Introducing Quality Improvement Methodology

Learning for Action

children's dental health project

AMCHP
ASSOCIATION OF MATERNAL & CHILD HEALTH PROGRAMS

astdd
Where oral health lives

NIPN
national improvement
Partnership Network

Table of Contents

A MESSAGE FROM CDHP: The purpose of this document is to share aspects of working collaboratively across organizations and using the quality improvement methodology to advance goals of an emerging issue. This reflection does not capture the entirety of the project as the initiative continues through 2019; however it captures the initial stages of the project in understanding the process of initiating a learning collaborative, adopting the QI methodology, and being able to identify the systemic barriers to pilot this project. We hope that future projects can expand on these insights as they embark on their learning collaboratives.

Definitions:

Learning Collaborative	Refers to a network of entities working together toward a common goal in a structured environment by sharing vulnerably, discussing real-time failures, and working together to answer shared questions.
Network	Refers to the national partner consortium - National Network for Perinatal Oral Health (Network) – established as part of the 2014 cooperative agreement awarded to CDHP. Use "Network" when referring to experience/perspectives of national team members.
NLN	Refers to the collective of PIOQHI grantees participating in the National Learning Network (NLN). Use NLN or National Learning Network when referring to grantee participants experience/perspectives.
states/state teams/ PIOHQI projects	Refers to the 16 PIOHQI grantees representing various entities (State health departments, universities, hospital, health plan, etc.) from 16 states.
Pilot states/projects	Refers to the three pilot PIOHQI grantees (2013 – 2017): Connecticut, New York, and West Virginia
Expansion states/ projects	Refers to the Eight Expansion PIOHQI grantees (2015 – 2019): California, Colorado, Maine, Maryland, New Mexico, Rhode Island, Virginia, and Wisconsin.
Expansion-2 states/ projects	Refers to the five Expansion-2 (E-2) grantees (2016 – 2019): Arizona, Massachusetts, Minnesota, South Carolina, and Texas.
Emergent Learning	"Emergent learning is the disciplined attention to learning that emerges from collective work and the deliberate application of that learning to improving future results. Emergent Learning creates a strong link between thinking and doing."[1]
Emergent Learning Platform™	A collection of facilitation tools, principles and techniques used to help a group use an emergent learning approach to their work.
Quality Improvement (QI)	A systematic approach to improving processes and outcomes through regular data collection, examination of performance relative to pre-determined targets, review of practices that promote or impede improvement, and application of changes in practices that may lead to improvements in performance.
QI tools	Refers to: process mapping, driver diagrams, the Model for Improvement including PDSA cycles, run charts, and Emergent Learning[2] tools – primarily Before and After Action Reviews (BAR/AAR) and action hypotheses.

Introduction

The Children's Dental Health Project (CDHP) was awarded a three-year cooperative agreement in 2014 by the Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB) as part of MCHB's Perinatal and Infant Oral Health Quality Improvement (PIOHQI) Initiative. Through this cooperative agreement, a consortium of national organizations was established, known as the National Network for Perinatal Oral Health (Network) to lead a cross-state collaborative called the National Learning Network. The Network partners included CDHP (as project lead), Association of State and Territorial Dental Directors (ASTDD), Association of Maternal and Child Health Programs (AMCHP), and National Academy for State Health Policy (NASHP). In June 2015, the Network was joined by The FrameShift Group, an affiliate of the National Improvement Partnership Network (NIPN). Its addition to the Network reflected the introduction of a QI lens to the project emphasizing on impact and outcomes and the role of data in making improvements within complex health and health care quality issues. In addition, NIPN introduced the Emergent Learning Platform (EL)™, a set of tools that mirrors process improvement and supports system improvement.[3] The deliberate use of a QI process to facilitate an oral health learning collaborative allowed the Network to discover successes from the activities, challenges of implementation in a complex system, and recommendations for future learning collaboratives.

This learning collaborative was designed to further the evidence base for improving access and quality of oral health care for pregnant women and infants. The following information outlines the context of the learning collaborative, NLN activities, rationale for the QI processes and preliminary results of the project. The three year learning collaborative was a tremendous opportunity for the Network and the 16 state teams to learn from and inform maternal and child health and oral health stakeholders across the country. This document was developed to support further exploration and testing of similar projects by opening up the process to allow for the adaptation of activities and capitalize on key lessons learned.

Background

Over the last decade, oral health care during pregnancy has been an emerging issue as a mother's oral health affects her overall health and her child's oral health and overall health. Some studies have found that nearly 40% of pregnant women have some form of periodontal disease, which may also correlate with poor birth outcomes.[4] Evidence also shows that a mother can transmit bacteria to her child through saliva and a mother's oral health status can be a strong predictor of her child's oral health status.[5, 6]

Ongoing efforts by MCHB brought attention to the issue, such as the development of *Oral Health Care During Pregnancy: A National Consensus Statement*, as a result of a convening of an expert work group. The National Consensus Statement provides a set of recommendations for health professionals and women's health professional to address oral health care during pregnancy. Building a foundation raised visibility in oral health and across disciplines that dental care is safe during pregnancy. However, understanding how the care delivery needed to take place had yet to be explored.

The Perinatal and Infant Oral Health Quality Improvement Project (PIOHQI) was one of the first national initiatives to build a collective experience towards best practices to improve access to quality dental care for pregnant women and infants. Through this initiative, funded by the Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB), 16 PIOHQI projects were funded in three waves over six years (2013 – 2019) to expand their knowledge, skills, and experiences by working individually and collaboratively as the National Learning Network (NLN).

Using the current available research, recommendations and resources from other efforts across the country, the PIOHQI states are now exploring the processes of implementation using QI through partnerships with clinical sites, insurance companies, stakeholders who work with pregnant women such as home visiting programs, and those who have political will. Consequently, the states need to navigate through the complexities of systemic barriers, including lack of medical and dental integration, healthcare professional and public health professional trainings and overall awareness, and the absence of a comprehensive benefit for pregnant women and timely national oral health data. Despite these barriers, the PIOHQI Initiative is an opportunity for the 16 states to explore and share their lessons learned to impact future initiatives and change.

At the onset, the role of the Network was to support the three PIOHQI Pilot Projects participating in the NLN through the creation of learning structures to allow enhanced opportunities for effective communication and coordination among the states, while giving space and opportunity for engagement with the Network to assist them in systems change. Between 2014 and 2016, the NLN grew from three to 11, and finally to 16 PIOHQI projects, and evolved substantially in scope of work.

