The Residency Review and Redesign in Pediatrics (R³P) Project: Roots and Branches

M. Douglas Jones, Jr, MD
Gail A. McGuinness, MD
Carol L. Carraccio, MD

The Residency Review and Redesign in Pediatrics (R³P) Project arose out of a particular historical and regulatory context. It is worthwhile to describe that context briefly and to be specific about how the project departed from previous projects as it built on their considerable accomplishments.

OVERSIGHT OF PEDIATRIC RESIDENCY EDUCATION

Pediatric residency education is overseen directly by the Accreditation Council for Graduate Medical Education (ACGME) and indirectly by the American Board of Pediatrics (ABP), in the sense that candidates for board certification must satisfactorily complete ACGME-accredited residency education. This implies close alignment between the standards for certification set by the ABP and the training requirements established by the ACGME. The ACGME program requirements for residency education in pediatrics combine requirements common to all graduate medical education with those developed specifically for pediatrics by the Review Committee for Pediatrics. Although the ACGME is an independent organization, program requirements reflect the review committee’s sense of the pediatric community. Requirements are revised at least every 5 years. Advice is solicited first from the nominating organizations of the Review Committee for Pediatrics: the ABP, the American Academy of Pediatrics (AAP), and the American Medical Association. Before final approval, drafts are posted on the ACGME Web site for general comment.

Evaluation of residency education by the pediatric community as a whole has been infrequent. In 1978, a task force consisting of representatives of the ABP, the AAP, the Pediatric Academic Societies, the Association of Medical School Pediatric Department Chairmen (now Chairs), the American Medical Association (now ACGME) Review Committee, and several specialty societies published recommendations for changes in residency education in The Future of Pediatric Education: A Report by the Task Force on Pediatric Education. This report was followed by commentary and debate and, in 1984–1985, by reexamination of subspecialty training. The next comprehensive look at pediatric education occurred during the 3-year grant-funded Future of Pediatric Education (FOPE) II Project. The FOPE II was an ambitious project that built on and confirmed the 1978 endeavor, by then designated the FOPE I. The extensive findings and recommendations of the FOPE II were published in 2000.

In general, review committee–initiated revisions of the program requirements and more comprehensive discipline-wide evaluations have been complementary. Strengths of review committee revisions are that they occur regularly and are directly linked to program accreditation. The weakness is that the ongoing burden of accrediting >1000 general pediatric and subspecialty graduate medical education training programs makes it difficult to find time and resources for a comprehensive examination of the context and culture of pediatric education and learning. Moreover, although the review committee invites input from a variety of sources, systematic input comes only from the 3 nominating organizations and, in recent years, from the Association of Pediatric Program Directors. The strength of initiatives such as the FOPE I and II is that they are able to bring together expertise, time, and resources from the entire pediatric community. On the other hand, they are expensive and complicated to organize. Largely...
for that reason there has been no durable mechanism for continuity of thought and attention between projects. Instruction of the FOPE I to continue “the process of reevaluation, incorporating into educational programs as many of the Task Force’s recommendations as continue to seem appropriate, and devising new recommendations to meet emerging needs”4 was not conducted until the FOPE II some 20 years later. Mindful of history, the FOPE II delegated responsibility for implementation of recommendations that dealt directly with education (Table 1) to the Federation of Pediatric Organizations (FOPO). The FOPO includes many of the organizations responsible for the 1978 report, with the addition of the Association of Pediatric Program Directors. Neither project had structured communications with the review committee. Despite the presence of a review committee member on the FOPE I task force, some of its recommendations (Table 2) were not incorporated into program requirements until almost 20 years later.10 There were no formal discussions between representatives of the review committee and the FOPE II, although the recent requirement that residents develop individualized learning plans arose from the FOPE II.

