

Effectiveness of a Mentored, Longitudinal Program Fostering Scholarly Research by Residents

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Setting and Problem

Many residency programs emphasize scholarly activities during residency. Some programs provide residents with block elective units during which they are expected to complete their scholarly work project. Yet most research takes longer than a few educational units to go from inception to completion. Reasons include delays in research design, Institutional Review Board approval, grant writing, data collection and analysis, and manuscript preparation. Because of the clinical time demands inherent in residency schedules, it is difficult for residents to produce a worthwhile scholarly project without additional protected time and effective mentorship by an experienced faculty scholar. Residency programs must balance allotment of time for scholarly research pursuits with that for clinical learning. In addition, the structure of scholarly activities during residency should mirror how academic faculty accomplish similar activities in a longitudinal fashion in which scholarly activities are intermixed with their other responsibilities.

Intervention

To provide pediatrics residents at Children's National Medical Center (CNMC) with appropriate resources, mentorship, and time to pursue effective scholarly activities, our residency program developed the REACH (Research, Education, and Advocacy in Child Healthcare) program, a longitudinal research elective for all residents designed to foster scholarship. Residents participating in REACH receive 1 half day per week of protected time during all rotations in their second and third years to pursue a scholarly project. The day of the week allocated to REACH may vary across rotations for a given resident, and is driven by the continuity clinic schedules of the other residents on that team to assure appropriate clinical coverage. Clinical cross-coverage on inpatient rotations is provided by the other residents on the team. On outpatient rotations, residents are excused from a half day of clinic on their REACH half day.

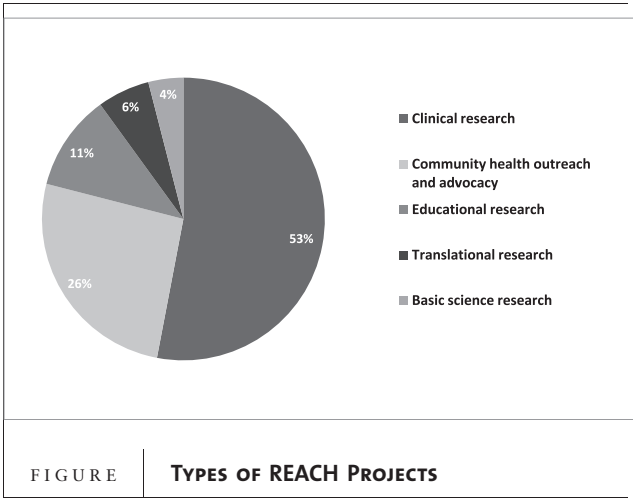
At the end of the first year, all pediatrics residents at CNMC are encouraged to develop a REACH proposal with mentorship by a faculty member. A committee composed of faculty with relevant research experience (basic, translational, clinical, educational, and advocacy) reviews resident REACH proposals in a blinded fashion to determine eligibility, and again after 1 year reviews progress reports submitted by the residents to determine continued provision of protected time. The committee provides critical feedback on the proposals and progress reports, and mentors to help assure success. Acceptable projects are those that have a realistic timeline, concisely stated specific aims, sound methodology, and clearly defined and assessable outcome measures.

Residents and their research mentors are matched through a number of different venues, including an online database of interested faculty members with research interests and potential projects, an informal meet-and-greet session, direction provided by core residency advisors, and interactions between interns and faculty in the clinical setting.

REACH faculty mentors are required to meet at least quarterly with their residents to monitor progress and address any problems. Mentors also establish expectations with residents a priori regarding submission of abstracts to research meetings and manuscript preparation and publication. Faculty mentorship has typically been 1:1, although occasionally there have been group resident projects or multiple faculty involved in a single project.

Outcomes to Date

Of the 127 pediatrics residents training between 2009 and 2012, 105 (83%) have participated in the REACH program, and 90 faculty members (15% of the institutional faculty) have been involved as mentors. We surveyed residents and faculty participating to assess the success of this approach to scholarship. Residents obtained 37 grants or awards totaling \$46,550 and presented 53



Abbreviation: REACH, Research, Education, and Advocacy in Child Healthcare.

times at 20 national and international conferences. Additionally, 35% of REACH projects resulted in a peer-reviewed publication. The types of projects are depicted in the **FIGURE**.

Conclusions

Our outcomes demonstrate that the REACH program—with longitudinal protected time over 2 years for resident research projects under the mentorship of a faculty member—could serve as a model for adoption by other residency programs as an effective means to enhance their residents’ scholarly output.

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New Ideas

The University of Washington Pediatric Alaska Track: A Novel Approach to Training Primary Care Pediatricians

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Setting and Problem

The University of Washington School of Medicine (UW-SOM) has been a leading medical school in training primary care physicians. Yet due to the small number of residency positions in the Pacific Northwest, the 5-state region of Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI) has some of the lowest physician-to-population, graduate medical education (GME) positions-to-population ratios in the nation, and has the lowest pediatrician-to-child ratio in the country. The UW Pediatric Alaska Track was designed to increase the number of primary care

pediatricians serving rural and underserved populations. The goals are to increase quality and access to health care for children and families throughout the WWAMI region, and to improve the learning environment for residents with a career interest in primary care pediatric practice.

Intervention

The Alaska Track is a primary care track within the UWSOM categorical pediatrics residency. The Alaska Track enrolls 4 residents each year for a total of 12 residents in the program. Each year, Alaska Track residents complete 2 four-week block rotations in a community practice in Anchorage, Alaska, and 2 four-week block rotations in a community practice in either Bethel or Fairbanks, Alaska. To maintain continuity, residents return to the same Alaska sites each year. Over the course of

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