

A Cooperative Extension Service for Primary Care in Oklahoma

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ABSTRACT

Lessons learned and practiced in agriculture for 100 years are now informing the development of a primary care extension program that has the potential to provide substantial support for primary care practices throughout Oklahoma and to make it easier for all agencies and organizations working to improve our state's health to do so more effectively.

BACKGROUND

A Brief History of Cooperative Extension

When our country was founded, the founding fathers correctly calculated that agriculture would be critical to the success of the young nation, and they were concerned that most farmers weren't practicing "evidence-based" farming. Poor plowing methods, failure to rotate crops, and other antiquated methods resulted in inefficient production and soil exhaustion. Poor coordination led to shortages of some crops and overproduction of others. Over 50% of the American workforce was involved in farming, reducing the number of adults available to other vital occupations. Food availability was unpredictable, prices were high, and quality was uneven. In his book, *Taking the University to the People*, Rasmussen recounts the steps taken to bring science into agriculture, steps that parallel those now being taken in health care for similar reasons.¹ For that reason, it may be instructive to review some of that history.

In 1796 George Washington proposed an office to promote dissemination and diffusion of modern agricultural methods. However, this had little impact. In 1810 the first agricultural journals were published, but readership was low. Frustrated, by the reluctance of established farmers to accept scientific methods, in 1862, Congress passed the Land-Grant College Act intended to train a new generation of evidence-based farmers. However, enrollment was less than anticipated. Many thought they could learn better by doing than by studying, and, they were needed on the farms. In fact, there was limited practical material to teach since much of the research wasn't well matched to the day-to-day needs of farmers. The agricultural colleges mostly taught farm operations.

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In order to address concerns about the disconnect between research and practice, the Hatch Act of 1882 established funding for "experimental farm stations," which were to be located strategically to replicate actual farming conditions and be more visible to farmers. As the experimental farm stations began to produce potentially useful results, they began to publish in research journals and bulletins. In 1889 the Department of Agriculture began issuing *Farmers' Bulletins* and the *Yearbook of Agriculture*. However, these publications reached a small proportion of farmers, many of whom still distrusted "book farming." To reach more farmers, the Departments of Agriculture began to offer local "Farmers' Institutes" throughout the country.

Despite these strategies, farming practice progressed remarkably slowly until, in 1903, a U.S. Department of Agriculture employee, Seaman A. Knapp, conducted an experiment in Terrell, Texas that resulted in a new way of looking at "continuing agricultural education." He decided that if he could convince one carefully chosen farmer to use evidence-based methods on a portion of his land, the results would convince him of the benefits, and he might then be able to convince other farmers in the same county to try them. When his experiment worked better than he could have imagined, Knapp offered Walter C. Porter, his "early adopter," a job as "county agricultural extension agent," and was given funding to hire an additional 32 additional extension agents in counties throughout Texas and into Louisiana. Word spread quickly, and, even as county extension offices were springing up in other states, Congress, passed the Smith-Lever Act in 1914, authorizing the Department of Agriculture to establish a nationwide Agricultural Extension Program. The goal of the program was to maintain meaningful bi-directional communication between the land grant universities and farmers and provide on-site training and assistance to farmers so they could stay abreast of advances in science. By 1920, there were seven thousand federal extension agents, working in nearly every county in the nation, and by 1930 there were more than seven hundred and fifty thousand demonstration farms and farm stations.

The ingredients missing from all prior strategies were person to person academic detailing (Knapp's instruction of Porter) and implementation assistance provided by a trusted neighbor and colleague (assistance provided by Porter to the other farmers in the county). Key principles were locality and

interpersonal relationships. The results were truly astounding. Productivity increased dramatically and prices fell by 50%, so that by 1930, food comprised just 24% of family spending and 20% of the workforce. Today, food accounts for 8% of household income and involves only 2% of the labor force. Food availability, variety, and safety are taken for granted.

Cooperative Extension receives funding from federal (30%), state (70%) and county (<1%) sources. Funding is of two types, sustainable funding and project-specific funding obtained through competitive grants and contracts. At the time of Rasmussen's book (1989), staffing was 1% federal, 32% university, and 67% local plus more than 2 million volunteers.

