

CASE STUDY

How Atrium Health Established a System-Wide APP Training Fellowship

Building a pipeline of well-trained APPs to support workforce needs

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Overview

The challenge

Most health care organizations do not have centralized APP training programs in place, leaving it up to individual physicians to train APPs as they see fit. This takes valuable time away from physicians and results in inconsistent training that varies in length and quality.

The organization

Atrium Health is an integrated not-for-profit health system based in Charlotte, North Carolina with over 3,100 providers at 36 hospitals and 900 care sites.

The approach

Atrium Health created a year-long, centralized APP fellowship program to prepare APPs for top-of-license practice and meet the system's workforce needs. Atrium Health established a core APP skillset that's consistent across the system and continues to support APPs with additional education once they begin practicing.

The result

Atrium Health has reduced their turnover rate to just 5% and also seen significant productivity gains from their fellowship program. For example, in critical care, APP fellowship graduates out-bill non-fellowship graduates by 42%.

Approach

How Atrium Health developed their APP fellowship program

Atrium Health recognized the need to create a more formalized training program for APPs that supported the organization's workforce planning and strategic priorities. They developed a system-wide, in-depth fellowship that prepares APPs to fill top-of-license roles across the organization.

The four steps

Leaders at Atrium Health built out their APP training fellowship in four steps:

01 Tailor specialty tracks to fill workforce needs

02 Structure curriculum around defined APP role

03 Embed APPs in practices for hands-on training

04 Support retention with ongoing education

Source: Advisory Board interviews and analysis.



FOUR STEPS TO ESTABLISH AN APP FELLOWSHIP

01 Tailor specialty tracks to fill workforce needs

Atrium Health's "Advanced Practice Provider Fellowship" is a year-long, paid, post-graduate program that prepares APPs for top-of-license practice. It is specialty-specific and intended to complement the education that APPs received in school. One of Atrium Health's goals for this fellowship is to build out an APP workforce that meets the system's projected needs. Atrium Health does this by investing heavily in workforce planning to inform recruitment for the fellowship.

1. Project workforce needs at the system level

Atrium Health begins their workforce planning by projecting needs at the system level. To aid this process, they use a third party tool to run a financial analysis and calculate projected volumes. Based on anticipated future demand, Atrium Health estimates how many APPs they need to hire and staff across the entire system to keep up with patient demand in their market.

2. Assess need for APPs at the specialty level

Because these projections often vary across specialties, Atrium Health layers on additional workforce planning across their ten major service lines. This helps leaders identify where they need to grow their APP workforce in specific areas—and to do so as one coordinated organization.

Each service line develops a workforce plan that details their projected APP needs. Leaders also complete a "provider requisition form" for all hiring decisions that's reviewed by a central team. Atrium Health has 900 care sites so this centralized planning helps ensure that APP hiring is coordinated, consistent, and ultimately supporting the system's larger workforce strategy.

Source: Wilcox M et al, "The Lifecycle of the Advanced Clinical Practitioner", *Nurse Leader*, April 2015. [https://www.nurseleader.com/article/S1541-4612\(15\)00016-6/pdf](https://www.nurseleader.com/article/S1541-4612(15)00016-6/pdf). Advisory Board interviews and analysis

APPROACH – STEP 1

Use workforce projections to scale fellowship tracks up, down

Atrium Health's workforce planning is an ongoing process with 1-year, 3-year, and 5-year projections reviewed annually. This constant review of anticipated needs gives them insight into the specialties where they need to grow their APP workforce, where they need to scale down, and where they currently have the right mix of providers. This helps to inform which specialty tracks Atrium Health should expand, contract, or suspend in the fellowship in any given year.

Since one of Atrium Health's goals is to use this fellowship to build out their future workforce, they prioritize recruiting and training APPs in the specialties where they have projected workforce gaps. They open up more fellowship slots in specialties where they need to grow their workforce by shifting fellowship slots from specialties that have fewer anticipated employment needs. This allows the fellowship to reallocate internal resources and remain budget neutral.