Evolution of the National Learning Network (NLN)

Sept 2013	**Sept 2014**	**June 2015**	**August 2015**	**June 2016**	**August 2017**
3 pilot PIOHQI projects receive funding: CT, NY, WV	CDHP, AMCHP, ASTDD, NASHP & three pilot PIOHQI projects become the NLN	NIPN joins the Network.	NASHP role in the Network ends; NLN is joined by 8 newly funded PIOHQI Expansion projects: CA, CO, ME, MD, NM, RI, VA, WI	NLN joined by 5 states additionally funded as PIOHQI Expansion projects (referred to as Expansion-2): AZ, MA, MN, SC, TX	NLN concludes with four national partners and 16 state grantees.

PIOHQI National Learning Network Scope of Work

Year 1:
Coordination of collaborative learning events and knowledge transfer opportunities for state grantees

Year 2:
➤ Development of National Implementation Framework and & QI roadmap
➤ Introduction of QI methodology
➤ Development PIOHQI Data Dashboard
➤ Introduction of common aims and strategies
➤ Introduction of Technical Assistance Strategies (Buddy System, State TA visits, Mentorship Program)

Key Reflections

This document captures key lessons from the major focus areas of the NLN and perspectives of the Network. Key lessons can be considered within the following major focus areas:

1. Facilitation of a Collaborative Learning Environment
2. Introduction of Quality Improvement Methodology
3. Identification of Common Strategies and Aims
4. Boosting State Knowledge Through Tailored Technical Assistance
5. Nurturing a National Partnership to Support State Projects

REFLECTION: Facilitation of a Collaborative Learning Environment

Collaboration across organizations takes a level of vulnerability, trust and setting expectations, which is not always easy when starting a new project. The 16 PIOHQI projects participated in a learning collaborative to work collectively towards the same goal of improving access and quality care for pregnant women and infants. As the group culture shifted over time, the group was able to reflect and recognize that collaboration was taking place.

To convene such group, creating an appropriate environment for learning is crucial to facilitate a successful learning collaborative, in which participants share vulnerably, discuss real-time failures and work together to answer shared questions. Culture plays a large role in shaping the group dynamic. When multiple entities of varying backgrounds come together, culture change is necessary. Changing a group's culture is a large undertaking by the leadership or the convener; thus, the lead organization's role is important in managing changes within leadership and throughout the learning collaborative. The Network intentionally focused on group dynamics, which helped shape the environment of the NLN.

The Network offered a robust menu of learning and networking opportunities for all PIOHQI projects, including monthly webinars, bi-annual in-person meetings, and a dedicated PIOHQI ListServ for state communication and sharing. To plan

Lessons learned from an Emergent Learning Approach and Focus on Group Dynamics:

➤ Identifying just-in-time, fresh, and generalizable topics of interest to a majority of state projects required a continual review of event evaluations, ListServ traffic, and conversations with individual states to generate fresh and relevant topics each month.

➤ Designing inclusive framing questions was challenging, but consistently resulted in more robust state conversations on webinars about real time challenges and successes (vs. yes/no responses).

➤ Using framing questions modeled an EL approach to states, and resulted in states adapting a similar approach to their project work.

➤ Focusing discussions with specific members of the state teams would allow for efficient use of team time and tailor more relevant topics for state team members. Some learning session topics were too specific for state teams, resulting in poor attendance.

➤ Calling on state teams to share can build comfort with each other, while being mindful of quiet team members/ states. Attention to calling on states when most appropriate or needed for expanding group learning, as well as relationship building between state and the Network between events, were essential to ensure projects' comfort level and willingness to share.

these activities, the Network used an Emergent Learning (EL) approach to learn and adapt to the changing needs of the state teams. Through this framework, two hypotheses emerged around the way learning opportunities were approached and shaped:

❶ If the Network used an EL approach to facilitate state interactions and allow a focus on what states were actually doing, then:
   a. States will talk to each other during calls and at meetings;
   b. The Network will talk less and facilitate more;
   c. Participants will be vulnerable and share failures;
   d. Participants will talk about what is happening TODAY (not the past or future); and,
   e. Participants will talk about what went well and badly.

❷ If the Network intentionally focuses on group dynamics, then:
   a. The Network will create a supportive, collaborative environment
   b. States will talk between meetings and ask each other for help
   c. Participants will be vulnerable and share about failures

These hypotheses are challenging to quantify, as many of the measures are anecdotal (e.g. did states talk more on webinars?). Therefore, the answer to "did we achieve these results" is hard to capture on formal evaluations when the Network was constantly adapting its focus. However, the Network cited anecdotal reflections (obtained from site visit discussions, anecdotal feedback on evaluations, and Network Buddy observations) at the end of the project that suggested using an EL approach and focusing on group dynamics created a collaborative learning environment among the 16 projects:

➤ States were contacting other states to adopt other states' products in their own work, and/or taking suggestions from the Network;
➤ State interactions on webinars were interactive, asking questions of one another;
➤ States were talking about real time challenges and not only reporting on what they did in the past;
➤ State leadership began to self-generate (e.g. states helping each other adapt programs and materials; one state took leadership for an ancillary group on home visiting).

Evaluations also indicated that learning opportunities coordinated by the Network were valuable:
➤ Two months after the onboarding, the E2 states reflected that they felt more confident – being able to connect personally with other states and see where others were in their project timeline.
➤ Seeing QI tools modeled on webinars and at meetings, and practicing QI exercises together at meetings, helped states see the tools in practice and think about using QI in their own work.
➤ Face-to-Face meetings helped states see their individual work in the larger PIOHQI context and allowed for in depth connection time with other states and the Network to work through real-time issues and ideas (at a level that could not be achieved through phone calls/emails).

Key Recommendation: Develop a culture for collaborative learning. Multiple aspects of the project can be attributed to creating a family-like environment that existed among the Network and the state projects by the end of the NLN project period. Using an EL approach and the intentional focus on group dynamics together created a synergy that moved the NLN toward a true environment of collaboration.

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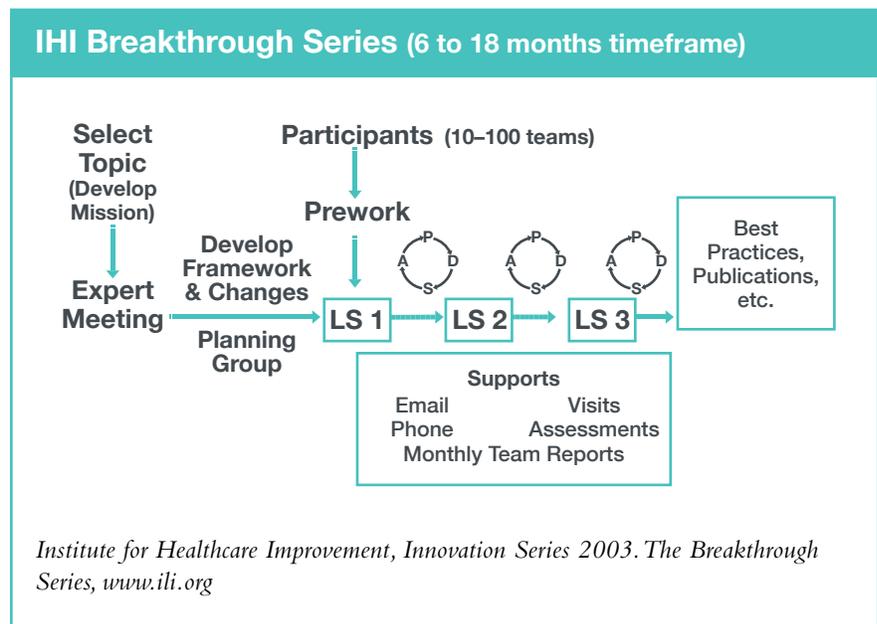## REFLECTION: Introduction of Quality Improvement Methodology

