Helicopters and Hospitalizations: Getting the Primary Care That We Invest In

The medical helicopter perched on the road between 2 wintery cornfields in my rural Wisconsin neighborhood. Two ambulances and 4 other vehicles blocked what sparse traffic might come by while the volunteer fire department and pilot stood guard. A stretcher with a neatly folded red wool blanket remained 10 feet from the helicopter. Inside, an emergency physician and a nurse attended the patient.

On the day I agreed to write this editorial about a modest investment to keep patients *out of* the hospital, I witnessed extraordinary coordination across multiple providers to bring a patient *into* the hospital, a feat of organization requiring investment in teamwork and infrastructure. First, a ground ambulance transported the patient a half-mile from his home to the makeshift landing pad. Within 30 minutes of the initial call, the patient was in the expert hands of a tertiary care team. The value we place on life is evident in the resources we summon when it is in acute peril.

We do well with rescue medicine. What will it take to similarly master chronic illness? Patient engagement, coordination, and relationship-based care are the tools to address this epidemic. Primary care is the delivery vehicle, but can it meet the growing demands for chronic illness in its current form?

In this issue, Freund and colleagues (1) evaluated the effect on hospitalization rates of modestly expanding the training and responsibilities of medical assistants in small primary care practices. The training comprised 2 days of classroom learning plus 20 hours of self-study. For the intervention, approximately every other month over 2 years, a medical assistant in each practice contacted a few of their patients at highest risk for hospitalization. There were no new hires and no new resources. The medical assistant–physician dyads were not relieved of any existing responsibilities to facilitate their new duties of medication assessment; symptom monitoring; behavioral counseling; and, when necessary, creation of an emergency care plan. Each medical assistant devoted approximately 7 minutes per day to this new work; physicians devoted less. Measures of quality of life and general health scores improved for these high-risk patients, but the primary outcome—hospitalizations—did not. Was it realistic to expect primary care to meet the challenge of reducing hospitalizations with just a few minutes of extra effort per day? Primary care is chronically underpowered, so it comes as no surprise when it underperforms, or that the people doing the work are running out of reserve (2).

A staffing ratio of 1 medical assistant per physician—or even less, such as 1 medical assistant per 3 physicians, as seen in some primary care practices—is inadequate. At these ratios, most medical assistants are scrambling just to get the rooms filled, the telephones answered, and the forms completed. Given the increase in administrative and regulatory responsibilities and the increase in the sheer time needed per task with the electronic health record, with these staffing models most primary care physicians are spending more time (including outside regular working hours) caring for the computer than caring for the patient. The lack of infrastructure makes it difficult, if not impossible, to do the extra things that might prevent hospitalization. The mundane but mandatory has eclipsed the impactful and meaningful.

Staffing ratios that team each physician with 3 clinical assistants (preferably nurses) are probably necessary to gain full value from primary care and to give society a return on its investment in medical school and residency training of primary care physicians. Higher staffing ratios (3) and higher levels of training of clinical assistants (4) have been shown to improve quality outcomes in primary care. Yet, in the United States and Europe, primary care is typically provided by a physician working with, at most, a single medical assistant. Further, a medical assistant in the United States requires only a fraction of the training of one in Germany, the site of Freund and colleagues' study. Medical assistants have higher turnover rates than nurses (4) and must transfer more tasks to the physician, meaning the physician spends less time working "at the top of their license."

In innovative models, such as the Iora Health and CareMore models (5, 6), where the providers share accountability for controlling global costs, the staffing ratio is 3 to 4 clinical assistants per provider. A survey of the staffing infrastructure required for the patient-centered medical home also suggests a minimum of 3 clinical assistants per physician (7). At CareMore, initial data suggest reduced hospitalization and chronic illness complication rates compared with national norms (6). Bellin Health in Green Bay, Wisconsin, provides a case study in optimism for chronic illness care. The primary care team has been expanded from 1 medical assistant per physician to 2 medical assistants or licensed practical nurses, 0.25 registered nurse, and 0.25 behavioral health specialist per physician; medical assistants and licensed practical nurses have been trained up to be "care team coordinators." Also new is an extended care team comprising a social worker, a pharmacist, and a nurse case manager that can reach into the home and community and connect with the health system. In the first 6 months, Bellin observed increases in cancer screening and chronic disease quality metrics and an overall improvement in operating margin. In addition, physicians and other team members reported experiencing more joy in their work. The

This article was published at www.annals.org on 2 February 2016.

model was implemented in preparation for capitated payment but has realized a beneficial return on investment in fee-for-service as well, and Bellin plans to continue to roll it out across all of its office-based specialties over the next 2 years (Jerzak J. Personal communication).

In the United States, we are great at high-tech rescue medicine. We can be equally great at high-touch, high-tech, highly coordinated chronic illness care, but only with investments in infrastructure that match those we have made in acute care. It is unrealistic to expect substantial impact with low-intensity, low-investment interventions, such as those tested by Freund and colleagues. Primary care needs greater investment in training clinical assistants; more favorable staffing ratios; and teams with strong training in information management, population health, and patient engagement. We can spend more than $40 000 to bring 1 person *into* the hospital, coordinating local volunteers with emergency medical services, air ambulances, and tertiary care, as in the case I witnessed in my rural neighborhood. It is past time that we invest in keeping patients *out of* the hospital with highly trained, well-supported primary care teams. Only when we do so will we achieve the Quadruple Aim (8) of better patient experience, better population health, lower cost, and greater professional satisfaction.

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Disclaimer: The views expressed in this article are those of the author and should not be interpreted as an official position of the American Medical Association.

Disclosures: The author has disclosed no conflicts of interest. The form can be viewed at www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M16-0008.

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Ann Intern Med. 2016;164:370-371. doi:10.7326/M16-0008

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