

## Children's Access to Care Declines in Rural Areas When Local Health Departments Stop Clinical Services: Lessons from South Carolina

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**H**istorically, many state and local health departments, particularly in rural and medically underserved areas, have served as key health care providers in their communities. Over the past 25 years, however, the focus of public health has shifted from providing clinical services to broader population-based activities, including disease surveillance and environmental safety. A key—and largely unanswered question—is what happens to access to care when local health departments (LHDs) discontinue clinical services. According to a new study from the University of South Carolina, when local health departments in rural and underserved areas discontinue clinical services, children are less likely to receive important preventive health services.

The study examined children's use of Early Periodic Screening, Diagnosis and Treatment (EPSDT) services in South Carolina between 1995 and 2010 when LHDs transitioned from providing clinical services as the state moved toward a medical-home model for children with Medicaid coverage. The impact of LHDs discontinuing EPSDT services varied greatly between urban and rural communities and by LHD clinical market share. Initially, use of EPSDT services declined in both urban and rural communities as health departments discontinued clinical services, especially in communities that relied more on LHDs. However, use of EPSDT services ultimately increased between 2005 and 2010 in urban communities with low health department market share. In contrast, use of EPSDT services in rural counties never recovered, remaining lower in 2010 than the 1995 baseline across all levels of LHD clinical market share.

The findings likely reflect rural communities' greater reliance on health departments as direct providers of clinical services and lack of other health care providers to absorb the demand when LHDs discontinued services. In communities with adequate community-based primary care capacity, shifting clinical services from health departments to community providers likely will improve children's access to care in the long run. However, in rural and underserved communities, children's access to care is likely to deteriorate unless steps are taken to increase primary care capacity when health departments discontinue clinical services.

### A Public Health System in Transition

Along with traditional core public health activities, such as disease and injury prevention, many local health departments have provided primary care and other clinical services to fill persistent gaps in access to care. In recent years, a renewed national emphasis on LHDs focusing on population-based public health activities has emerged. LHDs are under increasing pressure to move away from providing direct clinical care to individuals and instead focus on the key public health activities of assessment, policy development and assurance of community health. Despite the shift in focus, many LHDs continue to provide primary care and other clinical services—particularly in rural and underserved communities.

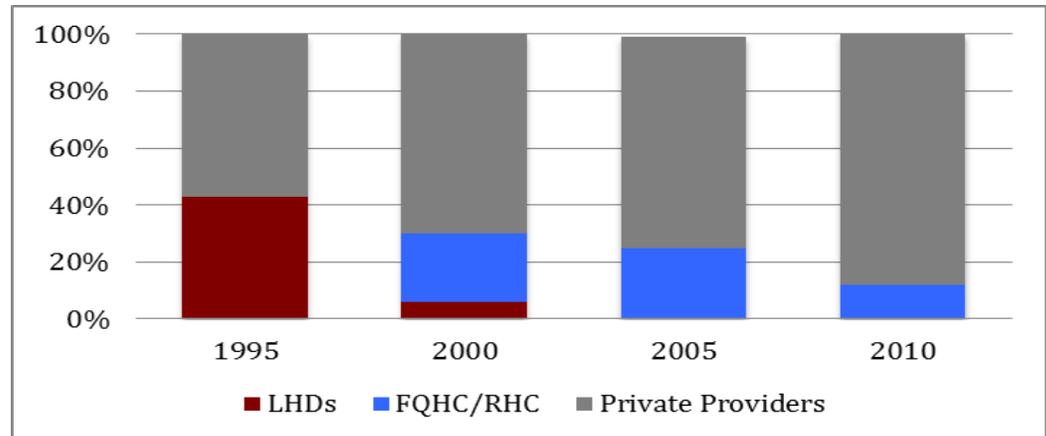
### The South Carolina Experience

A key, but largely unanswered, question underpinning the transition away from direct service provision is what happens to access to care in communities when local health departments stop providing primary care and other clinical services? Between 1995 and 2010, South Carolina LHDs transitioned away from clinical service provision, providing a unique opportunity to examine this question.