Perinatal oral health is an emerging public health issue that impacts the oral health and overall health of a woman and her child. Although there are recommendations through health professional organizations, a National Consensus Statement, and state guidelines, the evidence is currently being built in understanding how to implement the recommendations. Thus, the QI approach was a meaningful investment to test and understand the process of implementation. In order to implement the methodology, an introduction to QI was necessary.

QI is a deliberate improvement process to remove inefficiencies and ineffectiveness using QI tools, such as Plan–Do–Study–Act (PDSA) cycles.[8] This required QI experts to be involved in the Network, who provided background, served as coaches, and helped states apply QI in order to implement the methodology effectively in project activities. It also required states to have an internal QI culture that was willing to acknowledge and learn from successes and failures through small tests of change, to implement the methodology well before spreading externally.

One role of the Network was to provide QI technical assistance. Use of a QI methodology and tools were introduced in the PIOHQI projects late in Year 1 of the NLN. To outline a consistent process of applying QI methodology in this project, the Network developed the *Quality Improvement (QI) Roadmap* (See *Appendix A*), primarily modeled after the Institute for Healthcare Improvement's Breakthrough Series Collaborative.[9]

The Breakthrough Series process of developing aims and measures, learning sessions, and action periods provide a structure for testing and measuring improvement that works in synergy with the CoIIN model (discussed in the next section).

All PIOHQI projects were provided equal opportunity to interact with QI experts through phone calls, monthly all-state webinars, all grantee face-to-face meetings and on-site technical assistance visits. The Network also

IHI Breakthrough Series (6 to 18 months timeframe)

Institute for Healthcare Improvement, Innovation Series 2003. The Breakthrough Series, www.ili.org

provided an intensive *QI Mentorship Program* to three states: California, Rhode Island, and Wisconsin (See *PIOHQI Quality Improvement Mentorship Program* for more information).

   Introducing QI more rigorously half way through their projects did not allow some states, particularly the Pilot states, to get acclimated or provide equal time to incorporate QI tools as much as the subsequent cohorts. While not equally accepted or adapted by all projects, some projects actively incorporated QI tools (process maps, PDSAs, driver diagrams) and/or EL Platform ™ tools such as Before Action Reviews/After Action Reviews (BAR/AAR), and embraced the idea of "PDSA-ing" an effort to learn from previous failures and improve the next time. Feedback from states indicated a range of successes and challenges in applying QI and EL tools to their projects.

Internal Quality Improvement Culture:

Many public health workplaces across the country are incorporating QI methodologies such as Lean Six Sigma. Not surprisingly, states with an existing culture of improvement in their work environments integrated QI methodology into their PIOHQI projects more quickly by investing in improvement specialists on staff or having other program staff with previous QI experience. States focused on boosting internal QI culture in a variety of ways, including: engaging contractors and hiring staff specifically for their QI experience/expertise; providing internal staff training on QI methodology and tools; and institutionalizing the use of QI tools in every day work (e.g. using a series of BAR/AARs to improve internal team meeting functions). Individuals of state teams also reported using QI tools for their own work in order to understand the value before introducing the idea to their larger teams and partners.

QI plays a role in sustaining staff capacity. The use of BAR/AARs benefits future staff and projects, because it documents the rationale for decisions and lessons learned from the process. The 'small' lessons might otherwise be lost as staff and projects change or turnover. One state team, who used BAR/AARs to document its lessons, experienced staff turnover. As a result, the remaining staff were able to review the BAR/AARs conducted by staff earlier in the project to not only learn what had already been done, but to continue and improve on project efforts. Another state team reported using process mapping, PDSAs, and Emergent Learning ™ tools in a situationally-specific way. They recognized opportunities where BARs would help to provide focus to the team and to enhance planning for upcoming events, and became more comfortable and effective in using the BAR/AARs. Other states embraced various QI tools to adapt and adjust their work plan and the ways they approached their work.

QI plays a role in spreading new ideas. The structure of this learning collaborative allowed for continual peer learning and sharing – monthly opportunities to share and tackle challenges together, a private ListServ to share ideas and ask questions. All lend to the propagation of ideas (the space where innovation occurs) and to the spread of organizational cultures that value testing new ideas and learning from mistakes, and celebrate successes – small and large. By the end of Year 3, several states were routinely sharing their "borrowing and adapting" of other teams' training ideas and tools. Some states have even reported cross-state training and technical assistance, by helping and training other states on their programs and tools in order to adapt.

Key Recommendation: Introducing QI requires a leadership team (the Network) that is willing to foster a collaborative environment allowing for learning to take place. Additionally, the amount of time it takes to develop a successful learning collaborative is often overlooked when starting a project; however, time is a large factor to consider when initiating a learning collaborative. For QI to take place, it is highly recommended to have QI experts involved in planning the learning collaborative and to have a leadership team that can be accountable to each other.

REFLECTION: Identification of Common Aims & Strategies

Shared measures are necessary for a diverse cohort of teams to work towards a common goal or a long-term outcome. To effectively capture the unique background and experiences that teams bring to the learning collaborative, the shared measures help provide structure and relevant topics for discussion. The PIOHQI projects were comprised of various entities and joined the learning collaborative in cohorts; thus, the strategies and aims allowed the states to find common ground.

During Year 2, the Network identified common aims and strategies to allow the diverse cohort of States to share their respective perspectives and challenges around common topic areas. Common aims and strategies are elements of MCHB's Collaborative Improvement and Innovation Networks (CoIINs), which were necessary to provide structure and track progress toward similar measures and shared goals.

Origins of Collaborative Improvement and Innovation Networks (CoIINs):

Aims and strategies are common elements of Collaborative Innovation Networks or CoINs – a model for group collaboration emerging from the business arena. CoINs traditionally use technology to remove geographic barriers and to provide opportunities for participants with a collective vision to share ideas, best practices and lessons learned, and track their progress toward similar benchmarks and shared goals.[8]

Under the direction of Dr. Michael Lu, MCHB Associate Administrator, the Bureau expanded the concepts of CoIN methodology to include a focus on improvement. Within MCHB, the Collaborative Improvement and Innovation Network (CoIIN) is a platform and methodology for participants to engage in collaborative learning, as a virtual 'cyber team' around a common aim, applying QI methods which accelerates improvement in evidence-based strategies that contribute to desired outcomes.

