RECOMMENDATIONS FROM THE COPS FELLOWSHIP READINESS ACTION TEAM

Preamble
Curricula offered in residency training programs can significantly impact young physicians’ career choices and readiness for the next phase of their careers. Clinical and other training program exposure to subspecialty-focused curriculum enhances residency training and competency, improves knowledge of appropriate referral practices and appears to encourage career decisions to enter a subspecialty program (Pentiuk 2012). Academic and subspecialty training is inspired by residency programs offering early exposure to scholarly activities including clinical or basic research (Kurahara 2012). Other factors involved in career choices are less likely to be influenced by training programs including decisions regarding geographic living decisions, family, lifestyle and educational debt (Rosenberg 2013; Frintner 2013).

The preparedness of pediatric residency trainees entering pediatric subspecialty training programs has been questioned in light of recent changes in graduate medical education. These modifications have included reduced duty hours and a significantly increased level of supervision for residents. Sequelae from these new requirements have affected all pediatric residents, not merely those bound for fellowship training. However, specific changes to the ACGME requirements that have been developed require resident curricula to be tailored to the career plans of trainees. These six individualized months “must be determined by the learning needs and career plans of the resident.” It has been proposed that these six individualized months could be effectively used to address many of these new gaps in residency training.

To better understand these issues CoPS (Council of Pediatric Subspecialties), in collaboration with the APPD (Association of Pediatric Program Directors), convened an Action Team with the following charges:

- Determine qualifications that make a resident better prepared to enter a fellowship
- Suggest a career-focused curriculum that could be used by categorical program directors and to
- Seek input from stakeholders
To appropriately make recommendations in this regard, the Action Team surveyed residency and fellowship program directors, current fellows and recent fellowship graduates to determine the specific qualifications or characteristics that would better prepare pediatric residents to enter pediatric subspecialty training programs. Response rates included Residency PDs (48%), Fellowship PDs (28%), Current fellows (15%) and recent fellowship graduates within the last five years (13%). These results are presented to help provide guidelines to develop career-focused residency program curricula that could be applied by categorical program directors to better prepare residents planning a subspecialty career.

While program directors and trainees have a wide variety of opinions, consistent themes were shared by many respondents. In considering areas in which pediatric residents are not well trained as they enter subspecialty training, the following were most often cited as lacking:

- Independent decision-making skills
- Teaching skills
- Ability to lead a team
- Self-motivation for learning
- Patient ownership
- Familiarity with basics principles of research methodology
- Ability to apply principles of evidence-based medicine

**Recommendations**

After reviewing the survey results, the Action Team has formulated the following recommendations for residents deciding to enter Pediatric Subspecialty Fellowships. These items will need to be individualized to each particular residency program, as not all programs will be able to offer the same experiences for their residents. Similarly, these experiences will need to be individualized for each resident depending on their projected career path.

1. Most importantly, it is essential to note that both subspecialists and generalists alike agree that the goal of a general pediatrics residency is to train competent general pediatricians. This broad set of skills is essential to being a successful subspecialist. While variations in curricula may occur based on the ultimate career goal of the resident, program directors should ensure that their graduates are proficient in general pediatrics above all else.

2. Residents preparing to enter Pediatric Subspecialty training should have some exposure to basic research methodology. This does not need to involve an extensive research project during residency but rather could consist of general research methodology training during individualized learning time. If desired, within the structure of a particular residency program, a resident could participate in an already established research project to witness the use of these methods. However, this should not be the critical element of this process. In addition, education in the
principles of Evidence-Based Medicine would be a useful adjunct to residency training for this group of trainees. Specifically, the demonstration, by attendings, of the use of EBM in the act of providing patient care, would be significantly beneficial for trainees to witness. In some programs, an elective in research methodology could be developed that would benefit many graduates, not merely those moving toward fellowship training.

