

Dental Public Health Activity Descriptive Summary

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Building a Statewide Network to Address Perinatal Infant Oral Health

The broad purpose of South Carolina's Perinatal Infant Oral Health Quality Initiative (PIOHQI) was to adopt a statewide evidence-based framework for the integration of an oral health assessment and services into existing perinatal care systems. The integration project worked across SC's four Public Health Regions with a goal of identifying and expanding the oral health network. To mobilize and build capacity to address the identified needs of the target population, the Division of Oral Health (DOH) team partnered with the Community Systems Directors (CSDs) within the Public Health Regions to identify and expand the oral health network. They began by identifying partners who understood how to increase capacity within underserved areas through innovative partnerships. Two primary goals of the network approach are to:

- Expand the local/regional networks by identifying appropriate community organizations to collaborate with in order to improve access to preventive dental services for pregnant women and infants.
- Utilize the network to disseminate educational messages and resources on the safe and effective preventive care/services of pregnant women and infants to provider and community groups.

Social network analysis (SNA) was an essential component to the project. SNA examines the pattern of social relationships existing among a given set of actors, and the effect that network patterns may have on actor as well as network outcome. In our case, we used SNA to map the pattern of connections among Regional CSDs and local community agencies, and medical and dental providers. Regional representatives and CSDs were introduced to the network mapping aim of the program at multiple sessions. Discussions took place around the challenges and triumphs in CSD's efforts to build relationships with their local medical, dental, and community providers. As a result, the CSDs and their Regional Teams facilitated opportunities for dentists to learn about best practices for treating pregnant women and infants as well as having assisted primary care practices in acquiring the training and know-how to provide preventative oral health care for pregnant women and infants. This included training in fluoride varnish application for providers serving infants 0-3. Survey results suggest that the PIOHQI initiative had important impacts on the networking capacity of Public Health Regions as illustrated by the increase in network size and their confidence in making connections and providing assistance to other organizations.

Lessons Learned:

- It was crucial to the long-term success of the project for the CSDs and their teams to be encouraged to be active participants in the design of the approach at the regional level. It was not a top-down initiative, but a team-based approach.
- The DOH team provided opportunities for dialogue and discussion regarding what was working and what needed to be altered or changed. For example, when the DOH team encountered the barrier of training providers through the regions, they responded with an alternative approach that enabled the Regional Team to act in the role of recruiter versus trainer.
- It was important to celebrate and acknowledge the successes achieved by the Regional Teams. A portion of the SC Oral Health Coalition's Annual Forum was set aside for the

Regional Teams to showcase and present their successes and highlight the network expansion to oral health stakeholders from across the state who were in attendance.

- Undertaking the mapping of the whole network required a census of members in that network. These listings can sometimes be incomplete, particularly at the local level where turnover, new openings and closings often create gaps in the listing.
- Snowball sampling, which involves asking one organization to name other organizations in the network and so on, is one approach to addressing the problem of an incomplete knowledge of potential network members. In hindsight, these methods could have been employed with CSDs sooner, so as to build a more complete listing of regional network members.
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- Given the novelty of network mapping among Public Health Regions, few were aware of network analysis methods and the utility that such maps might offer in practice. As a result, we had to limit the depth and breadth of the network relationships being mapped over the grant period. In more evolved networks, a range of network relationship types might be mapped, thereby giving a more comprehensive and in-depth picture of local and regional referral networks.
- Given the success seen in building CSD confidence in developing relationships with local dental, medical, and community providers, it may be fruitful to localize the network mapping so that CSDs could develop, maintain, and evaluate the evolution of their local referral networks independent of the main program team. This would involve more extensive training (and time) in network analysis methods as well as the creation of a local database for maintaining this information. However, such localized network mapping resources would likely create additional CSD buy-in, contribute greatly to capacity building, and the further growth of local referral networks.
- The main challenge that the network mapping faced was the survey response rates: As with survey methods in general, response rates, particularly from local providers, limited the overall comprehensiveness of the network maps.
- Once the referral network is evolved, future mapping and measurement activities might automate the network mapping through the recording of referral processes and the closure of referral loops. This would reduce the dependency on survey methods.

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