NEW RISK, NEW BUSINESS MODELS

How Multi-Specialty Hubs Fill a Major Gap in the Care Continuum

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Robert M. Pearl, MD & Bernadette Loftus, MD

The Permanente Medical Group
Mid-Atlantic Permanente Medical Group

A huge gap exists in the typical care continuum. Patients with immediate problems that are too complex for a doctor's office but don't require a multiple-day hospitalization often have no choice but to use an emergency department, especially on nights and weekends. Once in an ED, patients may wait hours to be seen, as more emergent cases are triaged ahead of them.

New alternatives to the hospital emergency department, including urgent care centers and freestanding EDs, provide rapid non-emergent care. However, these alternatives do not offer broad availability of specialists or advanced lab and imaging facilities, and rarely do they connect directly with a patient's electronic health record (EHR) or personal physician. Retail clinics, staffed by nurse practitioners, and telehealth services, provided by doctors at a distance, can handle only a limited number of minor problems. Whether any of these alternatives trims costs in the long run remains an open question.

Nonetheless, the number of hospital EDs is declining as health systems consolidate their inpatient facilities. This trend can potentially increase occupancy, achieve economies of scale, and improve outcomes by concentrating procedures in fewer locations. But closing hospitals can leave entire
geographic areas without an ED and impose burdensome travel times for patients. And even as emergency departments close and hospital volumes decline, ED visits continue to increase, leaving a gap in the care continuum.

A hub model offers the potential for newly formed accountable care organizations to expand and fill in a crucial missing piece in the care continuum.”

A “hub” model of care solves these problems, providing complex and urgent care 24/7. Specialty care hubs cost less to build and to operate than a hospital and serve as part of a more traditional, large outpatient multi-specialty center during regular business hours. A hub model offers the potential for newly formed accountable care organizations to expand and fill in a crucial missing piece in the care continuum.

Five hubs currently operated by Kaiser Permanente, Mid-Atlantic States (KPMAS) have improved clinical care, increased health care access, and lowered costs, compared with the traditional community hospital/medical office care model.

Finding a Niche for Multi-Specialty Hubs

In contrast to Kaiser Permanente’s West Coast regions, KPMAS does not own or operate its own hospitals on the East Coast. Instead, it contracts with 11 hospitals in Virginia, the District of Columbia, and Maryland. Care for KPMAS’s 650,000 members is provided through the 1,200 physicians of the Mid-Atlantic Permanente Medical Group and is supported by advanced IT systems, including a comprehensive EHR as well as mobile and video technology.

KPMAS opted to construct its five multi-specialty hubs after its research showed that 91% of KPMAS patients treated in emergency departments could obtain appropriate care through a fully staffed and equipped specialty hub with medical, surgical, and diagnostic expertise. In addition, Kaiser Permanente projected that approximately half the patients hospitalized from the ED could be discharged home if they were treated in the hub instead, where they can stay for up to 23 hours.

The mid-Atlantic hubs began operation in 2012. These full-service medical office buildings are geographically dispersed, with each serving approximately 100,000 KPMAS members. Because of their smaller size, the cost of construction is only 20% of a hospital on average. With its
membership currently increasing 10% per year, KPMAS plans to open two additional multi-specialty hubs in the near future.

Kaiser Capitol Hill Medical Center. Click To Enlarge.

**Filling the Care Continuum Gap**

Kaiser Permanente hubs are located adjacent to large, multi-specialty medical offices. During the day, patients can be sent to the hub by their physicians for more complex problems, and physicians from nearly all specialties are rapidly available to provide expertise. The hubs function around the clock as immediate care for patients at any level of acuity that doesn’t require ambulance transport and/or multiple-day inpatient admission. A full range of specialists are on call nights and weekends. A patient’s experience may include:

*Comprehensive and intense medical treatment.* Patients with urgent and complex problems are treated by board-certified emergency medicine physicians, primary care physicians, a wide variety of specialists, RNs trained in critical care, and social workers. They receive advanced diagnostic testing and imaging (such as interventional radiology, PET scanning, and CT/MRI) and sophisticated medical and ambulatory surgical treatment. Mental and behavioral health services are available.
Minor treatment. Patients can obtain 24/7 rapid medical care for less intense problems, such as ear infections, upper respiratory infections, and sprains.

