# Lessons From Starting a New Subspecialty in a Rural State

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#### Abstract

In starting a new pediatric rheumatology service in a rural state, we designed the practice to focus on patient access, patient quality, and patient experience. We created a clinical experience that starts with an intake call to optimize the face-to-face visit. A team-based care approach is used. Weekend appointments are offered to avoid school and work absence. The social determinants of health are addressed. In our first year, our patients have reported their appreciation for a high-touch, patient-centered experience.

#### Keywords

access to care, clinician-patient relationship, patient satisfaction, pediatrics, relationships in healthcare, service excellence

#### Introduction

Pediatric rheumatology is a small subspecialty consisting of less than 500 physicians across the United States. Not only is there a shortage of doctors, but there is an unequal distribution such that 10 states have no pediatric rheumatologists (1). With an estimated 294 000 children with juvenile idiopathic arthritis (JIA) in the United States (2), families typically endure long-distance travel and several weeks of waiting for an appointment.

West Virginia is primarily a rural state with communities spread across a mountainous geography. With no pediatric rheumatologists in the state previously, families either drove several hours to neighboring states or were unable to access care. This is problematic in the case of JIA because delayed diagnosis and treatment can result in permanent joint damage and long-term disability (3). With the opportunity to build a new program, we wanted to design something that provided excellence in access, patient experience, and quality care.

# Description

In our particular case, one barrier to access is the pediatric rheumatologist has clinic hours available for just 12 hours per week due to other commitments working on quality improvement. It is estimated that 1 full-time pediatric rheumatologist is needed to support a population of 1 million people. With West Virginia's population almost 2 million, the ideal would be to have clinic hours in the range of 60 to 80 hours weekly. For us to be able to hit our aims of excellent access, quality, and experience, with only 12 hours weekly to work with, we knew we had to implement ideas that would maximize efficiency.

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The first thing we did was to cut the office visits from the standard 60 minutes to 30 minutes. We knew there would be no way to serve the community by being able to see only 8 new patients per day. We thought of ways we could offload some of the activities during the clinic time to make the visit more efficient. We implemented a brief (5-minute) preclinic intake call. During this call, the doctor introduces himself and asks the family why they are coming and what their biggest fear is. This call is conducted a few days before the visit and helps ease patient anxiety by meeting their doctor (over the phone) before the visit. The doctor captures some of the history ahead of time which unburdens the office visit. In addition, the doctor has an understanding of the family's main concern prior to the visit so the time is maximized. These intake calls also enable the doctor to discover if more testing is required or if the patient needs a different specialist. The findings from the intake call are shared with the staff. The intake call sets up the office visit for success and prevents families traveling for a suboptimal visit. In some cases, the family reports they need to cancel the visit and that

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appointment is offered to another family. In other cases, there is discovery that outside tests have been performed and we can track those down before the office visit. Feedback from families in the intake call helps demonstrate we are committed to their care.

To improve efficiency, we located the clinic in the suburban satellite rather than at the university medical center. The satellite is located off a major highway, whereas the university is in a more congested area. We scheduled clinic hours on Saturdays so the patients deal with less traffic, miss less school and work, and increase clinic flow efficiency with fewer providers in the clinic space. Feedback from families is they greatly appreciate having weekend access so as not to have to take off work and miss school.

In another effort to offload the clinic time, we put the doctor's email address and cell phone on all of the clinic notes going back to referring doctors and on all the business cards for patients. This means that referring doctors and families can contact the specialist anytime in a dysynchronous format. Families can reach the doctor directly via multiple ways including the electronic portal if they have further questions that can be handled outside the face-to-face visit. This eliminates patients having to waste time navigating phone trees, waiting on hold, and being redirected to multiple staff members. This takes the pressure off the office visit to answer all of the family concerns in one time frame.

At the office intake, the patient is greeted by a medical assistant for vital signs and medication review. Due to the prevalence of anxiety and depression in teens (4), children over 12 years of age are given a brief anxiety screen for child anxiety related disorders (SCARED) and depression screen patient health questionnaire-9 (PHQ-9). After the visit with the medical assistant, the physician and licensed practical nurse (LPN) enter the exam room. The LPN can assist with getting supplies, scribing the history, and helping with other needs for the family. A pet therapist with an 85 pound Old English Sheep dog also accompanies the team to reduce anxiety (5) for the patient and family. If biologic medications are prescribed, the WVU pharmacy team calls the family after the visit for a thorough educational interaction (6) to review medication side effects, administration instructions, and answer questions. We also have access to a psychologist who shares the same clinical space (7).

Because social determinants of health are major predictors of health outcomes (8), we wanted to ensure that we capture and address these as well. Families are surveyed about food insecurity, employment insecurity, exposure to domestic violence, and other social determinants during each office visit. Once identified, these can be addressed by the clinical team. In addition, the doctor evaluates transportation needs on the previsit call so that the family can have resources in place if needed.

#### Results

In our first year, these efforts have proven successful based on our clinic visit metrics. As expected, new patient visits are the vast majority, measuring 83% of the total, versus 22% for the pediatric department at large. New patient visits scheduled within 2 weeks of the initial referral is at 61%, compared to 39% for the department. The physician previsit phone call is also credited, in part, for the no show rate of 6%, which is below our department total of 11%, and needs to be interpreted in the context of the potentially long travel distances. Patient satisfaction achieved a mean score of 95.0out of 100 for overall likelihood to recommend on the Press Ganey medical practice survey.

#### Lessons Learned

We designed a high-touch clinical experience in order to engage patients and their families in a small subspecialty practice in a rural setting. By using a previsit intake call, families report feeling cared for even before the office encounter. The intake call helps address transportation needs and uncovers any fears the family has before the appointment. Learning this information early helps ensure a smooth visit for the family and the clinical team. A team model is used during the visit. After the visit, the patient can reach the doctor directly without phone tag or handoffs. Weekend hours create value for families by saving time and money.

#### Conclusions

We have opened a new subspecialty practice in a state with limited subspecialty care. Although we have limited clinical hours to work with, we are committed to deliver patient access, experience, and quality that meet families' needs. A future project is to assess patient-reported outcomes using the patient portal. Another project was planned to offer telemedicine visits. With the outbreak of the COVID-19 pandemic, office visits were temporarily put on hold as all new and follow-up visits were conducted via telemedicine for 90 days between April and June 2020. Currently, we are offering both office-based and telemedicine visits.

We are implementing best practices and trying some new strategies with respect to population health, the social determinants of health, patient centeredness, and team-based care. We believe our new practice is effectively serving our rural communities.

#### Authors' Note

This study meets criteria for non-human research. Accordingly, consent is not applicable.

#### **Declaration of Conflicting Interests**

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