

# **Dartmouth Health Advanced Practice Provider Postgraduate Programs Annual Report 2022 - 2023**







# **Dartmouth Health Advanced Practice Provider Postgraduate Programs**

# Annual Report 2022 - 2023

Postgraduate training for advanced practice providers (APPs) dates back to 1971. Currently, there are over 200 postgraduate programs at over 100 sites in the United States in a variety of medical specialties from primary care to neurosurgery. APP fellowships have been shown to increase job satisfaction and retention while decreasing recruitment and orientation times (1, 2). The United States Bureau of Labor and Statistics ranks nurse practitioners and physician assistants as the first and second fastest growing healthcare occupations with predicted growth of 45% and 27%, respectively, in the coming decade. (See Appendix A) Healthcare systems must prepare to attract, train, engage and retain this essential and growing healthcare provider workforce. Post-graduate APP training programs do just that. Dartmouth Health (DH) is leading in the area of APP training and engagement. DH offers 6 APP fellowships, 5 of which have earned national accreditation from the leading APP national accrediting bodies. Our fellowship programs have attracted a cohort of talented applicants, defining DH as an employer of choice for APPs. Our fellows engage in interprofessional learning, local, regional and national scholarly activity, quality and safety projects, and milestone guided didactic and clinical training. The APP fellowships support the DH commitment to ongoing professional, academic and leadership development of our APP and physician faculty. Continued support of these training programs will meet the current and growing need for training, engaging and retaining APPs in our system as well as enhance our national eminence as a leader for APP practice.

The mission of the Dartmouth Health Advanced Practice Provider (DH APP) fellowship programs is to provide postgraduate didactic and clinical education to APPs as they transition to practice. The DH APP fellowship program empowers APPs to establish safe, reliable and high-quality clinical practice that values diversity and is patient and family focused. Postgraduate APP education at DH promotes mission aligned, engaged APP practice that positively impacts the health system, patients and families and the community. Our mission is to guide, grow and enable DH APPs in the following ways:

## **Guide:**

- Prepare clinically outstanding APPs to advance health in the specialty of their choice
- Ensure continuous improvement through timely and relevant evaluation of the APP fellow, program leadership, curriculum and faculty
- Commit to the ongoing professional development and education of our workforce, including faculty and leadership development
- Foster a culture of lifelong learning

#### **Grow:**

 Serve as a model for future programs, both at Dartmouth Health and throughout the United States

- Provide a supportive structure for new and developing fellowship/residency programs that enables them to achieve national accreditation
- Utilize resources across Dartmouth Health to enhance the learner experience

#### **Enable:**

- Align educational and workforce initiatives of the APP postgraduate fellowships/residencies around the current and anticipated needs of our learners, patients, employees, the community and Dartmouth Health
- Encourage a positive "joy in work" culture that is learner, patient- and family-focused and embraces quality, safety, collaboration, diversity, equity, inclusion, belonging, meaningful work and work/life balance
- Inspire APPs to recognize Dartmouth Health as a system that promotes APP excellence and growth

### **BACKGROUND**

Advanced Practice Providers (APP) are vital members of the healthcare workforce and include Physician Assistants (PA) and Advanced Practice Registered Nurses (APRN.) Roles of the APRN include Nurse Practitioners (NP), Certified Nurse Midwives (CNM) and Certified Registered Nurse Anesthetists (CRNA.)

- Education/training of APPs:
  - o Prerequisites for PA and APRN school are highly variable.
  - The PA program is based on the medical model: 12 months of didactic teaching and 12 months of clinical training in these areas: Emergency Medicine, Surgery, Primary Care, Internal Medicine, Pediatrics, Women's Health, Psychiatry and elective rotations. Clinical hours amount to approximately 1800 hours.
  - The APRN program builds on the nursing model. The available tracks for NPs are Pediatrics, Adult/Gerontology, Acute Care, Psychiatry, Women's Health and Family. All APRNs must complete a master's or doctoral degree program and have advanced clinical training beyond their initial professional registered nurse (RN) preparation. Didactic and clinical courses prepare nurses with specialized knowledge and clinical competency to practice in primary care, acute care and long-term health care settings (American Association of Nurse Practitioners, 2023).
- Upon graduation and the successful passing of a board exam, an APP may enter into practice.
  - Graduates or practicing APPs may then pursue an optional specialty training postgraduate program (residency/fellowship programs) in most disciplines of medicine.
- APP Standards of practice:
  - o Both PAs and APRNs, once licensed, are able to prescribe, diagnosis and treat.
  - o At DH, NPs and PAs are often able to fill the same role.
  - The State of New Hampshire grants "full practice authority" for APRNs and "optimum team practice" for PAs.
- Current numbers of APPs at DH and projected growth rate
  - Number of APRNs in DH system: 496 and number of PAs in DH system: 220
  - 2023-2033 US Bureau of Labor Statistics projected growth for APPs (See Appendix A)

