



# Leadership and Education for Advanced Practice Providers in Cystic Fibrosis (LEAPP CF)

## The Post Graduate Fellowship Pilot

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### PURPOSE

The Leadership and Education for Advanced Practice Providers (LEAPP) post-graduate fellowship aims to fill a gap in the Cystic Fibrosis (CF) provider workforce and accelerate the progression from novice to competent provider through mentoring and a CF curriculum.

### BACKGROUND

Cystic Fibrosis is a complex condition with a growing population that requires specialized care. Many Cystic Fibrosis Centers have experienced challenges maintaining the provider workforce due to the shortage of pediatric and adult pulmonologists trained in CF care. There is an increasing number of persons with CF (PWCF) as a result of newborn screening and a growing adult CF population. Advanced Practice Providers (APPs), Nurse Practitioners (NPs) and Physician Assistants (PAs) have been providing high quality CF care and leadership for decades and have the potential to fill this gap. APPs are well suited to provide the specialized, comprehensive care within multidisciplinary teams for PWCF. However, most learn CF care on the job without specialized training or mentorship and face barriers to advancement and full scope of practice.

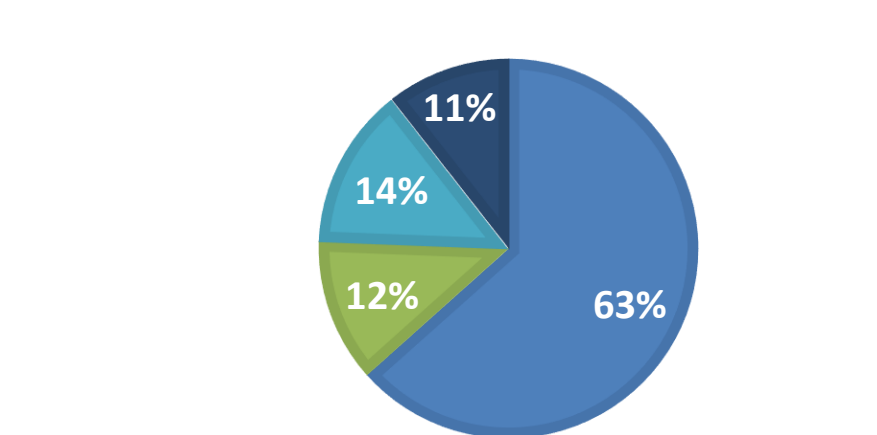
### APP TASK FORCE

In 2018, the CF Foundation (CFF) convened a task force to evaluate the workforce and make recommendations to address barriers to the full integration of APPs in CF care. A survey of CF Program Directors (PD) and APPs was conducted, and data collected from 107 APPs (90 NPs, 13 PAs 4 APNs) and 124 PDs.

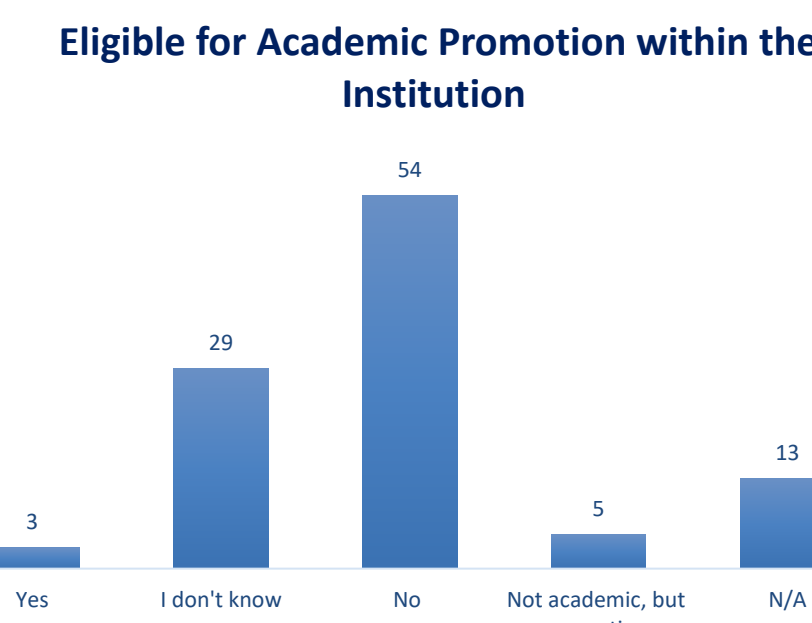
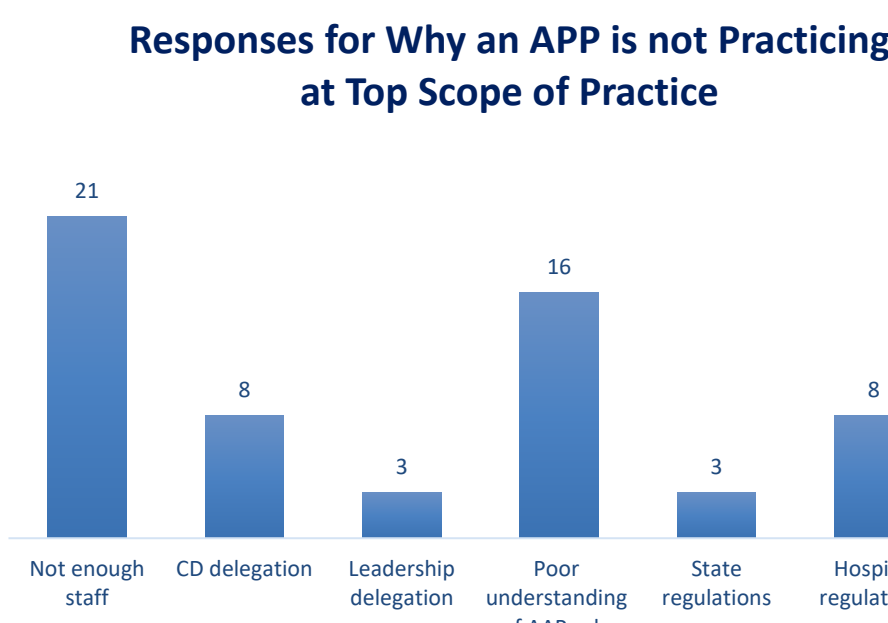
### Survey Results: CF Provider Workforce