A Brief Summary of Quality Improvement (QI) Research in Oklahoma

In 1999, researchers at the University of Oklahoma Health Sciences Center (OUHSC), in collaboration with clinician members of the Oklahoma Physicians Resource/Research Network, a primary care practice-based research network established 5 years earlier,² began a series of studies to determine the best ways to help primary care practices improve their care processes. The earliest studies were funded by the Oklahoma Foundation for Medical Quality and the Oklahoma Healthcare Authority. Subsequent projects have been funded by the U.S. Agency for Healthcare Research and Quality, the National Institutes of Health, and the Robert Wood Johnson Foundation.

One of the first lessons learned was the depth and breadth of practical wisdom that already exists within community practices but is rarely shared across practices. The research team learned how to find these "best practices" by conducting performance audits and focusing on the highest performers. They learned that clinicians are more likely to implement methods found to be successful by their peers than recommendations from journals or other "experts." But they also found, as others had, that there is still value in academic detailing from a trusted academic expert that includes an overview of the evidence, a review of what high performing practices seem to be doing, a facilitated discussion of current methods, and an agenda for improvement.

The team confirmed that clinicians always think they are doing a better job than they actually are, and so performance feedback is an important motivator for change. Because physicians tend to be competitive people, it also helps to provide data comparing their performance to that of their peers. They learned to repeat the performance evaluations monthly during the change process to give practices a sense of their progress.

Finally, the researchers learned that improving processes of care while continuing to see patients is difficult, that most primary care practices are resource poor, and that even a little assistance during the change process helps a lot. Borrowing the concept of practice facilitation from England and Canada, they began employing practice enhancement assistants (PEAs) who spend ½ day in each practice for periods of about 6 months to help them overcome obstacles to change. The fully evolved QI process then included initial and monthly performance

evaluations, identification and clarification of best practices, academic detailing, and practice facilitation. Several cluster randomized trials (randomization by practice) showed that this method was consistently effective. The team has also experimented with local learning collaboratives, monthly noon conferences involving representatives of small numbers of practices working on the same care processes, and this seems to have some additional value.²⁻¹⁰

It was only after the research team became comfortable with this process that they realized several things. First, it was clear that success was dependent upon relationships, including relationships between practices, relationships with the academic detailer, and relationships with the facilitator, and it was clear that relationships took time to build. When working with new practices it often took 2-3 months for the facilitator to bond sufficiently with the clinicians and staff to have any positive impact. Second, the facilitators were spending large amounts of time travelling from Oklahoma City and Tulsa to practices around the state at significant cost. At some point it occurred to the team that what they had "discovered" looked almost identical to what the farming community had figured out 100 years earlier.

Primary Care Extension

The Oklahoma research team and several others around the country began to wonder what "Primary Care Extension" would look like and how it might be funded. Because these conversations began during the crafting of the Affordable Care Act, they were able to bring their ideas to United States Senate staffers working with the Health, Education, Labor, and Pensions (HELP) Committee. The result was Section 5405 of the final bill authorizing the establishment of a "Primary Care Extension Program" that would "provide support and assistance to primary care providers to educate providers about preventive medicine, health promotion, chronic disease management, mental and behavioral health services, and evidence-based and evidence-informed therapies and techniques, in order to enable providers to incorporate such matters into their practices and to improve community health by working with community-based health connectors (referred to in this section as Health Extension Agents)." An article was published in the Journal of the American Medical Association entitled, "A health care cooperative extension service: Transforming primary care and community health"¹¹ and other similar publications followed in close succession.^{12,13}

Examples of "best practices" began to emerge. The University of New Mexico (UNM) was an early adopter of the health extension idea and had established Health Extension Rural Offices (HEROs) and health extension agents in communities throughout the state whose role was to help communities to identify health resource needs and communicate those to the Office of the Vice President for Community Health.¹⁴ The UNM and New Mexico State University, the state's land grant college, when possible, identified and supplied the needed resources if available. The focus was not on primary care practices per se, but primary care practices

were certainly encouraged to be involved. Resources provided by the two Universities have included consultants, trainees, grant writing assistance, bibliographic resources, workforce development, and assistance with program development. In the spirit of Cooperative Extension, they are “taking the University to the people.”