### ORGANIZATIONAL INFORMATION

The Office of APPs was established in 2021 and sits within the Center for Learning and Professional Development (CLPD). Positions in the Office of APPs are as follows:

- Chief APP Officer:
  - Dorothy Mullaney DNP APRN January 2022 June 2023 Debra Fournier MHCDS, MSN, APRN, ANP-BC, PHMNP-BC – interim. October 2023 – present National search – ongoing.
- Director of Professional Development for APPs: Cheryl Elinsky PA. January 2022-present.
- Accreditation Coordinator: Chris Dyke. May 2022-present

#### DARTMOUTH HEALTH APP POSTGRADUATE TRAINING PROGRAMS

Over the course of 12 months, the DH APP postgraduate programs provide structured training from dedicated faculty with an established curriculum to the learner with focus on safe, competent and compassionate care and as a member of an interprofessional team in a complex medical system. Additionally, postgraduates will develop research and teaching skills culminating in a presentation in a continuing medical education setting. Diversity, equity and inclusion are core values. Retaining the postgraduates within the DH system to support the financial well-being of the DH system is an important aim.

The current DH APP Postgraduate programs:

Program	APP Program Director	Physician Director*	Accrediting Body**
Cardiothoracic Surgery	Lisa Cotnoir PA	Jock McCullough MD	ARC - PA
	Chelsea Stoutenberg PA		
Otolaryngology	Matt McCabe PA	Sarah Seo MD	ARC - PA
Critical Care	Amelia Kerner PA	Matthew Roginski MD	ARC - PA
Hospice and Palliative	Lisa Stephens APRN	Max Vergo MD	APPFA
Medicine			
Neurology	Jillian Belmont DNP,APRN	pending	APPFA
	Jason Johns PA		
(Hospital Medicine)	Jessica Harris APRN	pending	
	Kerin Vadnais APRN		

<sup>\*</sup>The Physician Director partners with the APP Program Director, building interprofessional bridges between APPs and physicians and increasing provider satisfaction.

Program	Years in Existence	Number of Applicants	Number of Graduates	% Hired into Provider Positions
Cardiothoracic Surgery	8	77	15	69%
Otolaryngology	6	10	8	75%
Critical Care	5	92	8	63%
Hospice and Palliative Medicine	4	59	8	50%
Neurology	3	53	4	50%
(Hospital Medicine)	3	16	2	100%

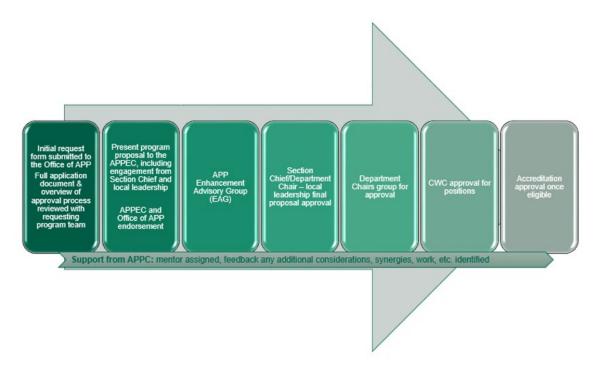
APPs and their teams from the following areas have expressed interest in developing a program:

NeonatologyGastroenterologyPrimary CareNeurosurgeryEmergency MedicineOrthopaedicsGeriatricsPain/Spine

Psychiatry Hematology/Oncology

#### PROCESS FOR NEW APP POSTGRADUATE PROGRAM APPROVAL

This process serves to provide an internal application process and was initiated to determine the readiness and feasibility of those APPs who have expressed interest in starting a program.



