialty. The ACGME and its partners will continue to evaluate and perform research on the Milestones to assess their impact and value.

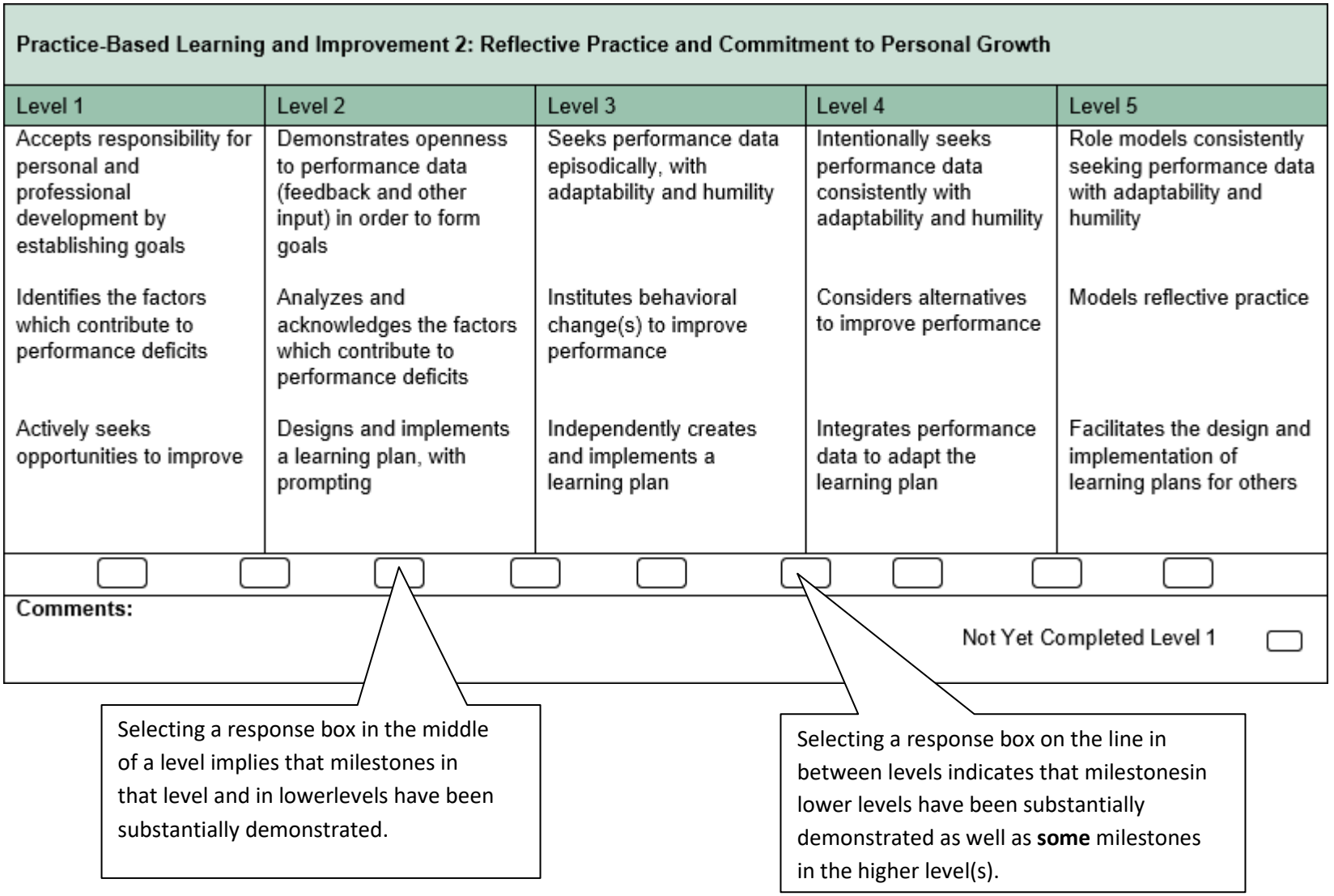
Examples are provided for some milestones within this document. Please note: the examples are not the required element oroutcome; they are provided as a way to share the intent of the element.

Some milestone descriptions include statements about performing independently. These activities must occur in conformity to ACGME supervision guidelines as described in the Program Requirements, as well as to institutional and program policies. Forexample, a resident who performs a procedure independently must, at a minimum, be supervised through oversight.