Historically, LHDs occupied a large share of the clinical service market for EPSDT services provided to children covered by Medicaid. As the state moved toward a primary care medical-home model for children enrolled in Medicaid, LHDs discontinued the provision of EPSDT services, transitioning children to other providers in the community. Generally, EPSDT services are analogous to well-child visits. This analysis examined how the level of EPSDT services for infants changed in rural and urban communities as LHDs withdrew clinical services and the relationship of those changes to community reliance on LHDs for EPSDT services.

*Initially, use of EPSDT services declined in both urban and rural communities as health departments discontinued clinical services, especially in communities more reliant on health departments for clinical services.*

**Figure 1: Clinical Market Share of EPSDT Services in South Carolina, by Provider Type and Year (1995-2010)**



### Community Reliance on LHDs

Community reliance was classified based on LHD clinical market share in 1995—the baseline year of the study—as high (>60%), average (20%-59%) and low (<20%). All LHDs provided some level of EPSDT services in 1995, but significant variation across communities was evident with market shares ranging from 5 percent to 91 percent. By 2000, most LHDs had initiated a formal transition process to move clinical services to other community providers, yet the clinical market share in some communities remained as high as 74 percent.

The transition was mostly complete by 2005, with less than 1 percent of all EPSDT visits provided by health departments. But in selected areas, LHD market share remained as high as 19 percent. By 2010, no EPSDT services were being provided by LHDs in South Carolina.

### Redistribution of EPSDT Services

Federally qualified health centers (FQHCs) and rural health clinics (RHCs), when available, provided an initial buffer during the intensive transition years. This was tempered by a subsequent shift to private providers during the later years of the transition (see Figure 1). Ultimately, private community-based providers were instrumental in absorbing the demand for EPSDT services as LHDs withdrew clinical services.

Changes in state Medicaid policy, managed care enrollment and EPSDT billing may explain the second shift to private providers,

but these changes occurred well after the initial transition of EPSDT services from LHDs was complete.

### Initial Declines in Urban/Rural Areas

Initially, use of EPSDT services declined in both urban and rural communities as health departments discontinued clinical services, especially in communities more reliant on health departments for clinical services. However, use of EPSDT services ultimately increased between 2005 and 2010 in urban communities (see Figure 2). Although improvements were proportionally small, the volume of infants residing in urban communities who demonstrated improvement was substantial and positively influenced statewide averages.

As EPSDT services were withdrawn in communities more reliant on LHDs for clinical services, a noticeable gap in the use of any EPSDT service emerges, as does a rural and urban disparity. In communities with high LHD clinical market share in 1995, most infants received at least one EPSDT visit during the year. As services provided by LHDs were withdrawn, the situation clearly deteriorated, particularly in rural communities. For every 10 infants in these communities who received EPSDT services in 1995, only eight did so by 2010.

### Number of Rural Visits Declines

When examining the total number of EPSDT visits received by infants during their first year, the average number of visits increased over

the study period in urban communities that relied little on LHDs for clinical services.

Interestingly, as services were withdrawn from communities with average LHDs market shares, no significant differences were observed, even among rural communities. However, a clear decline in average visits occurred in communities that relied heavily on LHDs for clinical services, with three fewer visits per infant in the first year of life by 2010, compared to 1995 (see Figure 3).