CoIINs are short term (18-24 month) initiatives grounded in the principles of collective impact – having a common aim, mutually reinforcing activities, shared measure, continuous communication, and the support of a backbone organization. MCHB currently supports 18 CoIIN and CoIIN-like projects, which includes the PIOHQI NLN.

The common aims and strategies were identified from an extensive review of PIOHQI project work plans, which focused the work by requesting specificity and data to support progress in achieving the aim (See *Appendix B*). Around the same time, a Data Dashboard was also redesigned by the Network for reporting on common strategies and aims. The use of a Dashboard was intended as a key tool to provide state teams the ability to see small incremental changes over time and the ability to respond and adapt quickly when something didn't work.

States Response to Common Aims and Strategies

The new responsibility was well-received by the projects at first introduction. Common strategies and aims became a necessary organizing structure for the diverse cohorts of states. Project communications went from vague discussions on topics to a specific set of tasks and people responsible for the Dashboard entries. Monthly learning sessions and face-to-face meetings were shaped to incorporate sharing, learning and TA on QI methodology and collecting data for improvement. Projects also reported over time that their ability to use 'common language' of the aims and strategies with their partners familiar with QI likely influenced their ability to move forward toward their aims.

Lack of Outcomes Doesn't Mean You Did It Wrong

QI is about small tests of change and making improvement based on those small tests. However, data does not move fast enough to generate improvement in two to three years (the life of this project). This is a culture shift for public health, and as public health professionals, there is a need to be reminded that when there is not a significant change on a particular outcome, it *does not mean that something important and impactful was not done.*

There are limited oral health data available and to determine the long term outcomes that were optimal for this project, MCHB and the Network agreed in March 2016 to select MCHB's Title V National Performance Measure 13A and 13B, which are preventive dental visit measures for pregnant women and infants. These were the best available national data sources (Pregnancy Risk Assessment Monitoring System and National Survey of Children's Health, respectively) that allowed the project to compare across the PIOHQI states, with the caveats that the data sources are not necessarily reflective of the project activities, are time-lagged, and are self-reported by women and parents.

At the conclusion of the three-year project, the PIOHQI projects adapted to using the Data Dashboard and increased their understanding of its importance. And as expected, changes in the long term outcomes related to the goals of this project are not yet reflected in the data sources; however, this does not mean the project has not made an impact.

Key Recommendations

Start project with common aims. Introducing the common aims and expectations in the middle of projects were unanticipated by participants, which initially was an adjustment for states to adapt and know how to participate in the learning collaborative. As a result, there were delays in implementation and data collection. It is important to establish common aims and expectations prior to the project to limit disruption in implementation as well as allowing sufficient time for participants' data collection.

The timing of onboarding cohorts in the project. When the common aims and strategies were introduced, every cohort was in a different stage of their project. The states that joined in the later cohort were able to acclimate to the new direction and have more time for implementation as they began their projects after the introduction of the common aims. It is important to start all participants at the same time so they are able build momentum around their projects at a similar pace and receive new information at the beginning of the project. Furthermore, starting participants at the same time would be logistically beneficial, as the process of onboarding new cohorts took away from other efforts in the project.

Selecting accessible common metrics. Participants were tasked to select data sources they were able to access and obtain in a timely manner. Some participants were able to obtain data more easily than others due to factors such as accessing the data internally or partnering with responsive data source holders. Selecting a measure that is accessible and timely to all participants would allow for consistent data collection.
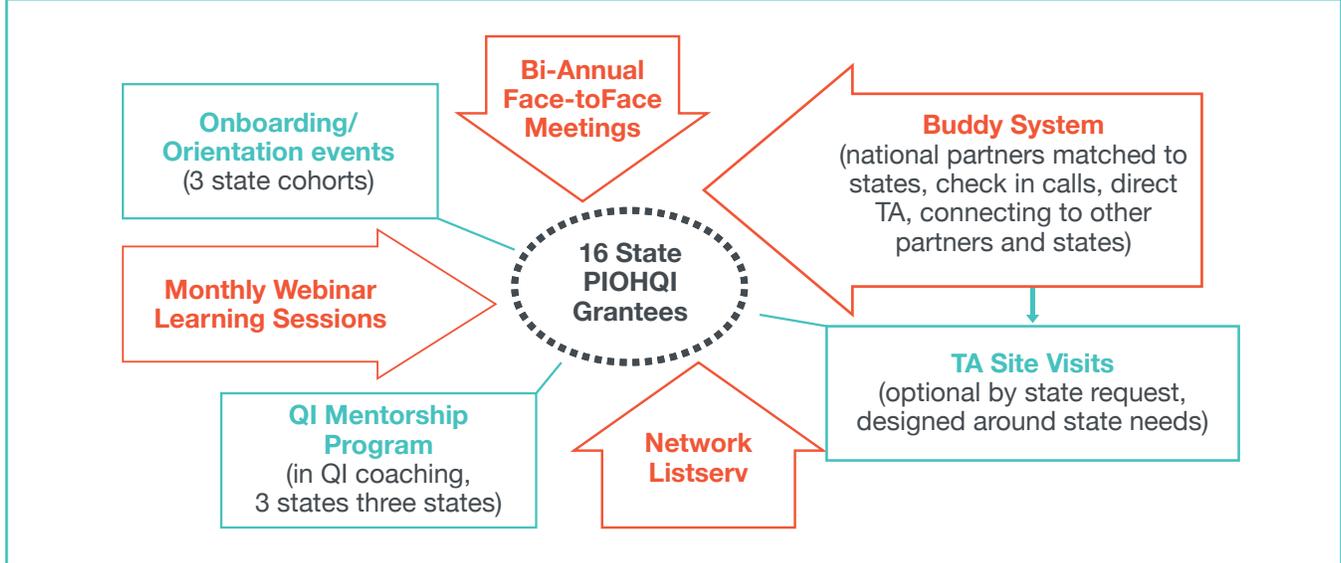
REFLECTION: Boosting State Knowledge Transfer Through Tailored Technical Assistance

It's natural to continue doing business as usual after receiving proper training and guidance on a new skill, especially when juggling multiple projects at once. However, intentional time to practice and incorporate new skills is necessary, much like taking the time to practice learning how to ride a bicycle. The Network helped states use their QI knowledge and provided time to reflect and address new ideas or challenges through technical assistance (TA) opportunities that met a variety of individuals and team needs.