A Supplemental Guide is also available to provide the intent of each subcompetency, examples for each level, assessment methodsor tools, and other available resources. The Supplemental Guide, like examples contained within the Milestones, is designed only toassist the program director and Clinical Competency Committee, and is not meant to demonstrate any required element or outcome.

Additional resources are available in the Milestones section of the ACGME website. Follow the links under “What We Do” atwww.acgme.org.

The diagram below presents an example set of milestones for one sub-competency in the same format as the ACGME Report Worksheet. For each reporting period, a resident's performance on the milestones for each sub-competency will be indicated by selecting the level of milestones that best describes that resident's performance in relation to those milestones.



Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth				
Level 1	Level 2	Level 3	Level 4	Level 5
Accepts responsibility for personal and professional development by establishing goals	Demonstrates openness to performance data (feedback and other input) in order to form goals	Seeks performance data episodically, with adaptability and humility	Intentionally seeks performance data consistently with adaptability and humility	Role models consistently seeking performance data with adaptability and humility
Identifies the factors which contribute to performance deficits	Analyzes and acknowledges the factors which contribute to performance deficits	Institutes behavioral change(s) to improve performance	Considers alternatives to improve performance	Models reflective practice
Actively seeks opportunities to improve	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Integrates performance data to adapt the learning plan	Facilitates the design and implementation of learning plans for others

Patient Care 1: Operative Management of Fractures and Dislocations				
Level 1	Level 2	Level 3	Level 4	Level 5
Develops a simple surgical plan, with assistance	Independently develops a simple surgical plan	Independently develops a surgical plan for core procedures that includes identification of potential challenges and technical complexities	Independently developsa surgical plan for complex procedures, including contingenciesfor complications	Independently plans and performs complex procedures, including management of peri-operative complications
Demonstrates basic surgical skills (e.g., wound closure) and assists with procedures	Performs surgical approach, with minimal assistance	Performs critical steps of core procedures, with assistance	Independently performs core procedures; performs complex procedures, with assistance	Independently performs critical steps of complex procedures
Identifies and reports simple complications	Manages simple complications	Identifies complex complications	Develops a plan for managing complex complications	Develops a plan an implements treatment of complex complications
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
				Not Yet Completed Level 1 ☐
				Not Yet Assessable ☐

Patient Care 2: Operative Management of Soft Tissue Pathology				
Level 1	Level 2	Level 3	Level 4	Level 5
Develops a simple surgical plan, with assistance	Independently develops a simple surgical plan	Independently develops a surgical plan for core procedures that includes identification of potential challenges and technical complexities	Independently developsa surgical plan for complex procedures, including contingenciesfor complications	Independently plans and performs complex procedures, including management of peri-operative complications
Demonstrates basic surgical skills (e.g., wound closure) and assists with procedures	Performs surgical approach, with minimal assistance	Performs critical steps of core procedures, with assistance	Independently performs core procedures; performs complex procedures, with assistance	
Identifies and reports simple complications	Manages simple complications	Identifies complex complications	Develops a plan for managing complex complications	
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
				Not Yet Completed Level 1 ☐
				Not Yet Assessable ☐

Patient Care 3: Operative Management of Degenerative, Infectious, and Neoplastic Conditions				
Level 1	Level 2	Level 3	Level 4	Level 5
Develops a simple surgical plan, with assistance	Independently develops a simple surgical plan	Independently develops a surgical plan for core procedures that includes identification of potential challenges and technical complexities	Independently developsa surgical plan for complex procedures, including contingenciesfor complications	Independently plans and performs complex procedures, including management of peri-operative complications
Demonstrates basic surgical skills (e.g., wound closure) and assists with procedures	Performs surgical approach, with minimal assistance	Performs critical steps of core procedures, with assistance	Independently performs core procedures; performs complex procedures, with assistance	
Identifies and reports simple complications	Manages simple complications	Identifies complex complications	Develops a plan for managing complex complications	
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
			Not Yet Completed Level 1	☐
			Not Yet Assessable	☐