#### **ACCREDITATION**

While accreditation it is not a requirement for an APP postgraduate program, it is strongly encouraged that the DH APP postgraduate programs pursue accreditation within 2 years of their start date. The accrediting bodies utilized by the DH APP postgraduate programs are:

- The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA)
   "is the accrediting agency that protects the interests of the public and PA profession by
   defining the standards for PA education and evaluating PA educational programs within
   the territorial United States to ensure compliance."
   Postgraduate Accreditation ARC-PA
- The American Nurses Credentialing Center's accreditation: Advanced Practice Provider Fellowship Association (APPFA) "recognizes transition-to-practice programs for

physician assistants (PA) and APRNs. National advanced practice provider leaders collaborated to create this innovative credential using evidence-based criteria. Earning APPFA means your program demonstrates excellence in transitioning PAs and APRNs to new practice settings."

Advanced Practice Provider Fellowships Accreditation | ANA (nursingworld.org)

#### **EVALUATION PROCESS**

All APP postgraduate programs evaluate residents/fellows regularly through the residency management platform, MedHub. All programs provide formative and summative evaluations of fellows throughout the fellowship year. Evaluations are utilized to improve programs.

#### Examples:

- 1) Program Director and Faculty evaluation of resident/fellow
- 2) Resident/fellow evaluation of faculty
- 3) Resident/fellow evaluation of program

### INDIVIDUAL PROGRAM ACCOMPLISHMENTS

In a relatively short period of time, the DH postgraduate programs have achieved significant achievements and recognitions which are as follows:

- CT Surgery was the first DH APP postgraduate program to be accredited and is the only CT surgery program accredited by the ARC-PA. It is one of 5 CT Surgery programs in the country with graduates deemed highly valued and marketable. Example: a recent graduate was hired at University of California San Diego Health's Cardiothoracic Surgery Department as a "Senior Physician Assistant."
- Otolaryngology has demonstrated a high retention rate for several years in a row.
- Critical Care was the second DH APP postgraduate program to achieve accreditation.
   The program has demonstrated an increase in engagement and longevity of the existing APP staff.
- The Hospice and Palliative Medicine (HPM) Fellowship program demonstrates an innovative interprofessional fellowship and has been widely successful with graduates poised to provide team-based palliative care and meeting the quadruple aim of health care. Along with Neurology, HPM received accreditation with distinction from APPFA, the highest recognition awarded by the American Nurses Credentialing Center's Accreditation Program.
- The Neurology Fellowship program has demonstrated an increase in engagement and joy in work by the faculty. This program also demonstrated improved knowledge of APP scope of practice which has resulted in maximizing interdisciplinary team function and relationships with APPs. Along with HPM, Neurology received accreditation with distinction from APPFA, the highest recognition awarded by the American Nurses Credentialing Center's Accreditation Program.

### NATIONAL INVOLVEMENT AND SCHOLARLY ACTIVITY

While research/QI and presentations are a requirement of the postgraduate program learners, our learners and faculty have been involved at the national level and are pursuing advanced degrees. These accomplishments are as follows:

- Amelia Kerner PA has been named as a Commissioner to the American Nurse Credentialing Center's Commission on Accreditation for Practice Transition.
- o Kerin Vadnais APRN will be awarded DNP December 2023.
- Cheryl Elinsky PA participated in 2 panel discussions at the annual APP Postgraduate (APGAP)
   Conference October 2023:

Integrating DEI into APP Postgraduate Education
Perspectives and Considerations with Fellowship Growth and Expansion