Physician Workforce 2009 and 2018	2009	2018
Programs Recruiting Physicians	39%	56%
Difficulties Recruiting Physicians	81%	80%

PRESENT AND FUTURE APP EMPLOYMENT



### Survey Results: Barriers to Full Integration of APPs in CF Care



### Key Survey Findings

- Most CF centers were having difficulty filling physician vacancies
- APPs were employed at a growing majority of CF centers
- Almost all APPs learned CF on the job
- Most APPs were involved in leadership or research activities
- Many APPs experienced barriers to full scope of practice and professional advancement

### TASK FORCE RECOMMENDATIONS

1. Establish an APP post-graduate training program in CF
2. Build a comprehensive CF curriculum
3. Enhance Partnerships to Support Full Scope of APP Practice



### LEAPP-CF FELLOWSHIP AT-A-GLANCE

#### Fellows (10 NPs and 3 PAs):

- Novice APP or experienced APP new to CF
- Cystic Fibrosis Foundation Fellow Award of 30% FTE for 2 years allows protected time for coursework and mentored CF care

#### Clinical Practice Mentorship:

- Experienced CF provider in home CF Center

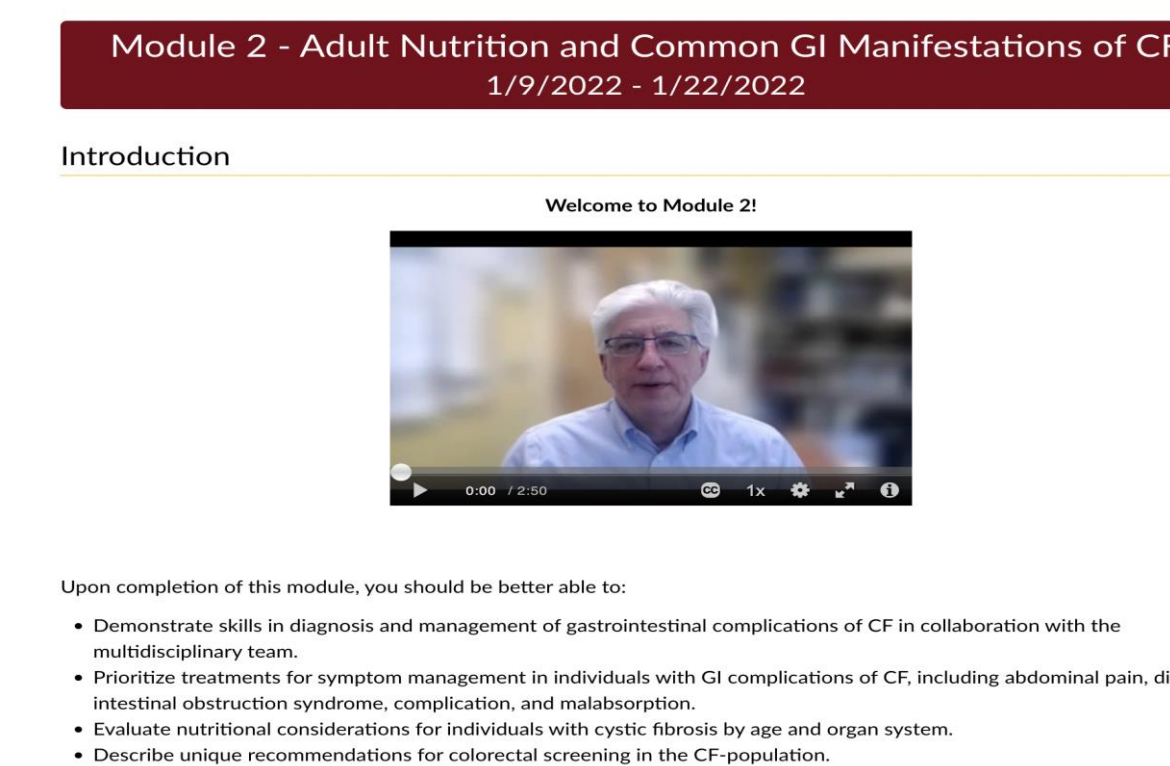
#### Professional Mentoring:

