# PERSPECTIVE

## ASSESSING THE SCOPE OF MEDICAL PRACTICE

**Organization of Resident Representatives**

### ABSTRACT

The fundamental goal of the medical education system should be to provide physicians with the skills necessary for their future practice. Despite ongoing debate, the optimal formula by which the medical education system can achieve this goal has not yet been defined. This issue is of particular concern in graduate medical education (GME), where an increasing pace and acuteness of hospital care and exponential growth of technology must be balanced with quality education and patient safety, all within the framework of limited resident duty hours. An integral component of achieving this balance and ensuring the quality of our health care system will be assessing and eliminating the disjunction between medical education and practice, commonly referred to as the “residency-practice training mismatch”.

### INTRODUCTION

The fundamental goal of the medical education system should be to provide physicians with the skills necessary for their future practice. Despite ongoing debate, the optimal formula by which the medical education system can achieve this goal has not yet been defined. This issue is of particular concern in graduate medical education (GME), where an increasing pace and acuteness of hospital care and exponential growth of technology must be balanced with quality education and patient safety, all within the framework of limited resident duty hours. An integral component of achieving this balance and ensuring the quality of our health care system will be assessing and eliminating the disjunction between medical education and practice, commonly referred to as the “residency-practice training mismatch”.

Recently, the Organization of Resident Representatives of the AAMC convened a forum on “Re-engineering Graduate Medical Education” with the goal of identifying effective ways to define and eliminate the “residency-practice training mismatch.”

### WHY IS THERE A RESIDENCY-PRactice TRAINING MISMATCH?

Several characteristics of the current GME environment may result in a residency-practice training mismatch. First, a residency curriculum can be too broad, incorporating knowledge, skills, and techniques from many specialties and subspecialties that may be of little use to physicians in everyday practice. For example, a primary care training program may include extended rotations in critical care. Simultaneously, a residency curriculum can be too narrow, with intense focus in a few, primarily inpatient specialties, that may be an important part of the institutional health services mission, but that have little applicability to the average practitioner. For example, a general surgery training program may include extended rotations in transplant surgery. There is also little flexibility in most residency curriculums to accommodate differences in educational goals and learning abilities of individual residents. Finally, residents may participate in hospital service requirements that are not in any way linked to educational goals. The combination of these factors predisposes our current GME environment to a residency-practice mismatch.

### WHAT ARE THE HEALTH CARE CONSEQUENCES OF A MISMATCH?

A residency-practice training mismatch can affect the quality of the entire health care system in several ways. Once in practice, these physicians may avoid treating problems they feel unprepared to manage. Others may simply provide ineffective care. These scenarios can affect access to care and create overall inefficiency in the health care system. Furthermore, given time and financial constraints, the health care system of the future will be less tolerant of inadequately trained young practitioners who require further on-the-job training that could have been completed during GME training. Therefore, eliminating a residency-practice training mismatch can not only improve the quality of GME, but also potentially ensure the future quality of our health care system.

Prepared by the Scope of Practice Writing Group of the Organization of Resident Representatives. Members and affiliations can be found at the conclusion of the article.

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WHAT IS THE CURRENT SCOPE OF THE MISMATCH?

Unfortunately, there is currently limited data to define the exact scope and effects of the disjunction between medical education and practice. Cantor et al\(^2\) conducted the only comprehensive assessment of physician preparedness in early practice. They found that 80% of respondents felt that their formal medical training did an “excellent” or “good” job of preparing them for medical practice. However, many reported either an under emphasis or over emphasis in numerous areas. Subsequently, Blumenthal et al\(^1\) assessed residents’ perceptions of their preparedness for practice during their last year of training. They found that residents tended to have a positive view of the overall quality of their training and ability to manage common clinical problems. However, more than 10% in each specialty identified specific gaps in preparedness. In addition, in some cases, the respondents identified inadequate preparedness in areas which were not typically emphasized in the residency curricula.

The ORR conducted an informal pilot study of physicians who had graduated from residency or fellowship within the last 5 years. Data from the 59 surveys clearly suggest perceived mismatch between areas emphasized in residency compared with the realities of practice. Thirty two percent felt under-prepared for certain areas of their medical practice, while 56% felt over-prepared in some areas. Many, graduates (42%) reported receiving too much training in an inpatient area, while less than 5% noted feeling over-prepared with areas in outpatient medicine. These results did not differ significantly between academic and private physician. A typical example of the mismatch is an internal medicine doctor who feels residency provided too many rotations in intensive care settings and too little training in outpatient settings seeing patients with common complaints, such as low back pain and depression. Thus, the results of our survey suggest a significant mismatch between residency training and eventual scope of practice, and emphasize the need for further investigation to clearly define the content of graduate medical education and how it relates to physician preparedness.

STEPS TO ADDRESSING THE MISMATCH

Effective evaluation of the residency-practice mismatch and reform of the current GME environment will require the cooperation of all members of the GME community. The following initial steps will be integral to this process:

- Curricular competencies should be broad-based and reflect the expected general scope of practice of each specialty.
- GME curricula should provide adequate flexibility to allow trainees to tailor their experience to their anticipated scope of practice.
- GME curricula should teach skills for lifelong learning, both to cope with the conditions outside of the anticipated scope of practice and to keep pace with advances in medical knowledge.
- Research should be conducted to define the current scope of practice of today’s physicians and the extent of the current residency-practice training mismatch.

CONCLUSION

The success of our medical education system is based on the quality of the care provided by its graduates throughout their professional careers. Therefore, we must ensure that trainees are provided with the knowledge and skills required for their anticipated scope of practice. A residency-practice training mismatch threatens the quality of GME and the health care system. Addressing this mismatch through research and structural reform promises to improve the efficiency of GME and our health care system.

REFERENCES

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