These hands-on activities were intensive, requiring resources and time to collaborate with state teams. In addition to the regular collaborative learning opportunities provided for state projects, the Network launched a "Buddy System" to strengthen relationships with states as well as give them a direct line to the Network. The Buddy System was essential for relationship building between learning events that boosted the collaboration among states and the Network. The Buddy System encompassed three activities:

1. **Regular Check-ins:** The Network Buddies and the state teams checked-in regularly on a monthly or bi-monthly basis. Buddy check-ins were built around the EL Framework described earlier, which provided a way of documenting state progress and helped Network Buddies identify and provide opportunities for coaching/technical assistance over time.
2. **TA Visit:** Expanding to offer an opportunity for state teams to request TA visits from the Network (coordinated by the Network Buddies); and
3. **QI Mentorship Program (for three states only):** Expanding to offer an opportunity for three state projects to receive additional guidance and resources from the Network's QI experts.

PIOHQI Technical Assistance Offerings to States

- Onboarding/Orientation events (3 state cohorts)
- Bi-Annual Face-toFace Meetings
- Buddy System (national partners matched to states, check in calls, direct TA, connecting to other partners and states)
- Monthly Webinar Learning Sessions
- 16 State PIOHQI Grantees
- TA Site Visits (optional by state request, designed around state needs)
- QI Mentorship Program (in QI coaching, 3 states three states)
- Network Listserv

A Network "Buddy" was assigned to each state and brought three important benefits:

1. **INDIVIDUALIZED BENEFIT:** The regular check-in provided a "pause" for teams to allow for an outside/big picture perspective and help dig deep into a single issue. States were able to receive content expertise, build skills, and share challenges and needs in a safe environment.

2. **COLLABORATIVE LEARNING & RELATIONSHIP-BUILDING** among state teams: Network Buddies gained a deeper knowledge of their Buddy states and connected states together around commonalities, barriers, and successes, which also served to spread ideas, knowledge, and tools/resources across PIOHQI projects.

3. **LEARNING COLLABORATIVE IMPLEMENTATION:** Having their "finger on the pulse" of the work at the center of PIOHQI projects allowed Network Buddies to shape just-in-time learning on the webinars and at face-to-face meetings.

Concluding Thoughts from the Buddy System

The NLN used QI to achieve the goal of elevating state project expertise and connecting states to learn from each other. The provision of occasional intense TA from the Network was reported as essential for state learning and adaptation of QI methodology.

➤ State teams who valued having a direct line to the Network via their Buddy benefited from having the pause to check in with their buddies (as reflected by the Network Buddies) and capitalized on their Buddy for tailored TA and directed resources and connections. These states became noticeably more engaged in the learning collaborative overall by talking more and being more willing to share on webinars; volunteering to share resources and tools with other states; connecting with other states between events; and reporting using/adapting other states' resources.

➤ State teams consistently reported that the coaching and TA they received from the Network outside of learning events was influential in helping them try new QI tools and techniques and use an inquiry approach to their projects.

Technical Assistance (TA) Visits

Network Buddies were responsible for coordinating TA visits, upon request, to their Buddy states. The purpose of the TA visit was to address TA needs and for the Network Buddy and the state team to collaboratively plan the agenda for the visit, rather than the Network prescribing one. The TA visits were an opportunity for the state projects:

➤ To step away from the daily office work, pause and think about what they are doing and why, and have the TA team (Network) help them think through their project implementation.

➤ To emphasize and remind the states and their partners of the importance of their PIOHQI projects in the national context.

As such, TA visits looked different in every project. Some teams used TA visits as strategic planning time to explore how to outreach more to their primary audience, or as mini-retreat time to pause and focus on real-time challenges. Some projects also requested TA visits to coincide with meetings with community partners and advisory committees, for which the Network sometimes served as facilitators and used its national presence as a way of emphasizing the bigger picture of the state PIOHQI work.

Through formal post-event evaluations with state teams as well as through documentation in Network staff Buddy reports, all team leads who requested TA visits reported being very satisfied with the TA visit (100%). Additionally, majority of participants "agreed" or "strongly agreed" that the TA visits fulfilled specific competencies, such as increasing knowledge on QI approaches or being provided information on one or more concepts that they would be able to apply to their work, and meeting objective needs.

> **Participant Feedback:**
>
> "Excellent TA visit. Allowed us the opportunity to 'pause' and engage in discussion with Peggy [NIPN] about our work, including next steps moving forward…"

QI Mentorship Program (taken from PIOHQI Quality Improvement Mentorship Program)
National Improvement Partnership Network

The QI Mentorship Program was an additional activity to support state teams that were willing to invest additional time each month to receive intensive TA through an application process. The QI Mentorship Program was intended to: (1) accelerate incorporation of a QI methodology into the mentored state projects' work, (2) increase the use of QI tools in all state projects through mentoring/coaching mentees in role of learner/teacher, (3) improve states' confidence and competence in using and teaching QI tools so that they, in turn, help mentor other PIOHQI projects. NIPN developed a framework for the program to guide the program implementation and to ensure that the intended results were met.

Knowledge Self-Assessment: Mentorship Participants
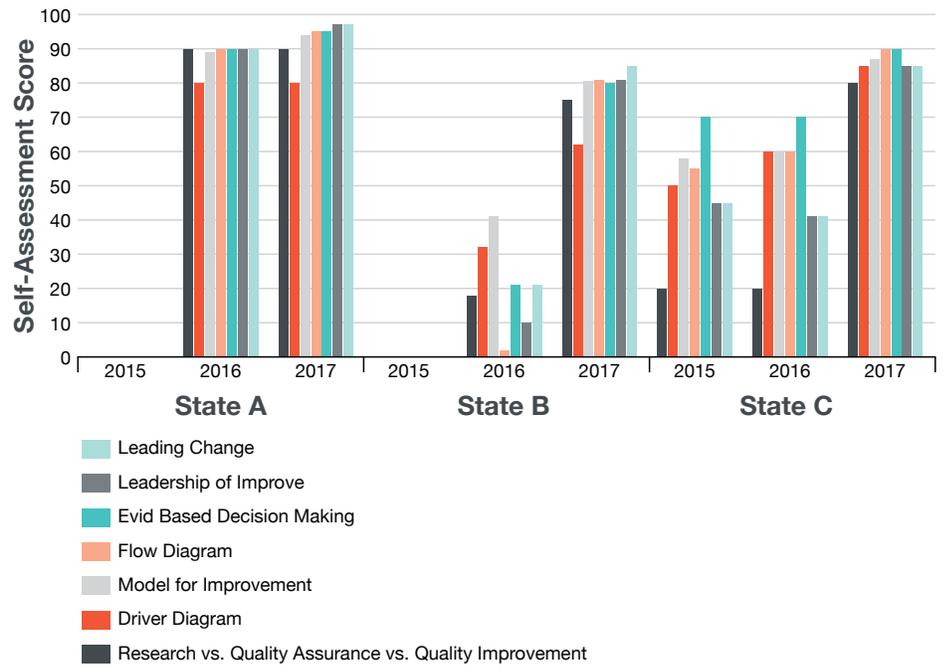
All mentee states gained confidence and competence incorporating QI into day-to-day business activities and were ready to support their PIOHQI colleagues at the end of the QI Mentorship Program. Each state achieved different results at a different rate. This is a consequence of a multitude of factors, including organizational culture, PIOHQI project design and implementation, the individual team members' unique learning styles, and the topics covered/ tools practiced throughout the project. Data over the course of the three years was available for one participant; a one-year comparison was available for two others. This allowed a quantitative assessment of the effect of the intensive QI mentorship program on the level of self-reported abilities of the participants. All participants showed marked increases in self-assessment of QI knowledge, reporting a high level of understanding or expertise using tools across the spectrum.

