A Health Care Cooperative Extension Service: Transforming Primary Care and Community Health

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Transforming Primary Care and Community Health

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PRIMARY CARE IS THE ESSENTIAL FOUNDATION FOR AN effective, efficient, and equitable health care system. Calls to rebuild the crumbling primary care infrastructure in the United States are reaching receptive ears, with public and private advisory groups including the Medicare Payment Advisory Commission and the National Business Group on Health recommending increased payments for primary care.[1] The American Recovery and Reinvestment Act (ARRA)[2] of 2009 appropriated $19 billion for the purchase of health information technology (HIT), with primary care physicians' offices slated to be among the beneficiaries.

Policy makers expect that new investments will transform primary care by creating more effective and efficient patient-centered medical homes. The primary care physician community acknowledges the need for new practice models that provide accessible, comprehensive, integrated care based on healing relationships over time.[3]

New investment in primary care is necessary but not sufficient to revitalize primary care unless combined with a strategy for disseminating and implementing innovations and best practices. Acquiring an electronic health record (EHR) will not create a highly functioning medical home unless it can be used to create functional patient registries. Receiving enhanced payments for care coordination without a workable plan for hiring and training health coaches for patient self-management leaves a gap between expectations and reality. Large, organized delivery systems such as Geisenger, Kaiser Permanente, and the Veterans Administration have the institutional wherewithal and economies of scale to implement practice redesign in a systematic and successful manner. However, two-thirds of office-based physicians work in practices of 4 or fewer physicians.[4] These clinicians often have little or no technical assistance to deploy and maintain new practice improvements like EHRs.

To successfully redesign practices requires knowledge transfer, performance feedback, facilitation, and HIT support provided by individuals with whom practices have established relationships over time. The farming community learned these principles a century ago. Primary care practices are like small farms of that era, which were geographically dispersed, poorly resourced for change, and inefficient in adopting new techniques or technology but vital to the nation's well-being. Practicing physicians need something akin to the agricultural extension agent who was so transformative for farming.[5,6] A nationwide Primary Care Cooperative Extension Service, modeled after the US Department of Agriculture's Cooperative State Research, Education, and Extension Service (Cooperative Extension), which so successfully accelerated farm transformation, should be created. County-based health extension organizations would support primary care clinicians in the same manner that the agricultural model assists family farmers, providing infrastructure for local learning communities and practice transformation. ARRA establishes a Health Information Technology Extension Program[2] to "assist health care providers to adopt, implement, and effectively use certified EHR technology," which could serve as the nidus for a broader program to revitalize primary care and community health.

The Extension Service Model

The Cooperative Extension was launched in 1914 as a collaboration among federal, state, and county governments, agricultural experts at land grant universities, and farmers. This program sped adoption of innovations through coaching by local change agents in every county, with whom farmers developed a trusting relationship. Agents are linked to a regional hub of an agriculture department at a land grant university, a resource for research evidence on best practices and promising innovations. Extension agents and farmers work collaboratively to solve problems. The Cooperative Extension accelerated farm modernization and became a rich source of new knowledge[7] and has been characterized as "one of the most successful innovation-spread programs ever seen in this country."[5] Experience gleaned from primary care practice–based research networks confirms that the adoption of innovations often depends on individualized support provided within the context of trusting relationships.[8]

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The Primary Care Cooperative Extension Service would provide technical assistance in the implementation of chronic care models, advanced access scheduling, group medical visits, and similar innovations. Extension agents would facilitate training for team-based care, with greater focus on panel management, patient education, and preventive service delivery. The service would also provide technical assistance in the application of EHRs, provide standardized feedback to clinicians for continuous improvement, and coordinate comprehensive health data collection. Extension agents would assist practices in engaging patients as partners and link practices with public health departments, mental health agencies, local school districts, and other community resources. Links with academics would help disseminate evidence, assess the process of implementation, and involve community clinicians in the generation of new knowledge. An overarching goal of the extension service would be to create practice learning communities that share best practices and problem-solving strategies.

Building on Existing Assets

Extension service elements are currently available to some practices: knowledge integration and translational research is performed by practice-based research networks, National Institutes of Health Clinical Translational Science Award community engagement programs, and the Agency for Healthcare Research and Quality's Knowledge Transfer/Implementation Program; technical assistance and training are provided by Medicare Quality Improvement Organizations, the Community Health Center Collaboratives, and Area Health Education Centers (AHECs) administered by the Health Resources and Services Administration, the TransforMED program sponsored by the American Academy of Family Physicians, and others. However, none of these existing programs encompasses the full scope of a primary care extension service, and they do not typically have sustained, local presence and partnership with community practices.