- Maxwell Vergo, MD, FAAHPM and Lisa Stephens, MSN, APRN, ANP-BC, ACHPN, FPCN lead the DH HPM APP Fellowship and have both achieved fellow in Hospice and Palliative Medicine and Palliative Nursing respectively. Dr. Vergo has also achieved Distinguished Faculty and Lisa Stephens has achieved Faculty for Vital Talk (a national evidence-based communication skills training program). Maxwell Vergo MD and Lisa Stephens, APRN participate as faculty in the Northern New England Regional Fellowship retreats that occur 3 times per year.
- Hospice and Palliative Medicine (HPM) Faculty have achieved national eminence through Vital Talk communication training on the local, regional and national level as well as many publications and national presentations. Our faculty are also involved in national committees for the AAHPM and HPNA professional organizations. Our Section Chief and Interim Chair of Medicine, Kathryn Kirkland, MD, FAAHPM, was just awarded the 2023 National Compassionate Caregiver of the Year through the Schwartz Foundation.
- Vergo, M, Silvius, K, Stephens, L., LaVoie, J, Jolin, J, Wood, H. "Revolutionizing Interprofessional Fellowship Education with a Side-by-Side Post-Graduate Training Model," has been selected as a 15-Minute Podium Presentation for inclusion in the 2024 Annual Assembly of Hospice and Palliative Care, taking place March 20-23, 2024, in Phoenix, Arizona.
- Stephanie Krasinski, APRN, DNP (HPM APP Fellow) will be presenting this poster: "Mitigating moral distress when a patient dies from complications rather than the disease" at Poster Fair at the 2024 Greg Smith Palliative Care Summit.



### **EXIT SURVEY INFORMATION**

Data is collected from the fellows and residents at the time of program completion regarding their thoughts on the program as a whole. Examples of those remarks are as follows:

"Being an interdisciplinary fellowship program in which physicians and APPs....undergo the same training in communication and symptom management, and have the opportunity to learn from each other made this program so unique and valuable given the interdisciplinary nature of palliative medicine. It prepared me so well for my current position and I would recommend

"From my experience this program has grown and improved over the past 3 years. The program directors are very receptive to feedback and really work hard to incorporate suggestions to the program. The APPs and also the attendings are supportive of the program and try to facilitate learning in each rotation."

"I can't imagine transitioning to practice in a specialty field without a fellowship experience like this. I could not feel better supported by the faculty and feel as though I'm gaining the skills and confidence to leave the fellowship as an expert in the field, and ready to hit the ground as an efficient, well-prepared provider."

"Overall this is a strong program which is only a few years into its development and which will continue to improve with time. The developers of the program are passionate about education and invested in their fellow's competency, well-being, and futures."

"This program successfully bridged the gap between my degree program and career as a new APRN. The exposure to all different subspecialties of neurology, experts in the field, as well as professional development opportunities exceeded my expectations. There were adequate opportunities to pursue individual interests within neurology. I anticipate the program growing and adapting with each year and group of fellows. I hope more of these programs become available to APPS to meet our high personal/career aspirations and evolving practice capabilities."

# **APP POSTGRADUATE PROGRAM FINANCES**

Program Cost/ Fellow		Additional Program Costs	Office of APP Costs and Resources			
Salary	\$71,400	APP Program Director FTE 0.15	Accreditation dues			
Benefits	\$25,000	Medical Director FTE 0.05	MedHub analyst			
Licenses,	DEA		APP Accreditation Coordinator			
			Director of Professional Development for APPs			

#### RETURN ON INVESTMENT

Graduates of APP postgraduate programs have been shown to be more confident and competent than those who did not participate in a postgraduate program (3) and thereby decrease the burden on current staff. Return on investment also includes retaining and integrating the postgraduates within the DH system and elevating DH as an employer of choice for APPs. Additionally, the programs have been shown to increase job satisfaction of those APP and physician providers involved with the programs. Our programs also demonstrate increase in collaboration with teams in a complex medical system. As compared to new entry-level new graduates, evidence demonstrates that postgraduates are more productive (1) and on average remain in the system for longer periods of time. Note, Sullivan Cotter shows that the cost of replacing an APP can be as high as \$250,000.

#### **FUTURE DIRECTIONS**

While the APP postgraduate programs are demonstrating success and enthusiasm, there are specific areas where attention, focus and support will be necessary. These areas are as follows:

Institutional support: Increased funding for administrative support and resources will ensure consistency and standards across all of the programs.

Culture of APP learning: The program directors are committed to an increase breadth and depth of learning opportunities with the goals of inspiring others APPs. Learning opportunities will include simulation-based activities, shared learning experiences such as DEIB events, establishing junior and senior levels within the programs and increased opportunities for interprofessional education.