Some key recommendations to note include the following (See *PIOHQI Quality Improvement Mentorship Program* document for full report with recommendations):

1. ***Communicate roles and expectations before the program begins.***

   Having roles and expectations clearly communicated in marketing materials and the application helped states to pre-emptively manage their time so they could participate in regular calls and complete homework assignments. It also arguably shrunk the "pool of candidates" for the program because states were less likely to apply if they were uncertain if they could commit to full mentorship participation, in addition to meeting other project deliverables.

2. ***People and organizational culture matter.***

   Individuals who participated in the mentorship program were highly motivated, organized professionals. This may have significantly influenced their level of engagement and subsequent success. It should also be noted that people from organizations which value learning, failure and improvement tried using QI tools more readily and progressed through the program phases quickly. The relationships within the mentee state teams also impacted the

delivery of the program. Various learning styles and the presence or absence of team members affected the agenda developed and the content discussed. Conversely, when the entire team was not engaged, coaching and mentorship was directed to a single individual, which had to account for the risk of staff turnover that would have caused the program to start over for the team.

The mentorship program will leave a lasting legacy on the PIOHQI network. The three states who participated improved their confidence and competence in using a QI approach in their everyday activities. Further, they have helped to foster a "QI culture" within their programs, departments, and organizations which was unlikely without the intense one-on-one coaching they received. All states and organizations participating in the PIOHQI initiative nationally benefited from this growth in that they serve as examples to colleagues to try new things, ask different questions, and share about what is NOT working to improve access and utilization of oral health services in their communities.

Nurturing a National Partnership to Support State Projects

As discussed earlier, the lead organization has a crucial role in facilitating a successful learning collaborative. The partner organizations in the Network also play a large role in cultivating the environment and the capacity for the Network to effectively function. It was also important for the partners to commit to the project goals and direction. Thus, nurturing national partnerships was important to support the state projects.[13]

By the end of Year 1, Network partners reported feeling very connected to each other by listening to, talking to, and learning from each other. There was an intense effort to build internal relationships and help state teams move forward in their projects. The flow and function of the Network felt organic and productive.

In Year 2, the substantial changes to the project's scope of work as well as the expansion of PIOHQI projects participating in the NLN from three to 16 within the span of 12 months, presented a variety of challenges to the Network:

➤ The Network staff did not expand with the expanding scope of work; consequently, existing staff, time, and resources were severely stretched.

➤ Substantial staff changes in partner organizations over time led to a gap in accumulated QI knowledge and historical knowledge of the project and the state projects. It was difficult to convey and translate the partner/team culture and evolution of QI culture that had developed over the first two years of the project to the new staff.

At the end of Year 3, the Network members evaluated the team itself using a modified Wilder Collaboration Survey[14] to see whether they had achieved the organizational capacity and partner collaboration to effectively support the PIOHQI projects goals, objectives, and activities. Despite challenges cited above, for the most part, Network members reported positive experiences and perceptions related to organizational input, standing, staffing, and capacity.

A key recommendation for future projects is to build time to pause and reflect for the national partners similar to what was encouraged for state projects. Having this time is essential to ensure that expectations of all partners match workloads and offerings to states. Also, being more attentive to staff onboarding, in the same way formal onboarding plans were established for incoming cohorts, is critical to ensure that the culture of collaboration developed initially by staff conveys to new staff and leadership.
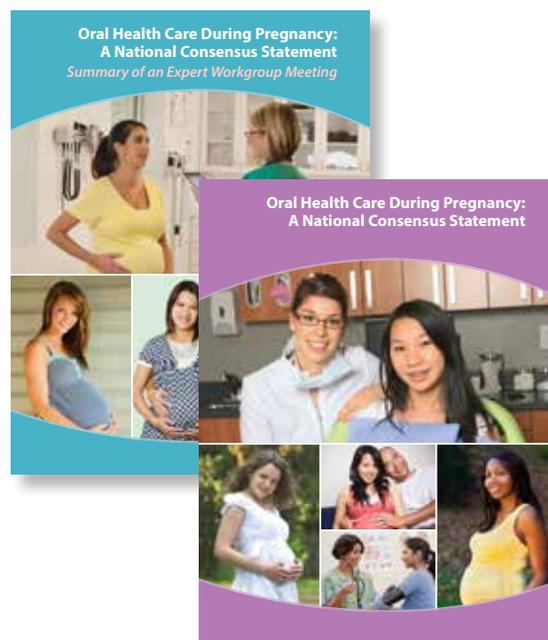
Reflections from National Partners
Quality Improvement in the Field of Oral Health Children's Dental Health Project

Using QI in a public health setting, moreover in an oral health context, was a strategic investment that allowed this project to capture and analyze processes that challenged traditional project implementation. The QI culture was necessary for the states to participate in a collective learning environment. Thus, windows of opportunities were created for states to advance their projects as they learned from one another.

The barriers that the states continue to face shed light on the barriers that are experienced at the national level. Although the importance and safety of dental care during pregnancy has been articulated by experts in the field for nearly a decade, the most recent work during this project has been the most formal stage for building an evidence-base for implementation. For the last five years, *Oral Health Care During Pregnancy: A National Consensus Statement*[15] has been widely disseminated;

Oral Health Care During Pregnancy: A National Consensus Statement was developed by the Oral Health Care During Pregnancy Expert Workgroup in 2011 to improve the provisions of oral health care to women during pregnancy.

however, no tangible movement in clinical or public health practice has been documented to improve access to care for pregnant women. Oral health is currently siloed from the rest of the healthcare system. To end such divisions, coordination across medical and dental care requires systems change. The issue of integrating medical and dental care and payment structures are not unique to this project; however it does require recognition that the project is working within a larger system that is being reformed, specifically in medical and dental public health, clinical practice and payment design. CDHP has worked for 20 years to address systemic issues to improve oral health of children and, for the last 10 years, in perinatal oral health with the Health Resources and Services Administration, the Centers for Medicare and Medicaid Services, and the Centers for Disease Control and Prevention.

