

# Improving Care Coordination in the Specialty Referral Process Between Primary and Specialty Care

Caroline Y. Lin

**There is growing evidence of sub-optimal care coordination in the US. Care coordination includes the specialty referral process, which involves referral decision-making and information transfer between primary and specialty care. This article summarizes the evidence of sub-optimal care coordination in this process, as well as potential strategies to improve it.**

## Referral Decision-Making

**D**espite spending \$8,086 per capita on health care in 2009, the US continues to do poorly on measures of health care delivery. In the 2011 National Scorecard on US Health System Performance, the US scored only 53% on measures of care coordination and efficiency. This includes growing evidence of sub-optimal care coordination in the specialty referral process between primary and specialty care in the ambulatory setting.

Specialty referrals are common. Up to 70% of patients are referred to specialists in a year and, among the elderly, an average of 2 new referrals are made yearly [1, 2]. Specialist visits account for more than half of all ambulatory visits [3]. Despite the frequency of specialist referrals, the referral process continues to present many challenges. The referral process involves referral decision-making followed by care coordination and information transfer to and from specialty care. Prior studies reveal substantial room for improvement in these steps, as well as potential strategies to improve them.

Up to 5-fold variation exists in referral rates among primary care physicians (PCPs) [3]. Such variation points to potential unnecessary referrals or missing referrals that may reduce appropriate use of specialty care, and may thus lead to delays in diagnosis, delays in treatment, or over treatment. Much of this variation may be attributed to physician factors such as years of experience, certainty in diagnosis, degree of risk aversion, technical orientation of care, and concerns about malpractice suits. Geographically, referrals are more frequently made by urban physicians and those in areas with more physicians per capita. Self-referrals are common, accounting for up to 50% of new specialist referrals, while specialist-to-specialist cross-referrals are uncommon, mak-

ing up only about 3% of referrals [3].

Efforts to improve referral decision-making include provision of feedback to providers, improved training, and the holding of regular meetings or joint consultations between providers [4-8]. Additionally, referral guidelines may help improve the process by clarifying which conditions should ideally be managed by PCPs, what type of communication is preferred by PCPs and specialists, and what tests should be ordered before a referral. Some specialty organization referral guidelines already exist for specific conditions. Another promising strategy involves specialist prescreening of referrals to detect those that may be unnecessary, require triage or referral to a more appropriate specialist, or require further tests prior to consultation [3].

Finally, payment reform may ultimately help promote more appropriate referrals by providing integrated primary-specialty care organizations with financial incentives for appropriate specialist care. For example, health policy experts have proposed a bundled payment to caregiving organizations to provide coordinated care for a specific condition (eg, congestive heart failure), rather than traditional fee-for-service payment. The costs of potential unnecessary referrals or specialist visits would be borne by the care organization, but a portion of any savings from more efficient care would pass back to the care organization [3].

## Care Coordination and Information Transfer to and from Specialty Care

Several studies reveal insufficient information transfer in the referral process, with no communication from referring providers to specialists in up to 50% of referrals, and no communication from specialists back to referring providers in up to 45% of referrals [9-13]. Information transfer of test results and records did not reach the other provider in time for an appointment in up to 25% of referrals. In one study,

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Address correspondence to Dr. Caroline Y. Lin, Kaiser Permanente, Primary Care, 3250 Fordham St, San Diego, CA 92110 (carolinelin76@gmail.com).

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50% of referring providers were dissatisfied with timeliness of specialist feedback [3]. Information is often inadequate even when successfully transferred in a timely manner. Up to 70% of specialists rated background information received from referring providers as fair or poor, [11, 12, 14] while up to 50% of referring providers desired more feedback from specialists [13, 15, 16]. There is often misunderstanding about the role of the specialist (eg, single cognitive consultation, co-management, etc.), thus contributing to a large number of follow-up specialist visits (including patients with stable conditions who arguably do not need to see specialists routinely), which comprise up to 50% of specialist visits in the US [3]. Disagreement or misunderstanding of management plans also exist between referring providers and specialists in up to 26% of referrals [3].

Inadequate information transfer and care coordination between primary and specialty care has numerous consequences, including reduced continuity of care, delayed diagnosis or treatment, duplicate testing, follow-up testing, poly-pharmacy, hospitalization, increased risk of malpractice suits, and increased costs [11, 16]. Patients and family members often become information intermediaries, but many are not comfortable in this role [17]. Among malpractice claims for missed or delayed diagnoses, 20% involved communication deficits between providers, 17% involved failure to establish clear lines of responsibility, and 5% involved failure of a requested referral to occur [11].

Many strategies have been proposed to improve care coordination and information transfer. Information technology and shared electronic medical records allow better referral tracking, scheduling, and information transfer. Web-based referral systems have improved scheduling success, reduced wait times, and reduced re-referrals. Referral guidelines can also help clarify provider roles and necessary tests. Patient-centered medical homes may improve the referral process by incorporating many of the above strategies, though an early pilot study so far has not shown significant improvement in care coordination [18]. Other promising strategies involve co-location of generalists and specialists to facilitate information transfer and shared or group visits. Finally, virtual consultations are promising, and include e-mail, telephone, Web-based, and video-conference visits [3].

The current specialty referral process leaves much room for improvement in referral decision-making and care coordination between primary and specialty care providers. Information technology, payment reform, and new models of care delivery are among the more widely promoted strategies for improvement. However, most of these strategies require more rigorous large-scale multi-institution evaluations. Given the expected growth of the elderly population and potential shortage of all types of physicians by 2020, improving the specialty referral process deserves much greater attention. NCMJ

**Caroline Y. Lin, MD, MS** staff physician, Department of Internal Medicine, Southern California Permanente Medical Group, Kaiser Permanente, Primary Care, San Diego, California.

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