3. Residents entering fellowship programs should not be expected to enter fellowship with a complete set of specialty-specific medical knowledge. While a small amount of subspecialty experience in the area of further training would be helpful to confirm the career choice, a majority of the individualized time in residency should not be spent in the chosen field. In some instances, adjunctive areas of exposure might be beneficial to a resident entering a particular subspecialty (e.g. genetics elective for a future neonatologist). Perhaps this is an area that CoPS and the APPD can facilitate by creating suggested elective rotations for each subspecialty.

4. For those fellowships with a significant procedural component, fellowship directors intend to train their fellows in these procedures during their fellowship training. However, residents may choose to use some individualized time to obtain some basic proficiencies in required ACGME competencies such as IV placement, neonatal intubation, etc. In addition, residents may desire to explore some of the procedural opportunities available in a subspecialty area to facilitate their introduction to their fields. At most, this should involve a minimum amount of residency training time, and should more serve to confirm the resident’s interest in a chosen field.

5. Adequate preparation for subspecialty training and beyond must include substantial mentorship. It should be the responsibility of both general pediatric residency directors as well as subspecialists to provide this mentorship for future subspecialty fellows. This mentorship should include career guidance on the choice of subspecialty training, the application process, as well the design of the individualized learning time. As some smaller residency programs may lack local mentors in a particular subspecialty, CoPS and the APPD can work to facilitate a contact list that these residency directors can use for their trainees.

6. Additional rotations placing the trainee in a teaching role would add skills necessary for both fellowship training and beyond. A teaching senior is one example, but an individual program may have other creative modalities to augment teaching skills. A focus on faculty development is critical to ensure that these programs will be successful. Many creative models of Resident as Teacher rotations exist already. The APPD can serve as a useful resource to compile a list of best practices to aid program directors in designing these experiences.

7. Supplementary supervisory rotations would allow future fellows to increase their team leadership abilities and independent decision making. These rotations could consist of “junior fellow rotations” in the desired subspecialty or could involve a supervisory experience in any area. The goals are not to master a subspecialty topic,
but to become more comfortable as a team leader and a teacher. A focus on communication and interdisciplinary teamwork is essential. In addition, establishing rotations where residents are placed in situations where they must make independent decisions is critical. In this era of significantly increased supervision, this charge will also take substantial faculty development to succeed. Faculty must be trained to understand the various levels of supervision allowed by the ACGME. These include direct supervision, indirect supervision (with direct supervision available) and oversight. Placing residents in roles with gradually increasing levels of autonomy will greatly aid their ability to function in an independent fashion as they progress in their training.

As a point to consider, many Med/Peds trainees commented on the substantial difference they experienced during their Internal Medicine supervisory time as opposed to their Pediatrics training. These trainees find more opportunity to function as an independent thinker in Internal Medicine. Perhaps some of this learning and working environment can be transmitted to Pediatrics.

8. In response to concerns that trainees entering subspecialty fellowships lack sufficient self-motivation for learning, sessions should be designed to teach trainees self-directed learning skills. While this is not an area that can be taught simply in didactic sessions, perhaps real world examples of how attendings navigate daily learning could provide trainees with useful skills as they advance in their careers. Trainees should be taught how to develop individual learning goals and learn strategies on how they can best pursue them. Moreover, emphasizing the responsibility that each trainee will have for their own education can only serve to add to their learning over time.

9. Other experiences that could enhance preparation for fellowship training could include but are not limited to

   i. Longitudinal subspecialty clinic experiences
   ii. Training in the consultative process
   iii. Increasing patient exposure, especially to patients with complex medical issues

Conclusions:

One size cannot fit all. As all training programs are different, so are all trainees. It is a firm belief of this Action Team that no one prescriptive formula should be created for all future subspecialty trainees. Hopefully, these findings can help residency program directors, in collaboration with fellowship program directors, to consider creative ways to best prepare their trainees bound for subspecialty training. CoPS and the APPD remain committed to continuing to work with both residency and fellowship program directors as they continue to work to better prepare residents for fellowship training.
References:


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