For decades, CDHP has been engaging private and public partners to advance innovative policy solutions so that no child suffers from tooth decay; these efforts also include pregnant women and new mothers. Although research inconsistently shows an association between periodontal disease and birth outcomes, reducing maternal-to-child bacterial transmission has been one of the primary prevention

strategies to address early childhood caries that is well established in literature. While numerous health professional organizations developed guidelines, and some states have adapted the National Consensus Statement to develop state guidelines, barriers to access and quality dental care for pregnant women remain prevalent. A consensus-driven process to clearly define a comprehensive dental benefit for pregnant women would provide the opportunity to address existing knowledge gaps and to clarify the science for appropriate, high quality care. It additionally provides one tool to support patients and to clarify for providers what is necessary and appropriate as clinical education and the scientific literature become more closely aligned.

While the states' qualitative data showed progress, quantitative data has been difficult to measure. Unlike other MCHB CoIIN projects, such as infant mortality, in which the project uses the number of infant deaths as an outcome measure, there is no national level data source that measures oral health outcomes. CDHP and partners have been grappling with this gap for numerous years. There are documents such as the ASTDD's Data Reference Guide, a compendium of data sources, which are currently available. Although dental utilization rates can be captured through the Medicaid-416 data for children under the age of 21 through the provision of the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT), dental utilization rates for adults, including pregnant women, are not captured, because dental services are optional for states and they are not mandated to report this data. Thus, PRAMS was the best proxy measure to capture data on pregnant women and oral health care.

As PIOHQI projects were tasked to collect real-time data to measure progress, the states were able to partner with pilot sites to obtain data. However, the data challenges were also reflected at the state level, and at a local/county level, due to the lack of integration between medical and dental data and the differences in what the oral health data measure: procedures rather than oral health status. The PIOHQI project implemented innovative activities that worked to integrate oral health into primary care and community health settings. However, without the support and existence of national data sets or indicators that reflect the impact of these activities, it remains a challenge for projects to measure systems change. Identifying indicators is critical to build an accountable and high quality system of care.

Promoting Oral Health in the Context of Maternal and Child Health
Association of Maternal and Child Health Programs

The Title V MCH Services Block Grant continues to provide an opportunity to promote oral health for women and children in states and territories. Last year, 31 states and territories selected oral health as a national performance measure: (NPM 13 - A) Percent of women who had a dental visit during pregnancy and (NPM 13-B) Percent of children, ages 1 through 17 who had a preventive dental visit in the past year.[16] Because this NPM addresses oral health from pregnancy to age 17, it gives states the opportunity to address oral health throughout the lifespan and take a life course approach. State strategies from action plans in their annual Title V applications run the gamut from dental sealants and fluoridation programs to increasing improved methods of monitoring oral diseases and conditions. AMCHP's support as a partner and a "buddy" to PIOHQI teams included the perspective of alignment as part of AMCHP's work. Productive conversations within the learning collaborative and the teams included elements of Title V support for oral health initiatives for pregnant women and infants. For example, one state team leveraged

Title V work in the health department as well as long-standing collaborations with the wider oral health community.

Challenges remain in aligning Title V with PIOHQI activities, as they do with other MCHB investments that are intended to support the overall efforts of improving maternal and child health but have different funding mechanisms, short-term objectives, and project goals. One well-established and oft-mentioned challenge is the continual lack of capacity and resources at the state health department level, which makes it difficult to forge new connections between Title V directors and non–Title V PIOHQI projects. A challenge that has been observed with a number of CoIIN and CoIIN-like projects is establishing culture of QI, which is paramount to the success of such initiatives. Health department leadership and state government administration are gatekeepers to funding, personnel, and resources to implement QI. If decision-makers fail to value QI and its infusion, project staff will encounter significant barriers to their work. This is particularly true for epidemiology staff at state health departments, who would be most likely to be involved with QI efforts. In fact, results from an Epidemiology Capacity Assessment (ECA) conducted in 2013 by the Council for State and Territorial Epidemiologists (CSTE) found that oral health continues to be a focus area with low levels of epidemiology capacity, in which 59% of states reported minimal-to-no (<25%) epidemiology capacity for oral health.[17]

Another issue related to capacity is the participation of Title V staff in QI efforts associated to oral health. Several HRSA-funded projects, including the AMCHP-led Adolescent and Young Adult Health CoIIN, the NICHQ-led Infant Mortality CoIIN, the Children's Safety Network-led Child Safety CoIIN, and the NICHQ-led Early Childhood Comprehensive Systems CoIIN, used QI methodologies for several years. AMCHP, as a lead or partner in the above-mentioned projects, and Title V staff engaged with each of these projects, have received training in QI methods over the last four years. Several challenges remain in applying those QI methods to public health problems; while these challenges are not insurmountable, it is instructive to explore them here, as well as solutions that were employed. The challenges include:

➤ Staff who have been previously trained may not be the same staff who work on oral health;
➤ Staff who have been trained have moved on to other positions, leaving a capacity gap;
➤ Epidemiology staff have training in using data for surveillance and assessment, but not necessarily for improvement; and
➤ QI methods training may have focused on one method or model and not the whole spectrum of available QI tools.

NIPN did a tremendous job in assessing QI skills of PIOHQI participants, identifying strengths and opportunities for improvement for state team and national partner staff, and selecting QI methods that best suit the task at hand. AMCHP has supported capacity and skill-building for state MCH

epidemiologists through a cooperative agreement with the Centers for Disease Control and Prevention for the last 15 years. As part of this portfolio of work, AMCHP has supported QI training for MCH epidemiologists to address the differences in preparation for traditional surveillance, assessment, and epidemiology functions compared to the different requirements for QI data, oversight of QI cycles, and making data-driven decisions for QI initiatives.

Another challenge in aligning Title V with PIOHQI activities was the apparent disconnect between PIOHQI projects and their state Title V agencies. AMCHP acknowledges that this disconnect is not exclusive to MCH, rather, it is observed in many areas of public health and government at large. As Table 1 indicates, out of the 16 PIOHQI project, only five states indicated oral health as a NPM. In addition, many of the projects were from academic or non-profit entities, and even the state health department level projects worked in their office of oral or children's health. This disconnect can be illustrated by an example from the state level. In some PIOHQI projects, project teams outside of the health department reported lack of response when trying to connect with Title V. Although participation by Title V was not required, alignment and coordination between the largest source of funding for maternal and child health programs within the state health system and efforts to improve receipt of oral health care among MCH populations is highly desirable. Future initiatives using this same structure would benefit from assessing opportunities to achieve alignment and coordination to maximize impact for improving the health of women, children, and families.

