

Continuity of Care as an Educational Goal but Failed Reality in Resident Training: Time to Innovate

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Continuity of care between a patient and a physician is a core aspiration. However, we rarely achieve it in residency training,¹⁻⁴ even though benefits of care continuity accrue in several realms, including preventive services,^{5,6} clinical outcomes in chronic disease,⁷ patient trust⁸ and satisfaction,⁹ and economic efficiencies.¹⁰ For trainees, benefits include participatory learning about the clinical courses of diseases and their patients' experience of illness, understanding the value of a continuous relationships with patients, and developing professional responsibility.^{11,12}

In the 1990s, threats to continuity of care included closed managed care programs with restrictive physician panels, exacerbated by frequent changes in employee insurance.¹³ Contemporary factors pose new disruptions to care continuity, including the hospitalist movement, resident duty hour limits,¹⁴ team coverage in the patient-centered medical home, and retail clinics.^{3,14} In this article, we explore the impact of these disruptions in continuity on resident education, and we propose strategies for improvement in the ambulatory, hospital, and transitional and alternate care settings.

The Current Reality: Discontinuities of Care The Ambulatory Setting

Prior to 2001, many training programs scheduled longitudinal clinics weekly, even on postcall days after an extended work period. While a seemingly untenable schedule, trainees saw their continuity patients with more consistency. However, with duty hour restrictions, the weekly clinic for residents during inpatient rotations became difficult to schedule and were increasingly replaced with ambulatory "immersion blocks."¹⁵ Although this approach has advantages, such as enabling engagement in quality improvement efforts, residents often spend significant

time in other "immersion" activities, and are less available for their patients' longitudinal care.¹⁶

In primary care specialties, academic practices are increasingly adopting training models consistent with the patient-centered medical home concept.¹⁷ By leveraging interprofessional teammates to provide timely care, physician-patient continuity may be sacrificed.³ Continuity is also diminished by the expansion of retail clinics, which provide affordable expediency for acute issues, but also disrupt longitudinal continuity.¹⁸

The Hospital

For many specialties, the majority of graduate medical education continues to occur in the hospital, where residency programs struggle to balance patient care, staffing, and educational priorities while complying with duty hour regulations. To lessen disruptions dictated by the rotating services, programs stagger switch dates for inpatient team members. Nonetheless, the entire team turns over every 2 to 4 weeks, and continuity is disrupted daily, detracting from residents' ability to relate to patients.¹⁹ With the adoption of the Accreditation Council for Graduate Medical Education (ACGME) duty hour restrictions, handoffs have increased,²⁰ and patients are often confused about who their physicians are and who is "in charge."^{21,22} While reduced hours certainly have positive consequences, residents have fewer opportunities to connect meaningfully with patients and witness the longitudinal course of illnesses.^{11,12,23}

Transitional and Alternate Care Settings

From the ambulatory setting to hospitals, rehabilitation, extended care, and hospice facilities, transitions across care settings are moments of heightened patient vulnerability.²⁴ Trainees often lack experience and role models to help provide transitional and continuing care for patients across these care settings beyond the hospital and outpatient clinic. These

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issues attract the attention of third-party payers, who increasingly hinge payments on a more integrated system of care.

Strategies for the Future: Increasing Continuity

Continuity of care has been a cornerstone of many specialties, and yet the United States is in the midst of an era of increasingly *discontinuous* care. While we are obliged to prepare trainees to function in the current reality, we propose several strategies to promote continuity of care during residency training to enhance patient care and resident education.

The Ambulatory Setting

We assert that, in most programs, the time allotted for residents to train in the ambulatory setting is not adequate. For example, the ACGME calls for ambulatory experiences to comprise only 33% of internal medicine and internal medicine–pediatrics residency training. We propose an increase to 50% for specialties preparing trainees for predominantly ambulatory-based practice. This would result in more consistent longitudinal involvement with patients and new opportunities for continuity of care and learning. This would also allow for dedicated time for residents to see their patients when hospitalized, which is not feasible with most current training structures. The patient experience would likely be enhanced by the peace of mind of having a familiar face who knows the “whole story” and having trust in new providers after witnessing a “warm handoff.”²⁵ In addition, more time for subspecialty ambulatory experiences would expose residents to more integrated outpatient–inpatient approaches common to some subspecialties.

The Hospital

Even if adjustments extend trainee shifts beyond 12 hours, enhancing inpatient continuity will require experimentation within the current fundamental duty hour limitations. An alternative timing for the 12-hour work period could improve continuity. The typical 7:00 AM start time seems often misaligned with many aspects of the hospital’s daily cycles. With admissions clustering late in the day or evening, residents often hand off new patients in the midst of diagnostic and consultative evaluations. We propose evaluating alternative timing of shifts such as noon to midnight (and vice versa), which we anticipate would result in less disruption in care continuity for many newly admitted patients.

BOX Proposed Innovations and Strategies to Improve Care Continuity in Residency Training

- Allot a greater portion of training time to ambulatory settings
- Reorganize existing ambulatory training time
- Incorporate educational opportunities and support for residents to follow their patients across care settings, including in the hospital, at home, in subspecialty offices, skilled nursing, and hospice facilities
- Experiment with alternative timing for inpatient work shifts (eg, noon to midnight)
- Institute regularly scheduled care transition conferences and related didactics to enhance education and resident assessment in care transition–related milestones and entrustable professional activities
- Convene local broadly representative, multiprofessional stakeholder groups to select, implement, and evaluate innovations
- Convene a national task force to develop and support implementation and evaluation of multisite and multi-specialty innovations

Transitional and Alternate Care Settings

Effective training is required to improve the integrity and safety of care transitions. Multiple specialties have articulated, in their ACGME milestones and associated entrustable professional activities, expectations for proficiency pertaining to care transitions, such as advocating for the needs of patients and utilizing available resources to coordinate care.^{26–29} The internal medicine program at Yale–New Haven Medical Center instituted a weekly “Generalist Firm” conference for bidirectional communication between inpatient and outpatient resident teams and staff to address clinical and psychosocial aspects of hospitalized patients. This conference is valuable for transitional care education and attention to priority patient care issues.

We propose an increase in ambulatory training time that could allow for resident education in home care, nursing facilities, and hospice. Resident participation in the care of their own patients in these frequently neglected sites would enhance learning by making the experience personal for trainees and their patients, and promote novel education in and about diverse care sites.

Next Steps

We advocate for instituting implementation trials and evaluation of these proposed innovations across program sites and specialties (BOX). In particular, substantial increase and reorganization¹⁵ of training time in ambulatory and alternate care sites is paramount. We propose convening local working

groups of diverse stakeholders² to devise implementation strategies for these and explore other innovations to promote care continuity. Working groups should have broad representation, including residency programs and medical directors, residents, hospital and nursing administrators, representatives from home care associations, and skilled nursing and hospice facilities.

Further, we believe that correcting these deficits will require a national strategic and funded approach beyond delineation of milestones and entrustable professional activities. We advocate for a national task force made up of graduate medical education thought leaders, program directors, and representatives from hospital and nursing associations, the Centers for Medicare & Medicaid Services and other payers, patient advocacy groups, and the ACGME.

Commitment to continuity of care reflects the highest ideals of our profession.^{1,2} The question to ask education leaders is this: Is continuity of care a core value in training? We believe that the answer is yes, and the time is now to apply the community's ingenuity and determination to better align residency education training with cherished values.

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