Though focused more on case management than on quality improvement, the North Carolina Community Care Program is also similar to the Health Extension model. In 2004, the Medicaid Program in North Carolina released a request for proposals to establish non-profit networks of primary care clinicians willing to share and direct case management services directed at improving care and reducing costs for patients with chronic health conditions. The Program agreed to provide \$2.50 per member per month to the networks and the same amount to clinicians who agreed to participate. Now seven years later, there are 14 networks covering the entire state, each of which includes on its board of directors representatives from public health, mental health, social services, and primary care. Physician advisory committees have considerable input into how the case managers hired by the networks are deployed and the projects they undertake. The result has been millions of dollars in cost savings and much better relationships between primary care clinicians and the Medicaid Program. Because of the success of this initiative, the Oklahoma Health Care Authority applied for and received a waiver from the Centers for Medicare and Medicaid to establish three similar networks, called Health Access Networks in Tulsa and Canadian Counties.

Vermont’s Blueprint for Health is another interesting example of the health extension model. In 2006, the Vermont legislature passed health care reform legislation that included universal health insurance coverage, a delivery system built on a foundation of primary care, establishment of “community health teams,” and an evaluation infrastructure to support ongoing quality improvement. All insurance companies are required to provide financial support for the program, which includes payments to clinicians based upon their ability to meet patient-centered medical home standards and participate in the community health teams. Each community health team includes five full time staff (e.g., case managers, QI facilitators, mental health professionals, etc.) determined by the needs of each community of 20,000 patients. From these examples it was clear that a Primary Care Extension system could be thought of as a piece of a larger vision of health extension.

Responsibility for Section 5405 of the Affordable Care Act (ACA) was assigned to the Agency for Healthcare Research and Quality (AHRQ), but the Senate Appropriations Committee did not appropriate the \$120 million suggested to fund the first 10 states. However, AHRQ had become extremely interested in Primary Care Extension as a way to facilitate dissemination and implementation of research products. A request for applications was released for what the Agency decided to call IMPaCT (Infrastructure to Maintain Primary Care Transformation) grants to support development of primary care extension programs in 4 states with dissemination to 12 others. Oklahoma was awarded one of these grants. The two-year project began

September 30, 2011.

Primary Care Extension in Oklahoma

Based upon an understanding of Oklahoma’s primary health care system and the state of the state’s health, and after conversing with a wide variety of potential stakeholders, the Oklahoma application proposed to establish a statewide network of county health improvement organizations (CHIOs). A county-based organizational structure was chosen because most stakeholder groups are organized by county (e.g., county health departments, county mental health services, county social service agencies, county medical societies, Turning Point coalitions, etc.), counties are about the right size in terms of travel distances, and because Cooperative Extension is organized by county. Obviously, accommodations may need to be made for both sparsely and heavily populated counties.

Because the CHIOs will receive and manage money, they will need to be or have access to fiscal entities, probably 501c3 non-profit, charitable organizations. The current plan is to help existing county coalitions (e.g. Turning Point coalitions) to become non-profit corporations. The Public Health Institute of Oklahoma has agreed to expand their Board of Directors to include representatives from academic departments of primary care and the Oklahoma Health Care Authority in order to satisfy AHRQ’s requirements for a state hub.

The mission of each CHIO will be to improve the health of citizens of that county. An important aspect of that work will be support for quality improvement in primary care practices, the purpose of the statute and the grant. Building upon the work that has already been done by the Department of Health and the 70 Turning Point coalitions, the CHIOs will be involved in periodic and ongoing countywide assessments of health and health care challenges and in strategic planning to address them. It is likely that each CHIO will establish advisory committees or work groups to address the wide variety of health-related issues that will be identified. For example, the primary care extension activities will require advisory committees made up of primary care clinicians, practice staff, and patients.

The four regional Area Health Education Centers (AHECs) will serve as regional QI coordinating centers. CHIOs in each quadrant of the state will be able to reach out to their regional AHEC for access to various resources. These resources could include administrative assistance, identification and arrangements for clinical expertise (e.g. academic detailing), assessment and responses to manpower shortages, research and grant writing assistance, and facilitation of project-specific funding. Some of these will be new roles for the AHECs, but ones that are compatible with their mission and ones they are anxious to assume. They will depend upon existing relationships among the AHECs, the academic institutions, and community clinicians throughout the state.