THE R3P PROJECT
Two precedents were important as the ABP Board of Directors and ABP Foundation (a separately administered charitable foundation associated with the ABP) began to consider a project on pediatric residency education. First, the FOPE II demonstrated that diverse members of the pediatric community could come together for a multiyear, comprehensive examination of pediatric education. Second, the ABP, through its subspecialties committee, had just joined with the pediatric community in a comprehensive review of education in pediatric subspecialties that resulted in major modifications in subspecialty certification requirements.11 It then worked with the review committee to revise program-accreditation requirements. The hope was that a similar approach could be used to reevaluate general pediatric residency education and revise program-accreditation requirements accordingly.

The initial vision of the R3P Project was that it would follow the example of the FOPE I, the FOPE II, and the ABP Subspecialties Committee in using the broadest possible input to construct recommendations for immediate change. An R3P committee met 8 times from 2005 through 2008, with additional meetings at the time of 3 colloquia in 2006 and 2007. It was joined by a large project group for the colloquia.12 The project was convened and conducted on behalf of the entire community of pediatric care providers, including the nurse practitioner and physician assistant communities. The project also included current and past members of the AAP Resident Section, a representative of the public at large, and internal medicine and family medicine physician educators. Finally, representatives of the project have made numerous presentations across the pediatric community to solicit ideas and comments.

RETHINKING THE GOALS OF THE R3P PROJECT
Revision of guidelines for pediatric residency education has been more periodic than continuous for several reasons. First, it is difficult to keep broad policy recommendations, regardless of how well conceived, in mind unless implementation begins immediately. It is discouraging that few are now aware of the recommendations of either the FOPE I or II. Second, review committee revisions are required only every 5 years, and even that is problematic for reasons mentioned previously. The ACGME Outcome Project13 is intended to supplement the periodic revisions with ongoing, data-driven program changes. The project was begun in 1999 with the aim of “increasing emphasis on educational outcomes in the accreditation of residency education programs.” It challenges programs to provide evidence that residents achieve learning objectives and asks for demonstration of evidence-based improvement in educational processes. As such, it represents a profoundly important philosophical shift toward supplementing, and perhaps one day replacing, accreditation judged by adherence to education processes with accreditation judged by the quality of education and patient outcomes. However, regulatory policies are, of necessity, more prescriptive than proactive. The energy and commitment needed for continuous, reflective, discipline-wide change must come from the specialty itself.

It is increasingly clear that the rate of change in the conduct and context of pediatric practice requires adap-

---

**TABLE 1** Selected Recommendations of the FOPE II Project (2000)
1. Enhance the science of pediatric medical education
2. Provide a flexible 3-y residency to train pediatricians for varied professional roles
3. Develop, revise, and evaluate core competencies and core curriculum as an ongoing task
4. Adjust residency training as the product of ongoing attention by all pediatric organizations
5. Provide career counseling and mentorship
6. Provide individualized professional education plans for third-year residents that incorporate anticipated needs for future practices

**TABLE 2** Selected Recommendations of the FOPE (1978)
1. Provide a minimum of 36 mo for residency training
2. Provide broad learning experiences to include
   - Biosocial and developmental pediatrics
   - Adolescent medicine
   - Clinical pharmacology and toxicology
   - Community pediatrics
   - Handicapping conditions and chronic illness
   - Medical ethics
   - Musculoskeletal, skin, and dental disorders
   - Nutrition
3. Provide flexible training with education in a variety of patient care settings
4. Provide elective experiences in areas of special interest
5. Prepare pediatricians for service as members, leaders, and consultants on multidisciplinary health care teams
6. Provide for the education of future academicians
7. Require development of a personal continuing education plan as a professional responsibility
tive system-wide changes in education. What has not been clear is how to do it. It soon became apparent to the R3P Committee that a list of specific recommendations as to how residency should change would be inadequate and likely mistaken. A list of recommendations would be a one-time event and, as such, would fail to take up the challenge posed first by the FOPE I to provide for ongoing reconsideration and revision of pediatric residency education by the pediatric community. It centered on the R3P Project as the change agent and, thus, could not take advantage of knowledge and problem-solving ability at the program level. It also made no specific provision for partnership with the review committee.