Recruit fellows to meet projected workforce needs

Atrium Health's workforce planning allows for a smooth recruitment process by determining ahead of time the number of APPs they need to recruit into each specialty track. Across their six-month recruiting process, recently graduated APPs apply to the specialty track of their choosing. The Medical Director and APP Director of each specialty then select four applicants to interview for every open spot. After the interview process, 40-45 APPs are chosen to participate in the fellowship program, across all open specialties.

Overall, this fellowship has been an effective recruiting tool for Atrium Health. They receive over 300 applications a year and 75% of their applicants are from the top 15 APP schools nationwide.

300%

Increase in applications from year one to year two of fellowship program

FOUR STEPS TO ESTABLISH AN APP FELLOWSHIP

02 Structure curriculum around defined APP role

After completing workforce planning, Atrium Health turned their attention to clearly defining the APP role. Atrium Health aims to use this fellowship to build a consistent, top-of-license APP workforce across the entire system so they structure their training curriculum around a clear definition of the APP's job description and skillset. Atrium Health established both system-wide and specialty-specific core competencies that serve as the foundation for the APP role and fellowship training.

Define competencies at the system and specialty level

Atrium Health started with their system-wide core competencies. This set of skills applies to all fellows regardless of their specialty. To develop this list, Atrium Health reviewed the competencies for resident physicians and determined which ones should apply to APPs too. However, they didn't want the fellowship to simply repeat everything that the fellows had already learned in school, so they conducted a formal gap analysis to determine where APPs needed additional training to expand on their knowledge. They used this information to form a comprehensive curriculum that builds upon existing APP training. It's centered around a clear definition of what it means to be an APP at Atrium Health and prepares APPs to work at top-of-license.

Atrium Health developed a set of six core competencies that encompass their expectations for its APP workforce: patient care, medical knowledge, system-based care, problem-based learning, professionalism, and communication. All APPs are expected to master these competencies by the end of the fellowship. Atrium Health also developed an additional 10-12 competencies specific to each specialty track.

Source: Advisory Board interviews and analysis.

APPROACH – STEP 2

Atrium Health's six core competencies for all APPs

Core competency	Brief description
Patient care	Develop comprehensive differential diagnosis and manage patient with progressive responsibility
Medical knowledge	Has sufficient medical knowledge in specialty area; Select and prescribe appropriate pharmacotherapeutics
System-based care	Work effectively in inter-professional team; Able to coordinate care across system
Problem-based learning	Demonstrate self-awareness and accept formative evaluations; Able to incorporate feedback in their practice
Professionalism	Demonstrate ethical behavior and respect patients, caregivers, and team members
Communication	Communicate appropriately with patients, caregivers, and team members; Communicate effectively through EHR

A full version of this artifact is on page 14.

Routinely assess APP competencies and skill gaps

Atrium Health's competency development and skill-gap analysis aren't just a one-time exercise—they're reassessed every year. A steering committee, led by the Medical Director and APP Director of each specialty, reviews the skills that fellows are coming in with and pinpoints where there are gaps in their academic training. This committee meets quarterly to check in about the fellowship and dedicates time once a year to review the system's core competencies.

By routinely assessing APP competencies in this way, Atrium Health ensures that their training program adequately prepares fellows for top-of-license practice year after year. And because all fellows are expected to master the same six core competencies, Atrium Health has set a clear standard for their APP workforce across the entire system.

Source: Advisory Board interviews and analysis.

FOUR STEPS TO ESTABLISH AN APP FELLOWSHIP

03 Embed APPs in practices for hands-on training

Atrium Health's year-long fellowship is specifically designed to transition APPs to practice autonomously so that they're ready to work as providers from day one. Atrium Health gradually increases the autonomy that APPs exercise across their training—allowing fellows to shift into their full-time roles in the final three months in the program while maintaining their academic work required for the fellowship.