Care coordination and proactive care. Since the specialty hubs use the same EHR as the rest of the KPMAS delivery system, the care team has immediate access to all test results and patient medical history and can record all the care delivered by the hub. While patients receive care for their immediate problems, physicians can also provide preventive care screenings, immunizations, and treatment for chronic diseases.

Ambulatory surgeries. Multi-specialty hubs have operating rooms equipped and staffed to perform both minor and moderately complex surgeries, such as uncomplicated spine surgery. Since 2012, KPMAS has performed 50,000 surgeries in the hubs with no major complications.

Direct patient admission to a partner hospital. If patients require hospital care, they are directly admitted from the hub to an inpatient bed in one of KP’s partner hospitals, rather than being sent to the ED. The clinical documentation in the EHR is immediately available to the treating hospitalist and specialist. Most patients receive specialized treatment more quickly than if they had started in the community hospital’s ED.

Lower Admissions, Higher Patient Satisfaction, Improved Quality

Of the 700,000 patients treated in the KPMAS hubs over the past six years, 31% would otherwise have been seen in an ED. Of these, only 2% were admitted to a hospital, significantly fewer than if they had received care in most hospital EDs. Use of the hubs has contributed to a 23% decrease in hospital days and ED visits per thousand members from 2009 to 2014. Across that time, there have been no major medical complications or avoidable patient deaths.

The hubs have enhanced patient satisfaction: 86% of hub visitors in 2015 reported a very good or excellent care experience. Since launching the hubs, KPMAS has experienced a 20% increase in the number of patients reporting an “excellent” overall care experience on the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey and has been rated “market leading” by J.D. Power and Associates.
Largo Medical Center Kaiser Permanente. Click To Enlarge.

The creation of the hubs has also contributed to quality improvement. KPMAS rose from 81st in the nation in the 2009 NCQA Health Plan rankings to 13th in the nation in 2014. KPMAS was one of only two health plans in the United States to achieve a 5-star rating for both Commercial and Medicare in the 2015–2016 NCQA ratings.

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Overall cost increase for care delivery over the past three years has been under 2% for the region, compared with an estimated 5–6% industry average. The hubs have contributed significantly to this result.

Hubs come with some upfront challenges for providers. Since they include the same sophisticated monitoring equipment, diagnostic machines and operating room design as a hospital, they require a major capital investment. Because hubs are staffed at all hours by board-certified ED physicians and critical care nurses, they share the same hiring challenges as EDs and hospitals in the
community. And since hubs need to link with partner hospitals, they require agreements governing such issues as EHR compatibility and guaranteed specialty coverage.

Yet as the United States struggles to address the health care challenges it faces, new models for care delivery will be essential. Physician offices and retail clinics can only provide medical care for the more routine problems patients experience and usually only during the day. As such, there is a major care gap that the hospital-based emergency department is asked to fill. The result is long waits, higher costs, and discontinuity of medical care. The five hubs built by Kaiser Permanente have successfully addressed these issues and provided patients with superior quality, personalized service, and greater affordability compared to the traditional model.

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Robert M. Pearl, MD
The Permanente Medical Group

Dr. Robert Pearl is the Executive Director and CEO of The Permanente Medical Group, the largest medical group in the country with over 9,000 physicians. He is responsible for the health care of over 4 million Kaiser Permanente members in California, Virginia, Maryland and the District of Columbia. Dr. Pearl is also President and CEO of the Mid-Atlantic Permanente Medical Group and co-CEO of the National Permanente Executive Committee for The Permanente Foundation. Learn more about Robert M. Pearl...

Bernadette Loftus, MD
Associate Executive Director and Executive in Charge, Mid-Atlantic Permanente Medical Group

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