

Making the Case for an X + Y Scheduling Model in Preliminary Internal Medicine Residency Training

The traditional construct of simultaneous attendance of both inpatient and outpatient responsibilities has created a fragmented system of care, which bore grave consequences and implications in patient safety and continuity. The resultant ambulatory experiences often created a stressful environment of competing obligations. This may potentially dissuade learners from pursuing careers in primary care in the midst of a growing shortage.^{1,2} Motivated by these challenges, calls for a redesign have emerged. An Accreditation Council for Graduate Medical Education mandate requires programs to develop models to minimize conflicting inpatient and outpatient responsibilities.³

One solution is a model of long, inpatient blocks, coupled with short, outpatient blocks to enable division of clinical duties while enhancing the ambulatory experience. This system is known broadly as an “X + Y” model, with X weeks dedicated to uninterrupted inpatient training, interspersed with Y weeks of outpatient ambulatory experiences.^{1,2} This novel template enabled fewer inpatient handoffs, fewer delays in providing outpatient care because of inpatient responsibilities, fewer interruptions in a typical clinic afternoon to attend to inpatient responsibilities, and an overall lesser degree of fragmentation in inpatient care.² With individualized weeks committed to ambulatory time, there was greater satisfaction in education given the slower pace and the additional time for focused ambulatory curriculum.^{1,2} From an ambulatory experience, patients also saw their resident physician a significantly greater percentage of time and vice versa.² Given the benefits of this structural reform, many internal medicine residency programs were quick to adopt the novel scheduling system.

While the weeklong ambulatory block leaves room for a continuous, focused curriculum, such as quality improvement, it is typically reserved only for the categorical residents. Thus, while the competing inpatient and outpatient demands were remedied

for categorical residents, the X + Y model exacerbates an existing problem—inequity between categorical and preliminary trainees. Although the new approach introduces a break between heavy inpatient service rotations for categorical residents, it does not extend the same approach to preliminary residents. In addition, to ensure a consistent resident presence during ambulatory blocks, categorical residents are typically staggered into cohorts of smaller communities within the residency, further alienating preliminary residents. The downstream implications are numerous, affecting both morale and the perception of the role of preliminary residents. Given the recent awareness of the need to address resident wellness, it is astounding that this issue has still not been raised.

Justin K. Lui, MD

Chief Medicine Resident of Internal Medicine, Department of Medicine, University of Massachusetts Medical School
Fellow, Division of Pulmonary, Allergy, Sleep, and Critical Care Medicine, Boston University School of Medicine

Nancy Lee, MD

Chief Medicine Resident of Internal Medicine, Department of Medicine, and Assistant Professor, Division of Hospital Medicine, University of Massachusetts Medical School

Adam S. Hodes, DO

Chief Medicine Resident of Internal Medicine, Department of Medicine, University of Massachusetts Medical School
Instructor of Medicine, Division of General Internal Medicine, GW Medical Faculty Associates

Daniel G. Kaufman, MD

Chief Medicine Resident of Internal Medicine, Department of Medicine, and Fellow, Division of Gastroenterology, University of Massachusetts Medical School

Elizabeth Murphy, MD

Associate Program Director for Ambulatory Training, Internal Medicine Residency Program, Department of Medicine, University of Massachusetts Medical School

Richard M. Forster, MD

Vice Chair of Graduate Medical Education and Program Director, Internal Medicine Residency

DOI: <http://dx.doi.org/10.4300/JGME-D-17-00684.1>

Program, Department of Medicine, University of Massachusetts Medical School

References

1. Mariotti JL, Shalaby M, Fitzgibbons JP. The 4:1 schedule: a novel template for internal medicine residencies. *J Grad Med Educ*. 2010;2(4):541–547.
2. Heist K, Guese M, Nikels M, et al. Impact of 4 + 1 block scheduling on patient care continuity in resident clinic. *J Gen Intern Med*. 2014;29(8):1195–1199.
3. Accreditation Council for Graduate Medical Education. ACGME program requirements for residency education in internal medicine. https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/140_internal_medicine_2017-07-01.pdf. Accessed November 10, 2017.