Incrementally increase hands-on training

Atrium Health trains their fellows across a one-year timeline that's focused on gradually ramping up hands-on practice. For the first three months of their training, fellows spend a significant amount of time in didactics, simulated cases, and preceptorship. Across the next three months, they ramp up clinic-based preceptorship while scaling back on didactics. During preceptorship, the fellows work side-by-side with an experienced APP in their specialty. In the beginning, the fellows primarily shadow their assigned preceptor, but as their training progresses, fellows eventually take on the provider role with their preceptor observing them.

The fellow's final three months are spent primarily in the clinical setting that the fellow will transition into for permanent employment. During those months, fellows are staffed in the practice where they'll be working following graduation (pending a job offer) so that they can get to know the care team and daily workflows. Similar to a physician residency program, APPs are well integrated and serving as providers, though they're technically still in "training."

27%

Increase in general clinical knowledge among first cohort of APPs after three months in Atrium Health's program¹.

1. Based on APPs' self-evaluations.

Source: Wilcox M et al. "The Lifecycle of the Advanced Clinical Practitioner", Nurse Leader, April 2015. [https://www.nurseleader.com/article/S1541-4612\(15\)00016-6/pdf](https://www.nurseleader.com/article/S1541-4612(15)00016-6/pdf); Advisory Board interviews and analysis

APPROACH – STEP 3

Equip APPs to practice as providers on day one

At the one-year mark, all APPs graduate from the fellowship program. While not all fellows receive a job offer, most do, and more than 70% end up accepting them—a higher job offer acceptance rate than the system's physician residents. Those APPs who accept their offers continue to work for the system in the practices and specialties in which they were trained. In this way, Atrium Health's fellowship ensures that APPs are trained for the specific roles that they'll be filling across the system.

In contrast to other training programs, Atrium Health's fellows are prepared to start practicing autonomously from day one. By the time they've graduated, they've already been credentialed, privileged, and trained—and working in their assigned role for the past three months. Because Atrium Health has invested so heavily in training fellows with their end role in mind, they've found that APPs who complete the program are more efficient and productive. For example, fellowship graduates in critical care out-bill non-fellowship graduates by 42%.

FOUR STEPS TO ESTABLISH AN APP FELLOWSHIP

04 Support retention with ongoing education

Education doesn't end at the one-year mark for Atrium Health's APPs. Atrium Health provides them with ongoing support through their Center for Advanced Practice (CAP), a centralized resource specifically dedicated to retaining APPs.

Provide opportunities for further training and education

CAP is Atrium Health's primary method for supporting APPs across the system and ensuring their workforce remains engaged. The center provides APPs with access to specialty-specific education, mentorship, and professional development on an ongoing basis. It also supports team-based care by facilitating clear communication between APPs, physician medical staff, and system leadership.

The support provided by the CAP is also bolstered by the natural sense of community created by Atrium Health's fellowship program. It provides each cohort of fellows with a support network of APPs at similar points in their careers.

“

CAP recognizes the unique needs APPs have when they transition to practice. The purpose of the center is to create and sustain a sense of community.”

Atrium Health
Center for Advanced Practice

Source: Wilcox M et al, "The Lifecycle of the Advanced Clinical Practitioner", Nurse Leader, April 2015, [https://www.nurseleader.com/article/S1541-4612\(15\)00016-6/pdf](https://www.nurseleader.com/article/S1541-4612(15)00016-6/pdf); Advisory Board interviews and analysis

APPROACH – STEP 4

Reduce APP turnover with long-term support

Atrium Health's efforts to provide APPs with ongoing support and training after graduating from the fellowship has resulted in a noticeable decline in their APP turnover rate. Before instituting the fellowship in the fall of 2013, Atrium Health's average turnover rate was 12% annually. By September 2014, the turnover rate hit 8%, and by 2018, turnover was down to 5% consistently.¹ The sense of community and engagement created by the fellowship as well as the continued support from CAP helps Atrium Health retain APPs long-term. 70% of fellows accept job offers to work at Atrium Health after they graduate and 93% of fellows who accepted positions within the system remain employed after three years.

