A Perspective on Promotion in Place and Competency-Based, Time-Variable Graduate **Medical Education**

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Scenario 1

The Clinical Competency Committee (CCC) determined orthopedic surgery residents A and B met the requirements for competence and board eligibility after year 4 of their 5-year residency.

Resident A chose a Promotion in Place (PIP) model and was credentialed to practice without supervision and bill as an attending of record for no added stipend. She enjoys autonomy with little supervision (sheltered independence), sees patients with common surgical problems, and mostly conducts routine surgical procedures. Resident B chose a traditional model. He receives progressive autonomy to conduct routine cases but regularly participates in complex surgical procedures supervised by faculty who actively teach and provide direct patient care.

The sponsoring institution (SI), designated institutional official, and program director are asked to respond to a Centers for Medicare & Medicaid Services (CMS) billing inquiry about their financial support for resident A's education, whom their records show is billing CMS for inpatient services as an attending.

The Accreditation Council for Graduate Medical Education (ACGME) receives a complaint alleging the SI is exploiting residents by billing for their services as attendings while compensating them as residents and pressuring them to select PIP.

Scenario 2

Senior medical student C is completing her rank order list. She has considerable debt, and only ranks programs that often "graduate" and credential residents early and pays them a higher stipend if they choose a PIP model.

The drumbeat of enthusiasm for competencybased, time-variable graduate medical education (CBTV-GME) has strengthened in recent years as influential medical organizations, including the American

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Medical Association, the ACGME, the Association of American Medical Colleges, the American Board of Medical Specialties (ABMS), the Macy Foundation, and others have expressed interest and support for studying this concept. 1,2 Goldhamer et al recently published "Promotion in Place: A Model for Competency-Based, Time-Variable Graduate Medical Education."3 The authors of this article included well-established graduate medical education (GME) thought leaders who have presented and published on CBTV-GME.

The PIP model the authors described allows residents deemed competent for early graduation to "transition to attending physician status within their training program and benefit from a period of 'sheltered independence' until the standard graduation date." As is currently true, residents who do not meet competency goals have their training extended to receive additional targeted

The PIP model allows enrolled residents to serve as attendings of record, "with billing privileges and appropriate malpractice coverage." The authors reported that residents at their SI favored continuing at a resident salary during PIP, purportedly to avoid tension with resident cohorts not promoted in place.

This PIP model raises immediate questions about conflicts of interest and unintended behaviors. SIs, many of which are under financial pressure, could be incentivized to maximize PIP participation to secure attending services (and receive attending reimbursement) for care provided by physicians at resident salaries. This model raises ethical questions about transparency in patient care, patient safety, quality, and equal pay for equal work. It risks prioritization of rotations and experiences based on institutional clinical needs, gaps in attending schedules, and profitability at the expense of educational interests. Implementing the described PIP model would create a cadre of physician employees simultaneously enrolled as residents tasked to manage an ambiguous dual role as attending physicians.

Residency programs adopting this model could overtly or quietly market early completion outcomes and choose to compensate PIP participants at a higher salary to improve program recruitment. Since this PIP model describes participants as "board-eligible and credentialled to serve as attending of record," justification for continuing their time-based training is needed. Also, nursing and allied health may struggle to assess the appropriateness of supervision as residents shift between their training and attending roles and resulting confusion over required supervision might compromise patient safety.

In the Goldhamer et al article, consideration of the PIP model was limited by its implementation in one residency program (pathology) at one SI. Ten of 46 residency programs expressed initial interest in the pilot. Seven withdrew for reasons that included program director transition, uncertainty about resident reactions, need to focus on ACGME Review Committee issues, lack of a faculty champion to lead the efforts, and other concerns. Only one of the 3 remaining programs was granted approval from their ABMS specialty board to exempt time-based training.

Competency-based assessment is well-established and widely accepted in medical education. ⁴⁻⁹ However, neither time-variable training nor PIP models have achieved a similar consensus for implementation. The Goldhamer et al study of CBTV-GME highlights the need for better resident assessment and clear advancement criteria in GME. Without improved assessments and advancement criteria, PIP could threaten GME's foundation, the quality and safety of patient care, the achievement of excellence, and public trust. ¹⁰⁻¹³

Contemporary CCC assessments are often based on insufficient evidence, inflated numeric scores, and generous comments in faculty evaluations of residents. ^{14,15} Neither useful formative feedback nor confident assessment of competence are supported by such flawed assessments. ^{16,17} Advances in technology offer opportunities for more reliable and objective assessments that should be studied for validity evidence, and implemented for understanding feasibility. However, inconsistent use of already established assessment tools suggests a dysfunctional culture is a likely root cause. ¹⁸

The impact of PIP and CBTV-GME models may differ among programs and institutions. Highly selective programs might experience a greater number of residents able to advance earlier in residency. This could result in fewer residents, compromised call schedules, less robust interactive conference participation, and diminished peer teaching and mentorship of junior residents.

We propose that implementation of time-variable training and PIP are not needed to advance competency-based GME. The traditional GME model provides similar benefits without creating institutional financial and workforce incentives to promote residents to attending roles. Progressive autonomy is already expected and

encouraged through individualized learning plans informed by careful assessment of each resident's performance and progress. Although proponents suggest a natural linkage between competency-based training and time variability, ¹⁹ introducing time variability could create a minimal standards model that deprives residents of the rich opportunity to advance their knowledge, skills, and behaviors beyond minimal competence while maturing in a rich academic environment.

The recent study by Goldhamer et al³ provides hints that the GME community is not yet ready to embrace this PIP model. Despite the initial interest of 10 of 46 residency programs, only one participated. The PIP model also met resistance from 2 of 3 ABMS specialty boards. The willingness and advisability of credentialing committees and risk management officials to advance residents to attending status during their training, and the legal risks assumed by residents who choose to do so, remain ill-defined. The durability, legality, and fairness of providing attending services for resident compensation is suspect. Government payers may balk at providing financial support for resident training while paying for their services as attendings.

In summary, the PIP model is currently compromised by potential conflicts of interest and appears vulnerable to exploitation. In addition, it relies on a robust assessment system with strong evidence of validity, with ongoing faculty training and reinforcement. Although time-variable GME has promise, serious concerns about chaos and unintended consequences remain. Many of the advantages described in the proposed PIP model are available within the current structure of GME training. We believe that the GME community would be better served to focus first on consistent, robust, and authentic feedback and assessment.

Continued advancement of competency-based GME makes sense. We should tap the brakes on time variability and PIP, at least for now.

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