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A novel fellowship track to strengthen pulmonary fellows expertise in pulmonary subspecialties

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Abstract

Study Purpose: The purpose of this pilot study is to investigate the role of a novel subspecialty track model in training pulmonary fellows for independent subspecialty clinical practice.

Aims: The study aims to evaluate pulmonary fellows self-perceived competency, clinical preceptors perceived ability of fellows to provide longitudinal care, and fellows medical knowledge before and after participation in the track. Fellows development of professional identity will also be explored.

Background: Pulmonary subspecialty diseases are challenging for even the most experienced pulmonologist. This can lead to misdiagnosis, delays in care, and unnecessary costly or invasive diagnostic procedures(1). Many institutions allow trainees to rotate through pulmonary subspecialty clinics. Despite these opportunities, graduating pulmonary fellows struggle to care for patients with these diseases; experiencing discomfort regarding their management and an inability to provide longitudinal expert care(4).

Clinical exposure is rated by fellowship program directors as being the most effective tool for subspecialty training(4). Over the past three decades, residency programs have transitioned from traditional generalized training to subspecialized “tracks” containing clinical experiences that foster independent practice within a specific area of focus(2). To our knowledge, the feasibility of clinical subspecialty tracks in pulmonary fellowship and how to structure subspecialty exposure is unknown.

As the number of pulmonary fellows who subspecialize increases, it is imperative that we provide them with comprehensive clinical experiences to allow them to thrive within that subspecialty.

Methods: Ericsson's theory of expertise is a conceptual framework that focuses on deliberate practice with direct feedback. Deliberate practice involves the use of individualized coaching and the development of goals and objectives to improve specific aspects of performance. This study will utilize the theory of expertise in conjunction with social learning and constructivism concepts to explore the impact of a subspecialty track on pulmonary fellowship training. It is common for pulmonary fellows to choose a subspecialty focus yet upon completion of their training they lack the ability and confidence to provide expert care in these fields. Through this novel track, fellows will own a panel of subspecialty patients. They will have increased clinical exposure and repetition of managing these patients autonomously with the goal of increasing their skill and preparing them to become subspecialty experts. They will be coached by current subspecialty faculty who will set the clinical competencies that should be met, role model expert care, and provide real-time feedback. This will be a qualitative study using a case study approach and constructivism paradigm. Study participants will include four senior pulmonary critical care fellows and five subspecialty pulmonary faculty in the PACCM division at OHSU. Fellows will participate in a subspecialty track of their choosing, either cystic fibrosis, pulmonary arterial hypertension, or interstitial lung disease. The track will be 6-18 months long depending on post graduate status. Surveys evaluating fellows' self-perceived competency, faculty's perceived ability of fellows, and fellows medical knowledge of these subspecialties will be administered to the study participants pre and post implementation. To assess feasibility of the track, fellow participants will be surveyed about the amount of time spent on documentation and addressing patient calls. Faculty participants will be surveyed about the track's impact on their own clinical duties. Surveys will be developed by the program director and associate program director of the PCCM fellowship program with guidance from subspecialty experts from additional U.S. institutions. Survey responses will be based on a five-point Likert scale as well as narrative comments. Fellows will also complete the Macleod Clark Professional Identity Scale, a questionnaire that has validity across multiple health professions(3) and will provide narrative comments to evaluate their level of professional identity pre and post-participation in the track.

Results: This pilot study has not been conducted yet, however my hope is that it will demonstrate that a subspecialty track in fellowship can improve the specialized care that pulmonary fellows provide and strengthen their niche development. This track could be adapted by other pulmonary critical care programs nationally as well.

Learning Objectives

1. Explain fellows level of self-perceived competency and faculty's perceptions of fellows competency to care for pulmonary subspecialty patients before and after implementation of a novel subspecialty track
2. Describe the impact a novel subspecialty track has on fellows professional identity development

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