Patient Care 4: Operative Management of Arthroscopically Treated Conditions				
Level 1	Level 2	Level 3	Level 4	Level 5
Develops a simple surgical plan, with assistance	Independently develops a simple surgical plan	Independently develops a surgical plan for core procedures that includes identification of potential challenges and technical complexities	Independently developsa surgical plan for complex procedures, including contingenciesfor complications	Independently plans and performs complex procedures, including management of peri-operative complications
Demonstrates basic surgical skills (e.g., wound closure) and assists with procedures	Performs surgical approach, with minimal assistance	Performs critical steps of core procedures, with assistance	Independently performs core procedures; performs complex procedures, with assistance	
Identifies and reports simple complications	Manages simple complications	Identifies complex complications	Develops a plan for managing complex complications	
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
				Not Yet Completed Level 1 ☐
				Not Yet Assessable ☐

Patient Care 5: Operative Management of Pediatric Conditions				
Level 1	Level 2	Level 3	Level 4	Level 5
Develops a simple surgical plan, with assistance	Independently develops a simple surgical plan	Independently develops a surgical plan for core procedures that includes identification of potential challenges and technical complexities	Independently developsa surgical plan for complex procedures, including contingenciesfor complications	Independently plans and performs complex procedures, including management of peri-operative complications
Demonstrates basic surgical skills (e.g., wound closure) and assists with procedures	Performs surgical approach, with minimal assistance	Performs critical steps of core procedures, with assistance	Independently performs core procedures; performs complex procedures, with assistance	
Identifies and reports simple complications	Manages simple complications	Identifies complex complications	Develops a plan for managing complex complications	
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				Not Yet Completed Level 1 ☐ Not Yet Assessable ☐

Patient Care 6: Evaluation and Management of the Adult Orthopaedic Patient				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains a patient history, performs a physical examination and developsa differential diagnosis for patients across clinical settings	Orders and interprets diagnostic testing and consultations based on patient evaluation	Synthesizes a plan to manage healthy patients with straightforward conditions, including operative and non-operative options	Synthesizes a comprehensive plan to manage patients with complex conditions and comorbidities	Develops a clinical pathway or guideline for the management of patients based on demonstrated clinical expertise
Manages patients with straightforward conditions, with direct supervision (e.g., fracture, arthritis)	Manages patients with straightforward conditions, with indirect supervision	Independently manages patients and adapts management plan for changing clinical situation	Leads an orthopaedic team in the managementof patients with complex conditions (e.g., periprosthetic femur fractures in the setting of osteoporosis and medical comorbidities, complex elbow instabilityin the obese patient)	Leads a multidisciplinary team in the management of patients with complex conditions
Recognizes and initiates work-up of emergent conditions (e.g. compartment syndrome, dysvascular limb, cauda equina syndrome)	Formulates and executes a stabilization plan for emergent conditions	Triages management of multiple emergent conditions	Leads an orthopaedic team in the managementof emergent conditions (e.g., polytrauma)	
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐

Comments:

☐ Not Yet Completed Level 1
☐ Not Yet Assessable

Patient Care 7: Evaluation and Management of the Pediatric Orthopaedic Patient				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains a patient history, performs a physical examination and develops a differential diagnosis for patients across clinical settings	Orders and interprets diagnostic testing and consultations based on patient evaluation	Synthesizes a plan to manage healthy patients with straightforward conditions, including operative and non-operative options	Synthesizes a comprehensive plan to manage patients with complex conditions and comorbidities	Develops a clinical pathway or guideline for the management of patients based on demonstrated clinical expertise
Manages patients with straightforward conditions, with direct supervision (e.g., fracture, arthritis)	Manages patients with straightforward conditions, with indirect supervision	Independently manages patients and adapts management plan for changing clinical situation	Leads an orthopaedic team in the management of patients with complex conditions (e.g., persistent spine infection after pedicle screw instrumentation in a malnourished patient)	Leads a multidisciplinary team in the management of patients with complex conditions
Recognizes and initiates work-up of emergent conditions (e.g. compartment syndrome, dysvascular limb, cauda equina syndrome)	Formulates and executes a stabilization plan for emergent conditions	Triages management of multiple emergent Conditions	Leads an orthopaedic team in the management of emergent conditions (e.g., polytrauma)	
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
				Not Yet Completed Level 1 ☐
				Not Yet Assessable ☐

