



Dental Hub & Spoke Project Links Kansans in Underserved Areas to Dental Care

BRENDA R. SHARPE

President and CEO, REACH Healthcare Foundation

ansas, like many states with a vast rural geography, has substantial areas with little or no access to oral health services. Studies of the Kansas dental workforce show 93 of 105 counties do not have enough dentists to serve their population. Thirteen counties have no dentists at all. A study released in 2011 counted 1,159 primary care dentists practicing in the state. Approximately half are located in two metro areas.

Given the state's rural composition and concentration of population in a few larger communities, no single solution can fully address Kansas' oral health access barriers and workforce shortages. One innovative approach that began with a pilot project in 2007 not only significantly improved access to dental care in the state, but also exemplifies how oral health leaders can leverage the safety net health care infrastructure to provide dental services in deeply underserved areas. The project also showcases a partnership of public and philanthropic resources that produced significant investment in oral health and set the stage for a financially sustainable solution.

BUILDING A NETWORK OF HUBS AND SPOKES

In 2007 the Kansas Association for Medically Underserved (KAMU), the state's primary care association, secured a \$500,000 appropriation from the Kansas Legislature to support an innovative "hub and spoke" concept designed to expand the state's oral health infrastructure. The concept establishes dental "hubs" at existing safety net clinics that support oral health outreach sites, or "spokes," in underserved areas (see figure).

KAMU approached several foundations funding oral health projects in Kansas to invest in the pilot project. Six foundations (Delta Dental Foundation of Kansas, Jones Foundation, Kansas Health Foundation, REACH Healthcare Foundation, Sunflower Foundation, and United Methodist Health Ministry Fund) ultimately signed on to support the project.

THE DENTAL HUB MODEL

A primary aim of the initiative was to integrate dental services in safety net primary care clinics. To implement the pilot, safety net health care clinics had to begin by building capacity at their hubs to serve more patients and connect services with primary care. For most clinics that meant hiring additional dentists and other dental staff, upgrading facilities, adding dental operatories, and developing patient care and robust referral systems to link dental services with the primary care clinics.

As part of the grant application, hub sites identified underserved communities and populations that met the criteria for dental spokes. Spokes could be a physical clinic location or involve portable services in nursing homes, schools, Head Start centers, and other sites with populations not being served.

A key ingredient in this model was Kansas' Extended Care Permit (ECP) for dental hygienists. Kansas passed legislation in 2003 and amended it in 2007 to expand the scope of practice

DENTAL HUB AND SPOKE MODEL Schools/ Day Care **Facilities** Hub **Public** Fixed (Safety Health Satellite Net Dept. Clinic) Group or Nursing Home

for dental hygienists in an effort to address gaps in oral health access and uneven distribution of the oral health workforce across the state. The ECP allows hygienists who have an agreement with a sponsoring dentist to deliver preventive services for specific populations in specified locations. Availability of ECP hygienists created new possibilities for delivering services in locations that otherwise would not be able to recruit a dentist or sustain a dental practice. ECP hygienists also contributed to the financial viability of the hub by providing reimbursable services to populations not being served.

RETURN ON INVESTMENT

While the state initially allocated \$500,000, it ultimately contributed \$1.5 million to the project. The state's initial appropriation presented valuable seed money, but not enough to address widespread access problems. KAMU staff recognized the opportunity to leverage the state dollars but realized it would require the cooperation and flexibility of charitable foundations working in Kansas to succeed.

With that goal in mind, KAMU convened a group of foundations in 2007 to present the project and ask funders to align their grantmaking processes to collectively invest in a publicprivate partnership that offered potentially significant returns.

The REACH Healthcare Foundation, one of the foundations that contributed to the project, is a regional funder in Kansas City with a defined six-county geographic service area that spans the Kansas and Missouri state line. Other participating foundations operate statewide but with a focus on capital needs or equipment; others are limited to specific counties.

By working collaboratively, the six foundations were able to capitalize on their individual interests, adhere to their particular funding restrictions, and still contribute to a "greater good." The foundations agreed to work through KAMU as the coordinating agency that handled the grants process and managed the relationships with clinics. Funders also agreed to accept a common application, reporting measures, and timelines. The foundations ultimately invested \$4.6 million over three years to support early program development, start-up capital, and staffing expenses.

Foundations often expect collaboration from grantees but are not always role models of the practice themselves. To make the project work, the foundations had to agree to suspend some of their requirements to achieve a more substantial return on investment. For the REACH Foundation that potential return included:

- greater leverage of the foundation's resources and geographic limitations;
- the opportunity to improve access in an underserved rural community in the foundation's service area while providing benefit to other parts of the state;
- a new approach to collaboration with funding colleagues;
- a framework for rethinking grantmaking processes when those processes present barriers for prospective grantees;
- a unique opportunity to engage with government and private funders in a systems-level solution to a problem

- that seemed insurmountable; and
- implementation of a model that offered promise for sustainability, and potential replication for other projects or other states.

ACCESS MAGNIFIED—RESULTS!

From 2007-2011, KAMU awarded \$6.1 million in grants to 10 safety net clinics, expanding access to safety net oral health services from eight counties in 2007 to 78 counties in 2011. The number of dental visits in the grantee clinics increased from 42,306 in 2007 to a remarkable 93,624 in 2011. The program also expanded the state's oral health workforce. The number of full-time equivalent dentists in the hub sites grew from 7.3 to 25.5; the number of dental hygienists more than doubled during the same period.

The investment in oral health infrastructure also laid the groundwork for future workforce expansion efforts, such as the Registered Dental Practitioner model proposed by the Kansas Dental Project (http://www.kansasdental.com). Furthermore, under KAMU's leadership and through a recent grant from the DentaQuest Institute, a number of Kansas clinics are working with Safety Net Solutions (http://www.dentaquestinstitute. org/safetynetsolutions) to enhance their operations, capacity, and productivity. In our view, success begets success, and Kansas is playing a lead role in the implementation of innovative approaches to oral health access issues that persist in the rest of the country.

LESSONS FOR FOUNDATIONS

The Dental Hub and Spoke Program is the largest foundation collaboration in the state in terms of total dollars contributed and return on investment. The success of the project, and the relationships developed by the foundations, spurred interest among several funders in finding the next partnership project. Working together has become a way of doing business for REACH and the other Kansas health foundations. Several of the original hub and spoke funders have since collaborated on a number of other projects, ranging from oral health advocacy to health reform implementation assistance.

Key to these collaborations is the willingness to give each foundation partner shared voice in the project, regardless of total financial contribution. Although REACH's investment in the Dental Hub and Spoke Program was the lowest relative to our colleagues, we were equal partners in the decisionmaking. The foundations also recognized the value of an effective coordinating agency (KAMU) with the capacity and relationships to drive innovation in the safety net system and draw support from multiple sectors. Finally, the project was well timed to take advantage of a policy development (the ECP dental hygienist) that paved the way for the expansion.