### Mixed Results in Communities with Average Market Share

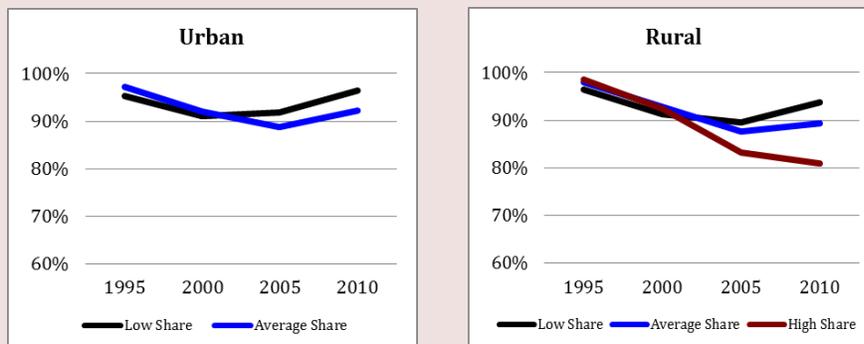
There were mixed findings in communities with average LHD clinical market share. As the withdrawal of services occurred, fewer infants received any EPSDT visit in these communities, but the total number of EPSDT visits received per infant remained relatively constant, even in rural communities. Presumably, these communities had existing provider capacity to absorb the increased demand from families already connected in some way to community-based providers.

One possible explanation is that integration of EPSDT clinical services with other services provided by LHDs, such as the Women Infants, and Children, or WIC, program, provided a short, natural bridge to EPSDT services for families without a strong link to a community-based provider. As LHDs discontinued EPSDT services in these communities, the bridge to these marginally connected families likely became weaker and less direct. For LHDs in rural and underserved communities with extremely limited community-based primary care, the bridge ultimately collapsed altogether.

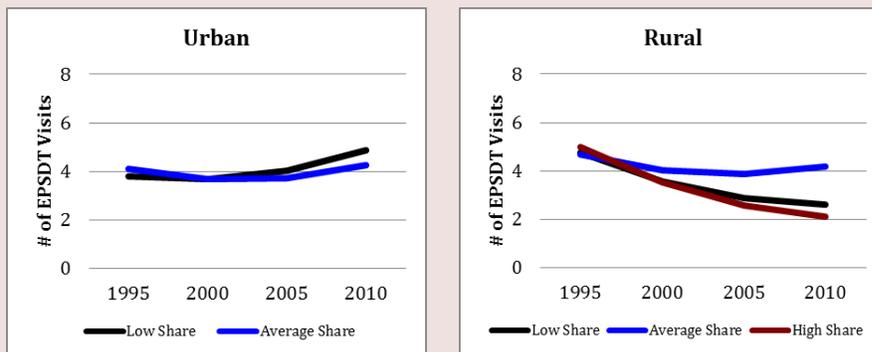
### Public Health Policy Implications

Although the study was conducted in a single state, the findings are relevant to larger discussions about the organization and delivery of public health services. The findings suggest that the impact of LHDs discontinuing clinical services differs greatly in rural and urban communities and by communities' reliance on

**Figure 2: Change in Any Infant Early EPSDT Visit in South Carolina Urban and Rural Areas, 1995-2010, by Health Department Clinical Market Share**



**Figure 3: Change in Number of Infant EPSDT Visits in South Carolina Urban and Rural Areas, 1995-2010, by Health Department Clinical Market Share**



health departments for direct clinical service provision. In communities with adequate community-based primary care capacity, shifting clinical services from LHDs to community providers likely will improve access to care for children in the long run. These findings are promising for public health leaders and policymakers contemplating LHD transition away from clinical service provision in similar communities.

However, in rural and medically underserved communities, children's access to care is likely to deteriorate unless steps are taken to increase primary care capacity when LHDs discontinue clinical services. When considering changes, policymakers need to factor in rural communities' greater reliance on health departments as direct providers of clinical services

and the lack of other health care providers to absorb the demand when LHDs discontinue services.

The study findings also have implications in the context of health care reform. Infants included in this study were continuously enrolled in Medicaid during the first year of life. The marked differences in the use of EPSDT services observed in the study were not a function of insurance—they were a function of access. Although health care reform is playing a key role in expanding access to health coverage, the effectiveness of health reform potentially will be hampered by inadequate primary care capacity. As policymakers grapple with a public health system in transition, they should consider the complex histories and existing dynamics of LHDs within the larger health care delivery system. ♦