Some existing primary care support programs embody many of the elements of the proposed extension service. The Oklahoma Physicians Resource/Research Network (OKPRN),[9] a collaboration between the Oklahoma Academy of Family Physicians and the University of Oklahoma Department of Family and Preventive Medicine, with ties to the state's Department of Health, Medicare Quality Improvement Organization, and Medicaid Program, includes more than 235 clinicians at 110 sites, mostly in small practices. The OKPRN developed and tested a quality improvement method that includes performance feedback with benchmarking, academic detailing, practice facilitation, HIT support, and learning collaboratives. Researchers at the University of Oklahoma provide methodological expertise and access to research and practice improvement resources.

A key ingredient in the success of the OKPRN is a cadre of practice enhancement assistants who have a role analogous to agriculture extension agents.[10] The practice enhancement assistants develop relationships with a group of practices that include practice audits and feedback, staff training, "cross-fertilization" of ideas among practices, coordination of quality improvement initiatives, and facilitation of practice-based research network projects. The OKPRN's activities have produced measurable improvement in preventive services and diabetes care by sharing approaches to common challenges.[11]

Another successful model is Community Care of North Carolina (CCNC). This model was initiated by North Carolina's Medicaid program to improve the quality of primary care for program beneficiaries and consists of 14 networks reaching more than 3000 physicians.[12] These networks are nonprofit corporations, and in addition to community physicians they include county health departments, social services, hospitals, universities, AHECs, and other key stakeholders. Networks receive $3 per member per month from Medicaid to improve services through hiring case managers for high-risk patients and other interventions. The CCNC has improved quality of care and yielded Medicaid a return of $2 in savings for every $1 invested.

The Center for Excellence for Primary Care at the University of California, San Francisco uses practice coaches, akin to OKPRN practice enhancement assistants, to facilitate practice redesign in local safety net clinics, including training in team-based models pairing clinicians with a health coach and panel management for patients with chronic conditions.[13] The Center for Excellence benefits from a partnership with Kaiser Permanente, helping to translate innovations from Kaiser to local safety net clinics and vice versa.

The New Mexico Health Extension Regional Offices (HEROs)[14] were developed to improve community health and have close ties with the existing US Department of Agriculture extension service. HEROs are a partnership among the University of New Mexico's Office for Community Health, New Mexico State University extension offices, County Health Councils, the state's AHECs, community health centers, the Indian Health Service, community hospitals, rural family medicine residency programs, and a primary care practice–based research network. HEROs are strategically located in underserved rural counties and use county health report cards to guide interventions to address the primary determinants of health and illness.

The OKPRN, the CCNC, the University of California, San Francisco Center for Excellence, and HEROs share key features: Each is committed to sustained partnership with community primary care practices to improve health care and the public's health, involve local extension agents to facilitate cooperative learning communities, include a prominent role for primary care departments at partnering universities, and involve other key regional institutions and agencies. Only the CCNC has a stable funding source due to integration with the state Medicaid program. All 4 programs illustrate the gains that could be

accomplished by a nationwide investment in primary care extension services.

The Way Forward

The US Department of Agriculture's Cooperative Extension provides an informative model, but the skills required to transform health delivery differ in important ways and the new program would need to be administered by an agency within the US Department of Health and Human Services. Many organizational principles of the existing Cooperative Extension should be emulated in a new Primary Care Cooperative Extension Service, and the new program should articulate with the existing extension program.

The Primary Care Cooperative Extension Service should be organized around state or regional hubs, which in turn support county agency offices. Each hub should include a university-based center of excellence and state health department. The academic home would provide expertise in community-engaged research and evaluation. The governmental home would provide a focus on the health needs of the public and a forum for networking and collaboration. States could also include other partners in the hubs, such as quality improvement organizations, AHEC offices, health professional associations, and practice-based research networks. Hubs would support county offices and serve as a resource for information on best practices and HIT standards, training of county extension agents, and quality control and program oversight. Administrative costs for hubs should be capped so that most resources are pushed out into local extension offices.

Local extension offices could be operated by a variety of qualified nonprofit organizations, as long as they could demonstrate capacity for practice improvement and HIT facilitation. Local extension office oversight committees should include patients as well as representatives from primary care, public health, mental health, social services, and local hospitals.

A federal investment of $500 million annually, equivalent to federal appropriations for the Department of Agriculture Cooperative Extension,[15] would enable establishment of primary care extension program infrastructure in every state. If public and private health plans also contributed $1 per member per month (approximately one-quarter of their existing quality improvement budgets), annual funding for the primary care extension would be nearly $3 billion.

Conclusion

Rebuilding the nation's primary care infrastructure to improve the health of communities should include the establishment of a nationwide Primary Care Cooperative Extension Service. Nearly a century ago, the US Department of Agriculture's Cooperative Extension was developed to speed farming improvement, increase yield, and learn from innovators. The linkage of family farms to academics and researchers via a trusted extension agent greatly improved agricultural efficiency and produced new knowledge that would have otherwise lain fallow in innovative family farms. Ensuring that primary care physicians optimally contribute to the health of the US population is certainly no less important.

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