Program expansion: Those involved with the APP postgraduate programs look forward to an increase in numbers of the programs with a centralized leadership structure and program coordinator positions.

In summary, the DH APP Postgraduate Programs have been widely successful and are proving to contribute to the APP workforce here at DH and afar. Future programs will benefit from these successes which will have a powerful impact on provider satisfaction and patient outcomes.

# **Appendix A: Projections for APPs 2021-2031**





**APRIL 2023** 

# Occupational projections overview, 2021-31

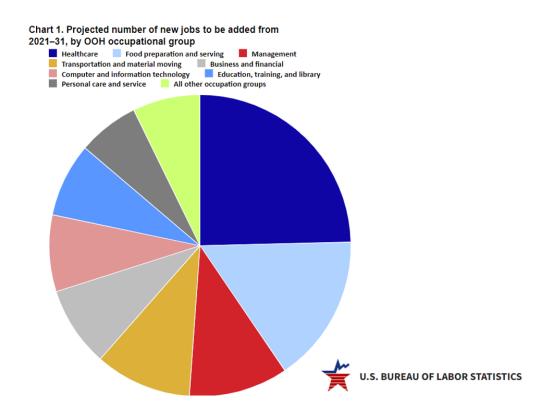


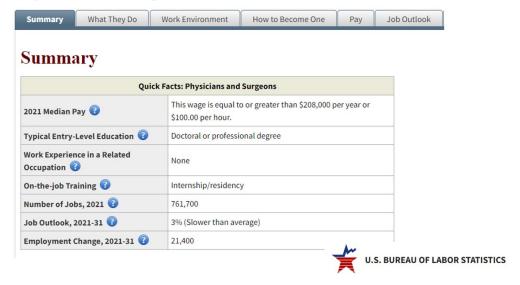
Table 2. Top five fastest growing occupations within healthcare occupations, 2021 and projected 2031

Occupation		Employment		Change (2021–31)		Median annual wage, 2021 [1]	Typical education needed for entry
		2021 2031		Number Percent			
Total, all occupations	00-0000	158,134.7	166,452.1	8,317.4	5.3	\$45,760	[2
Healthcare	29-0000 and 31-0000	16,254.2	18,303.2	2,049.1	12.6	47,070	[2
Nurse practitioners	29-1171	246.7	359.4	112.7	45.7	120,680	Master's degre
Physician assistants	29-1071	139.1	177.5	38.4	27.6	121,530	Master's degre
Physical therapist assistants	31-2021	96.5	122.1	25.6	26.5	61,180	Associate's degre
Home health and personal care aides	31-1120	3,636.9	4,560.9	924.0	25.4	29,430	High school diplom or equivaler
Occupational therapy assistants	31-2011	43.4	54.5	11.0	25.4	61,730	Associate's degre

<sup>[1]</sup> Data are from the Occupational Employment and Wage Statistics program, U.S. Bureau of Labor Statistics. Wage data cover nonfarm wage and salary workers and do not cover the self-employed, owners and partners in unincorporated firms, or household workers.

Note: Employment numbers are in thousands. Details may not sum to totals because of rounding. Source: U.S. Bureau of Labor Statistics, Employment Projections program.

# Physicians and Surgeons



<sup>[2]</sup> This entry is not applicable.

# **References:**

- Grabenkort, W. Robert, et al. "Acute Care Nurse Practitioners and Physician Assistants in Critical Care: Transforming Education and Practice." *Critical Care Medicine*, Vol. 45, No. 7, 2017, pp. 1111–14, https://doi.org/10.1097/CCM.000000000002536.
- 2. Will, Kristen K., et al. "Perceived Efficacy and Utility of Postgraduate Physician Assistant Training Programs." *Journal of the American Academy of Physician Assistants*, Vol. 29, No. 3, 2016, pp. 46–48, https://doi.org/10.1097/01.JAA.0000480569.39885.c8.
- 3. Ricker, M., et al. "Advanced Practice Provider Onboarding Support Model Comparison: Is there a superior choice?" *Internet Journal of Allied Health Sciences and Practice*, Vol. 19, No. 3, 2021, <a href="Advanced Practice Provider Onboarding Support Model Comparison: Is there a Superior Choice?" (nova.edu)</a>