Medical Knowledge 1: Orthopaedic Clinical Decision Making				
Level 1	Level 2	Level 3	Level 4	Level 5
Articulates a methodology for clinicalreasoning Identifies resources to direct clinical decisions	Demonstrates clinical reasoning to determine treatment goals Selects and prioritizes relevant resources basedon scenario to inform decisions	Synthesizes information to make clinical decisionsfor straightforward conditions Integrates evidence- based information to inform diagnostic decisionmaking for straightforward conditions	Efficiently synthesizes information and integrates reflection to make clinical decisionsfor complex conditions Integrates evidence-based information to inform diagnostic decision making for complex conditions	Incorporates clinical reasoning to improve care pathways
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
				Not Yet Completed Level 1 ☐ Not Yet Assessable ☐

Medical Knowledge 2: Anatomy and Physiology of Musculoskeletal Conditions				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies anatomy and pathophysiology of straightforward conditions	Demonstrates knowledge of pathoanatomy, disease classification systems, and natural history for straightforward conditions	Applies knowledge of pathoanatomy and pathophysiology to explain the effects of surgical or non-surgical treatment on patient outcomes for straightforward conditions	Applies comprehensive knowledge of pathoanatomy and pathophysiology to treatment options and patient outcomes for complex conditions	Contributes to peer-reviewed literature on the varying patterns of disease presentation, natural history, and treatment options
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				Not Yet Completed Level 1 ☐ Not Yet Assessable ☐

Systems-Based Practice 1: Patient Safety and Quality Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of common patient safety events	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events (simulated or actual)	Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)	Actively engages teams and processes to modify systems to prevent patient safety events
Demonstrates knowledge of how to report patient safety events	Reports patient safety events through institutional reporting systems (simulated or actual)	Participates in disclosure of patient safety events to patients and families (simulated or actual)	Discloses patient safety events to patients and families (simulated or actual)	Role models or mentors others in the disclosure of patient safety events
Demonstrates knowledge of basic quality improvement methodologies and metrics	Describes local quality improvement initiatives	Participates in local quality improvement Initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses quality improvement initiatives at the institutional or community level
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
				Not Yet Completed Level 1 ☐

Systems-Based Practice 2: System Navigation for Patient-Centered Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of care coordination	Coordinates care of patients in routine clinical situations effectively using the roles of the interprofessional teams	Coordinates care of patients in complex clinical situations effectively using the roles of their interprofessional Teams	Role models effective coordination of patient-centered care among multidisciplinary teams	Analyzes the process of care coordination and leads in the design and implementation of improvements
Identifies key elements for safe and effective transitions of care and hand-offs	Performs safe and effective transitions of care/hand-offs in straightforward clinical situations	Performs safe and effective transitions of care/hand-offs in complex clinical situations	Role models and advocates for safe and effective transitions of care/hand-offs	Improves quality of transitions of care within and across health care delivery systems to optimize patient outcomes
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
Not Yet Completed Level 1 ☐				

Systems-Based Practice 3: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Describes basic health payment systems, including government, private, public, and uninsured care as well as different practice models	Describes how working within the health care system impacts patient care, including billing and coding	Analyzes how personal practice affects the system (e.g., length of stay, readmission rates, clinical efficiency)	Uses shared decision making in patient care, taking into consideration costs to the patient	Participates in advocacy activities for health policy
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
				Not Yet Completed Level 1 ☐

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates how to access and use available evidence, and incorporate patient preferences and values in order to take care of a straightforward condition	Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based care	Locates and applies the best available evidence, integrated with patient preference, to the care of complex conditions	Critically appraises and applies evidence even in the face of uncertainty and conflicting evidence to guide care, tailored to the individual patient	Coaches others to critically appraise and apply evidence for complex conditions; and/or participates in the development of guidelines
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
Not Yet Completed Level 1 ☐				

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth				
Level 1	Level 2	Level 3	Level 4	Level 5
Accepts responsibility for personal and professional development by establishing goals Identifies the strengths, deficiencies and limitations in one's knowledge and expertise	Demonstrates opennessto feedback and other input in order to inform goals Analyzes and reflects on the strengths, deficienciesand limitations in one's knowledge and expertise to design a learning plan, with assistance	Responds to feedback and other input episodically, with adaptability, and humility Creates and implements a learning plan to optimize educational and professional development	Actively seeks feedbackand other input with adaptability, and humility Uses ongoing reflection, feedback, and other input to measure the effectiveness of the learning plan and when necessary, improves it	Role models consistently seeking feedback and other input with adaptability and humility Coaches others on reflective practice
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments: Not Yet Completed Level 1 ☐				