Funding for health extension is expected to be of two types, long term and project-specific. Long-term, sustainable funding will be the greatest challenge. The most promising sources are the public and private insurance companies. Pennsylvania and Vermont have forged alliances among insurance carriers to fund

primary care improvement initiatives. In North Carolina and Oklahoma, the Medicaid programs have received waivers, allowing them to fund case management and some aspects of primary care quality improvement. If a level playing field can be created, the insurance carriers will likely be willing to support primary care extension. In fact, the ACA provides a potential field-leveling opportunity in the Minimum Loss Ratio provision, which requires that major insurance companies spend 85% of the money they receive in premiums for health care and the improvement of health care services. Since most companies are currently only spending 75% of premiums, new money will be coming into the system. The rules for how that money can be spent are now being written, but many inside of the insurance industry would like to be able to spend some of it to provide greater support to primary care without actually increasing fee-for-service payments. Project-specific funding is already plentiful. The number of organizations willing to invest in improved health and health care is large and increasing, and even more money would be spent if there were more effective ways to distribute and use it to achieve desired results.

In 2005, the Canadian County Coalition for Healthy Families and Children (founded nine years earlier) partnered with several county agencies in an attempt to increase access to health care for children. Ten thousand dollars were identified to begin the effort. This was matched one-to-one through the Medicaid program, making it possible to hire a half-time case manager. Because of that development, the Department of Family and Preventive Medicine at the OUHSC entered into a contract with the Oklahoma Health Care Authority (OkHCA) to provide approximately \$50,000 of faculty and staff time matched by an equal amount of funding from Medicaid to pay a practice facilitator to help Canadian County practices increase the rate and quality of well child care visits. As a result of that initiative, the Department of Pediatrics at the OUHSC applied for and received a \$100,000 grant from the Commonwealth Fund to help the same practices incorporate developmental and behavioral screening processes. During this time, the involved clinicians began meeting to learn from each other. Now, 6 years later, the Coalition has merged with an existing 501c3, non-profit organization, the El Reno Community Clinic, Inc., and was approved as one of three Health Access Networks by the OkHCA and is receiving approximately \$300,000 per year to provide support to primary care practices serving Medicaid patients. In other words, a coalition focused on improving access to primary care services, by joining with county agencies, were able to leverage a \$10,000 initial investment to bring \$300,000 per year of sustainable funding and \$210,000 of project-specific funding and human resources into the county.

Aligning Existing QI Resources

A number of state agencies and organizations are involved in QI activities. The OkHCA contracts for both practice facilitators and case managers who serve patients throughout the state. The Oklahoma Foundation for Medical Quality also employs the equivalent of practice facilitators and conducts a variety of QI activities in primary care practices. The Area Health Education

Centers are doing QI with clinicians and practices. All of these activities could be more effective and efficient within a health extension infrastructure.

The professional associations are becoming involved in QI activities. The new Maintenance of Certification standards have increased pressure on these organizations to support QI-like activities. The state's three major academic medical centers (AMCs) are all involved in continuing medical education (CME) and understand that this will increasingly involve more than just lectures. The University of Oklahoma's Department of Geriatric Medicine has received funding to expand its QI efforts in order to improve care of the elderly.

Virtually every county in Oklahoma is blessed with a significant number of organizations and agencies focused on improving population health and health care services. In most counties, these groups have already begun to work together through Turning Point Coalitions formed from a wide variety of stakeholder groups with support from a grant to the state from the Robert Wood Johnson Foundation and staff from the Oklahoma State Department of Health. Many of these coalitions have already received foundation funding for specific communitywide health improvement projects. However, most have yet to develop into identifiable fiscal entities and most do not have significant primary care clinician involvement.

The proposed extension program can be viewed as the next step in the evolution of PHIO, Turning Point Coalitions, AHECs and AMC CME offices. It is also the next logical step toward breaking down traditional walls separating public health, mental health, and primary care. It will provide a forum within which hospitals can more effectively work with primary care clinicians and with other community stakeholder groups. True collaboration is most likely to occur when there is a shared mission (improving the health of the county) and when all stakeholders are working off of the same budget at least part of the time.

Timeline

A statewide meeting is being planned for February 1, 2012, in Oklahoma City to introduce clinicians and other stakeholders across the state to the concept. Conference attendees will be asked to critique the current blueprints and offer concrete suggestions for improvement. A goal is to have at least 25 functional county health improvement organizations by the end of September of 2012 and another 25 a year later. Their ability to employ administrative staff and facilitators will depend upon the ability of the various partners to align existing resources and on the availability of additional funding.

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