- Small groups discussions led by experienced CF APP

### CURRICULUM

- Four courses comprised of 10-12 two-week modules.
  - Courses 1-3: Clinical care of CF
  - Course 4: Guided quality improvement project
  - Leadership curriculum integrated in to courses 3 and 4
- Courses hosted on the CANVAS LMS platform
  - Partnership with University of Minnesota School of Nursing
  - Employs adult learning principles and best practices for course design and evaluation

### Canvas LMS Online Module Page



### CURRICULUM CONT.

#### Flipping the Classroom



- **Class Next:**
  - Synchronous. Live or virtual case discussion and problem solving with topic experts.

### EVALUATION

#### Fellows:

- Self-assessment of CF competencies and learning needs at baseline, mid-fellowship, and end of fellowship
- Clinical mentor assessment of fellow competencies at baseline, mid-fellowship, and end of fellowship
- Knowledge self-checks for content mastery in each module

#### Curriculum and Program:

- Module and course-level evaluations (ease of completion, ability to meet objectives, quality of content and instruction)
- Mid-program survey of fellows and mentors to evaluate progress and identify areas for improvement

### RESULTS

- The program has been well-received by fellows and mentors, with high scores for quality and satisfaction
- Fellow self assessment of competencies and knowledge assessments at baseline indicate opportunities for CF-specific development in the program

### DISCUSSION

- LEAPP has the potential to boost the CF provider workforce and improve access to specialized care for persons with CF.
- LEAPP provides fellows with the opportunity to grow professionally through accelerated mastery, leadership and quality improvement training, and mentoring.
- Partnership with University of Minnesota ensures quality and best practices for adult learning
- Flexibility and adaptability was essential during development and implementation during the pandemic
- Rapidly changing CF care with highly effective medications requires up-to-the-minute content expertise
- LEAPP format could be replicated for other complex chronic conditions that require specialized care.

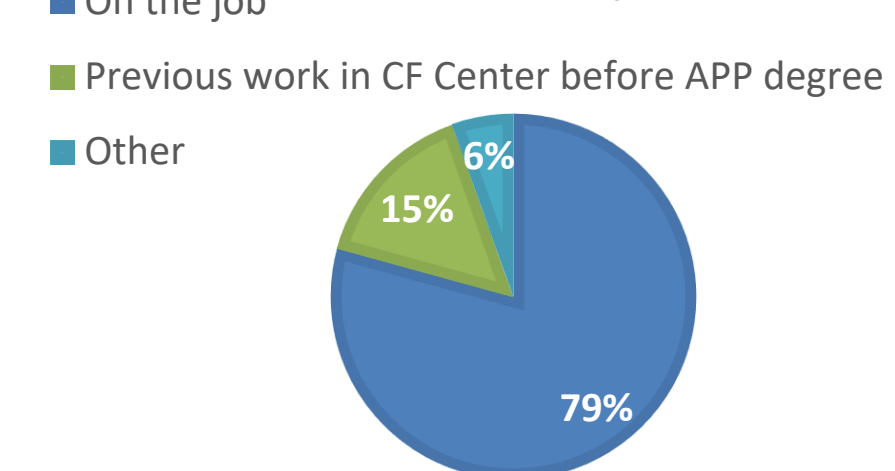
### NEXT STEPS

- Address barriers to full scope of APP practice and professional advancement to improve career satisfaction and retention.
- Evaluate pilot to refine the program

### ACKNOWLEDGEMENTS

- The LEAPP-CF program is funded by the Cystic Fibrosis Foundation
- Designed by : Marisol Hartshorn | Children's Respiratory and Critical Care Specialists (CRCCS)
- TM: Goldy Gopher official mascot of University of Minnesota Twin Cities.

### TRAINING FOR APPS IN CF (2018 APP SURVEY)



### Leadership Roles