Professionalism 1: Professional Behavior and Ethical Principles				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies and describes inciting events for professionalism lapses	Demonstrates insight into professional behavior in straightforward situations	Demonstrates professional behavior in complex situations	Recognizes situations that may promote professionalism lapses and intervenes to prevent lapses in self and others	Coaches others when their behavior fails to meet professional expectations
Demonstrates knowledge of the ethical principles underlying patient care (e.g., informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics)	Applies ethical principles in straightforward situations and takes responsibility for lapses	Integrates ethical principles and recognizes the need to seek help in complex situations	Recognizes and uses appropriate resources for managing and resolving ethical dilemmas (e.g., ethics consultations, literature review, risk management/legal consultation)	Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
				Not Yet Completed Level 1 ☐

Professionalism 2: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
Reliably arrives to clinical activities on time and describes strategies for ensuring timely task completion Responds promptly to requests or reminders to complete tasks and responsibilities	Performs tasks and responsibilities in a timely manner with appropriate attention to detail in straightforward situations Completes tasks and responsibilities without reminders	Prioritizes tasks and responsibilities in a timely manner with appropriate attention to detail in complex situations Proactively completes tasks and responsibilities to ensure that the needs of patients, teams, and systems are met	Recognizes barriers that may impact others' ability to complete tasks and responsibilities in a timely manner	Develops processes to enhance other's ability to efficiently complete patient care tasks and responsibilities
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments: Not Yet Completed Level 1 ☐				

Professionalism 3: Well-Being				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the importance of addressing personal and professional well-being (e.g., physical and emotional health)	Lists available resourcesfor personal and professional well-being Describes institutional resources that are meant to promote well-being	Discusses a plan to promote personal and professional well-being with institutional support Recognizes which institutional factors affect well-being	Independently developsa plan to promote personal and professional well-being Describes institutional factors that positively and/or negatively affect well-being	Creates institutional level interventions that promote colleagues' well-being Describes institutional programs designed to examine systemic contributors to burnout
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments: Not Yet Completed Level 1 ☐				

This subcompetency is not intended to evaluate a resident's well-being, but to ensure each resident has the fundamental knowledge of factors that impact well-being, the mechanisms by which those factors impact well-being, and available resources and tools to improve well-being.

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates respect and establishes rapport with patient and family (e.g., situational awareness of language, disability, health literacy level, cultural)	Establishes a therapeutic relationship in straightforward encounters	Establishes a therapeutic relationship in challenging encounters (e.g., shared decision making)	Facilitates difficult discussions to patients and families, (e.g., explaining complications, therapeutic uncertainty)	Coaches others in the facilitation of difficult conversations
Communicates with patients and their families in an understandable and respectful manner	Identifies barriers to effective communication (e.g., health literacy, cultural)	When prompted, reflects on personal biases while attempting to minimize communication barriers	Recognizes biases and integrates patient's viewpoint and autonomy to ensure effective communication	Mentors others in situational awareness and critical self-reflection
Demonstrates basic understanding of informed consent process	Answers questions about straightforward treatment plans, with assistance	Counsels patient through decision-making process for straightforward Conditions	Counsels patient through decision-making process for complex conditions	Counsels patient through decision-making process for uncommon conditions
☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐ ☐
Comments:				
				Not Yet Completed Level 1 ☐

Interpersonal and Communication Skills 2: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the value and role of each team member and respectfully interacts with all members of health care team	Communicates in a professional and productive manner to facilitate teamwork (e.g., active listening, updates in timely fashion)	Actively recognizes and mitigates communication barriers and biases with the health care team	Facilitates respectful communications and conflict resolution with the multidisciplinary health care team	Exemplar of effective and respectful communication strategies
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				
			Not Yet Completed Level 1	☐

Interpersonal and Communication Skills 3: Communication within Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Accurately records information in the patient record while safeguarding patient personal health information	Demonstrates accurate, timely, and efficient use of electronic health record to communicate with the health care team Uses appropriate communication methods (e.g., face-to-face, voice, electronic)	Concisely reports diagnostic and therapeutic reasoning while incorporating relevant outside data Respectfully initiates communications about concerns in the system	Independently communicates via written or verbal methods based on urgency and context Uses appropriate channels to offer clear and constructive suggestions to improve the system	Facilitates improved written and verbal communication of others Guides departmental or institutional communication around policies and procedures
☐	☐ ☐	☐	☐ ☐	☐ ☐