While these additional investments in engagement and retention are often viewed as optional, they're essential to ensuring that Atrium Health sees ROI from their fellowship program. It requires a significant investment to fund the training and compensation for APP fellows year-after-year, so it's crucial that the system retain them to realize their full value.

70%

Of fellows accept job offers to work at system after fellowship program

93%

Of fellowship graduates retained after 3+ years

1. According to Advisory Board's Integrated Medical Group Benchmark Generator, the average turnover rate for APPs nationally is 10%.

Source: Wilcox M et al. "The Lifecycle of the Advanced Clinical Practitioner", *Nurse Leader*, April 2015. [https://www.nurseleader.com/article/S1541-4612\(15\)00016-6/pdf](https://www.nurseleader.com/article/S1541-4612(15)00016-6/pdf); Integrated Medical Group Benchmark Generator, Advisory Board; Advisory Board interviews and analysis

Results

Fellowship improves APP retention and productivity

Implementing an APP fellowship has improved Atrium Health's APP retention and engagement. In addition, Atrium Health's APP turnover rate has significantly decreased since beginning the fellowship and introducing the CAP.

25% Increase in APP engagement

5% Turnover APP rate¹

42% Rate at which APP fellowship graduates in critical care out-bill non-fellowship graduates

Overall, the fellowship has resulted in significant gains for the system due to improved productivity and increased retention of APPs—a lower cost, essential member of the care team. ▶

1. According to Advisory Board's Integrated Medical Group Benchmark Generator, the average turnover rate for APPs nationally is 10%.

Source: Wilcox M et al. "The Lifecycle of the Advanced Clinical Practitioner", *Nurse Leader*, April 2015. [https://www.nurseleader.com/article/S1541-4612\(15\)00016-6/pdf](https://www.nurseleader.com/article/S1541-4612(15)00016-6/pdf); Integrated Medical Group Benchmark Generator, Advisory Board; Advisory Board interviews and analysis

Supporting artifact(s)

Atrium Health's APP Core Competencies

Patient Care

- Demonstrates ability to gather essential and accurate information. Performs appropriate history and physical exam synthesizing information and findings using appropriate resources to define objectives of the patient encounter.
- Able to organize and prioritize presenting problems, data and findings to develop a comprehensive differential diagnosis and management plan.
- Manages patient with progressive responsibility, able to appropriately selected and interpreted diagnostic testing based on patient presentation.

Medical Knowledge

- Appropriately selects, performs and interprets procedures specific to the specialty. Understands, avoids and identifies potential complications.
- Selects and prescribes appropriate pharmacotherapeutics based on mechanism of action, intended effects and possible adverse reactions and interactions.
- Demonstrates sufficient breadth and depth of medical knowledge in specialty area. Applies critical thinking in patient care.

System-Based Care

- Works effectively in an interprofessional team.
- Demonstrates the ability to coordinate care across the system ensuring cost conscientious, safe, effective patient care.

Problem-Based Learning

- Demonstrates self-awareness and ability to identify strengths, weaknesses and deficiencies in her own knowledge. Accepting of formative evaluations and the ability to incorporate feedback in their practice.

Professionalism

- Demonstrates professional conduct, ethical behavior and accountability. Accepts responsibility and follows through with tasks. He has respectful interactions with patients, caregivers and members of the interprofessional team.

Communication

- Communicates appropriately with patients, caregivers, and members of the interprofessional team. Communicates effectively and timely through the electronic health record.

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Project director

Eliza Campbell

campbele@advisory.com
202-568-7908

Sarah Hostetter

hostetts@advisory.com
202-909-4162

Research analyst

Gillian Hughes

Program leadership

Sarah Evans

Megan Clark

Steven Berkow, JD

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