In considering alternatives, the R3P Project has been fortunate to be able to learn from examples in internal medicine. The 2 groups built on the ACGME Outcome Project’s concept of data-driven change with family medicine. The 2 groups built on the ACGME fortune to be able to learn from examples in internal medicine. Both monitor and learn from outcomes. On reappraisal, the R3P Committee decided that a continuous improvement approach to system-wide change was more likely to be effective than even the most carefully assembled list of recommendations. A method of continuous learning from experience offers a means of dealing with both current and future challenges. Decentralized to the program level, it allows programs to take advantage of situation-specific opportunities, imagination, and energy as well as supportive hospital partners. Explicitly, the responsibilities of the R3P Project, in coordination with the Review Committee for Pediatrics, would be to determine how best to promote goal-oriented innovation in pediatric residency education; how to initiate, facilitate, and sustain it; how to oversee it; and, finally, how to identify and disseminate innovations that are effective.

Preference for continual, decentralized change over periodic, centralized redesign is consistent with contemporary thinking about the behavior of complex organizations. Periodic redesign is unlikely to provide timely responses to continually changing circumstances. Furthermore, centralized processes tend to provoke resentment. Margaret Wheatley, a management consultant and theorist, writes that “[complex] systems do not accept direction, only provocation...They leave us with no choice but to become interested experimenters, sending pulses into the system to see what it notices.” Westley et al noted that complex endeavors are best served by what they label a “developmental” approach to problem-solving. They and others have suggested that continually reevaluated intermediate “maybe” solutions are preferable to static goals that may soon prove to be unrealistic, obsolete, or both.

Reassessment of goals calls attention to the need to reconsider the concept of residency redesign. The intention to redesign pediatric graduate medical education has been replaced with a commitment to redesign the process by which residency education evolves over time.

CONCLUSIONS

The R3P Project represents an important departure from past initiatives. First, it proposes continuous evaluation and innovation rather than episodic system-wide change. Second, it is developing a partnership with the Review Committee for Pediatrics to promote and learn from innovative solutions. Third, it proposes a decentralized process with selection of strategies for change at the program level. Herein lies a challenge, nicely stated by Surowiecki in his provocative book The Wisdom of Crowds. Surowiecki warned of the danger of reliance on “the” expert or small group of experts to solve problems. However, decentralized problem-solving is not automatically magic: “Decentralization’s great strength is that it encourages independence and specialization on the one hand while still allowing people to coordinate their activities and solve difficult problems on the other... Its great weakness is that there’s no guarantee that valuable information which is uncovered in one part of the system will find its way through the rest of the system.” By encouraging collaboration among programs and fostering collaboration among numbers of programs interested in solving specific problems, we hope to take advantage of the strengths of decentralization while avoiding the pitfalls.

The goal of the R3P Project is to establish the mechanism for ongoing reevaluation of pediatric residency education recommended 30 years ago by the insightful Task Force on Pediatric Education. Success depends on the active participation of the entire pediatric community. The overall goal is unambiguous: to improve the health of children, adolescents, and young adults through better education. With that in mind, the R3P Project aims to foster a dynamic, generative process to improve the quality of pediatric residency education.

ACKNOWLEDGMENTS

The American Board of Pediatrics Foundation supported this project.

This project would not have been possible but for the accomplishments of Drs Jimmy Simon, Russell Chesney, Errol Alden, and colleagues on the FOPE II Project.

REFERENCES

The Residency Review and Redesign in Pediatrics (R³P) Project: Roots and Branches
M. Douglas Jones Jr, Gail A. McGuinness and Carol L. Carraccio
Pediatrics 2009;123;S8
DOI: 10.1542/peds.2008-1578D

The online version of this article, along with updated information and services, is located on the World Wide Web at:
/content/123/Supplement_1/S8.full.html