Comments:

Not Yet Completed Level 1 ☐

TABLE 1: REVENUE SOURCES FOR PROJECTED EXPENSES - DOCTORATE OF MEDICAL SCIENCES

	2024 Year 1	2025 Year 2	2026 Year 3	2027 Year 4	2028 Year 5	**Total**
Existing Funds [1]	$148,909					$148,909
Required New Public Funds [2]	0	$0	0	0	0	$0
1. State Funds						$0
2. Local Tax Funds (community colleges)						$0
Tuition and Fees [3]	$567,600	$893,426	$1,085,724	$1,263,862	$1,449,911	$5,260,523
Other Funding [4]						$0
1						$0
2						$0
3						$0
Total Revenue	$716,509	$893,426	$1,085,724	$1,263,862	$1,449,911	$5,409,432

[1] Funds from college auxiliary activities will be used to cover the shortfall in revenue during the first year of the program.

[2.] No new public funds are required.

[3] Tuition generation is based on the $710 per credit hour inflated at 2.5% per year. Fees are limited to the NU Online per credit hour fee of $35. and a UNMC 5% tax on online programs.

[4] N/A

NOTE: Where appropriate, show calculations and/or formulas that were used to project new revenue; e.g. number of new students projected multiplied by tuition and fees.

CCPE; 11/19/08

Tuition and Fees Calculation	Academic Year				
	2024	2025	2026	2027	2028
# FT students matriculating annually taking 31 CH	20	20	20	20	20
# FT year-2 students taking 9 CH		20	20	20	20
# PT students taking 18 CH year 2	10	15	20	25	30
# PT students taking 16 CH year 1		10	15	20	25
# PT students taking 6 CH year 3			10	15	20
CH generated	800	1230	1460	1660	1860
Tuition generated ($710/CH)	$568,000	$895,133	$1,089,078	$1,269,223	$1,457,695
NU online course fee @ $35/CH	$28,000	$43,050	$51,100	$58,100	$65,100
UNMC online program fee 5%	$(28,400)	$(44,757)	$(54,454)	$(63,461)	$(72,885)
Total Revenue	$567,600	$893,426	$1,085,724	$1,263,862	$1,449,911

Projecting 20 full-time students and 10 part-time students in AY 24, increasing part-time enrollment by 5 students per year until full enrollment of 30 part-time students per cohort is achieved in 2027.

TABLE 3: PROJECTED EXPENSES - DOCTORATE OF MEDICAL SCIENCES

	2024 Year 1		2025 Year 2		2026 Year 3		2027 Year 4		2028 Year 5		**Total**	
Personnel	**FTE**	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	**FTE**	**Cost**
Faculty [1]	2.5	$409,600	3	$498,560	3.25	$551,368	4.00	$689,210	4	$706,440		$2,855,178
Professional [2]												$0
Graduate assistants												$0
Support staff	1.5	$94,060	1.5	$104,304	2.00	$143,894	2.00	$147,491	2.5	$181,533		$671,282
Subtotal		$503,660		$602,864		$695,262		$836,701		$887,973		$3,526,460
Operating												
General Operating [3]		$195,449		$252,570		$264,631		$315,308		$309,806		$1,337,764
Equipment [4]		$0		$0		$0		$0		$0		$0
New or renovated space [5]		$0		$0		$0		$0		$0		$0
Library/Information Resources [6]						$0		$0		$0		$0
Other [7] Adjunct stipends		$17,400		$35,670		$54,810		$74,820		$95,700		$278,400
Subtotal		$212,849		$288,240		$319,441		$390,128		$405,506		$1,616,164
Total Expenses		$716,509		$891,104		$1,014,703		$1,226,829		$1,293,479		**$5,142,623**

[1] Includes a 1.0 FTE Program Director and 3 additional faculty. Salaries are inflated at 2.5% per year.

[2.] NA

[3] Includes additional funds for marketing and recruiting for the new program in the first four years as well as general office supplies, professional development, miscellaneous expenses.

[4] Program is delivered online, no new equipment needs are anticipated.

[5.] Program will be delivered online, no renovations or additional space is required.

[6] No new resources are anticipated.

[7] Some instruction will be provided by courtesy and adjunct faculty who will be paid stipends. Stipends are inflated at 2.5% per year.