One issue not unique to this project, but that is found within many public health programs, is a reluctance to embed evaluation methods and measures within programmatic functions that assess the impact of interventions and practice on health outcomes. Because impact evaluation requires the examination of the counterfactual, which requires a comparison group, planning for impact evaluation can be mistaken for research, even though it is not. Some impact evaluation reluctance or misconception was present during this project. In the PIOHQI model, the attainment of a QI AIM seemed to disconnect state teams from planning and establishing a holistic evaluation platform for their oral health programs. In other words, PIOHQI teams did not see evaluation as a part of the "start with small tests/change" QI paradigm that was showcased in this project. It is important for future efforts to note that adequate planning and support are needed for both QI approaches, including small tests of change and constant adjustment based on "just in time data," as well as impact evaluation, thoroughly examining whether the program or intervention resulted in a change in outcome and attributing that outcome to the program or intervention.

Despite these challenges, there are tremendous benefits to this work; these boundaries and limitations were identified, tested, and pushed as far as possible for the benefit of women's and children's health. A key takeaway from this work is that it is hard, but it is absolutely worth doing. There was great value for

AMCHP to learn how the systems of oral health care for women and children in each state are constructed, what they need, and how projects like this one can bring innovation and creativity to seemingly intractable problems.

QI in the field of Oral Health from a Dental Public Health Perspective
Association of State and Territorial Dental Directors

There are a number of significant enablers for doing improvement work in perinatal/infant oral health. First, there should be an institutional/organizational commitment to QI with concomitant and effective training on QI methods, tools, and application. Second, the involved Perinatal and Infant Oral Health (PIOH) staff and partners must be open, receptive and given the resources, such as time and dedicated staff, to implement QI. Third, leaders/administrators and implementing staff must be clearly and compellingly shown evidence that QI works and benefits "what they do and how they do it" and has "value-addedness" to their programs and the beneficiaries.

Over the past three years with the PIOHQI National Learning Network (NLN), ASTDD observed that among the biggest limitations to "doing improvement work" is having adequate staff time, followed by having appropriate staff expertise. For a program of one or two people, like a state oral health program (SOHP), it is hard to find time to actually "do the work," including QI. In addition, staff tasked with improvement responsibilities may not have the necessary skill set and competencies for QI work. For example, in some cases, programs have asked their epidemiologists to serve as evaluators even though those two roles may require completely different skill sets. Another significant challenge has been the difficulty in identifying, collecting, analyzing, and aggregating comparable data/metrics on the target populations. This has been due, in part, to the wide range of health care providers involved with the target populations. There may be differences in providers' respective data/patient record systems, e.g. nurses, physicians, dental providers, etc., and the range of clinical and patient care settings, e.g., different FQHC sites WIC centers, private OB-GYN and dental clinics, etc.

With regard to ASTDD's mission and service to its membership and "lessons learned" from PIOHQI, ASTDD wanted members and their oral health/health care colleagues to more fully appreciate the value and utility of QI in their programs. To this end, its partnership in PIOHQI has resulted in several positive outcomes for ASTDD:

➤ Developed the performance management (PM)/QI Toolkit, presented the information on a webinar (also archived) and disseminated the PM/QI methodology/toolkit to non-PIOHQI funded states and jurisdictions (in addition, ASTDD presented the PM/QI Toolkit on an ASTHO webinar);

➤ Informed ASTDD's approach in working with the 31 states and jurisdictions that chose NPM 13 as one of its priority Title V MCH Block Grant priorities, e.g., on providing TA to state oral health programs and their partners;

➤ Formed a foundational basis for the development of the NPM 13 Toolkit;

➤ Informed how the ASTDD Perinatal Oral Health Committee will implement its drafted annual work plan, including a proposed update of "*Best Practices Approach Report-Perinatal Oral Health*" and;

➤ Formed a key cornerstone to ASTDD's forthcoming contributions to the NPM 13 Community of Learning efforts in the coming years.

Table 1: Title V, PIOHQI, and Medicaid Protections

State/Territory	Selected Title V NPM #13: Oral Health	PIOHQI Project State	Medicaid Protections for Dental Care for Adults (Pregnant Women) +	State/Territory	Selected Title V NPM #13: Oral Health	PIOHQI Project State	Medicaid Protections for Dental Care for Adults (Pregnant Women) +
Alabama	*		*	Missouri			***
Alaska	*		****	Montana	*		***
American Samoa	*			Nebraska			***
Arizona		*	*	Nevada			**
Arkansas			***	New Hampshire			**
California		*	****	New Jersey	*		****
Colorado		*	***	New Mexico	*	*	****
Connecticut	*	*	****	New York	*	*	****
Delaware	*		*	North Carolina			****
District of Columbia	*		***	North Dakota	*		****
Federated States of Micronesia	*			Northern Mariana Islands	*		
Florida			**	Ohio			****
Georgia	*		**	Oklahoma			**
Guam				Oregon	*		****
Hawaii	*		**	Palau			
Idaho	*		**	Pennsylvania			***
Illinois	*		***	Puerto Rico	*		
Indiana			***	Rhode Island	*	*	****
Iowa	*		****	South Carolina		*	***
Kansas			***	South Dakota	*		***
Kentucky	*		***	Tennessee			*
Louisiana			***	Texas		*	**
Maine		*	**	Utah	*		**
Marshall Islands	*			Vermont	*		***
Maryland	*	*	**	Virginia		*	***
Massachusetts	*	*	****	Virgin Islands	*		
Michigan	*		***	Washington			****
Minnesota		*	***	West Virginia	*	*	**
Mississippi			**				

+ Data is as of February 2016, http://kff.org/medicaid/issue-brief/access-to-dental-care-in-medicaid-spotlight-on-nonelderly-adults/
* No Benefits ** Emergency Only Benefits *** Limited Benefits **** Extensive Benefits

APPENDIX A

QI Roadmap

(See full document at http://bit.ly/PIOHQI_Roadmap)

STEPS 1 & 2
Develop SMART Aim & Measure, Identify Key Drivers

Each PIOHQI team will identify a set of activities/interventions/changes that they will use to impact the drivers. The teams will be urged to use small tests of change as they proceed with these activities, and should include periodic checkpoints on whether the work is proceeding as expected, and what they are learning. If possible, the teams should use common process, outcome, and balancing measures to assess progress.

STEPS 3 & 4
Observe and Document Current Process, Identify and Quantify Process Failures

The first step in improving a process is to document the process in its current project. This helps to identify specific targets for improvement, and also to break down the complexity of the process into manageable parts.

At the state level, each team will work with stakeholders to identify potential interventions to test. Once the intervention is identified, the team will work with stakeholders to map the specific process flow. Mapping out the steps of the process in its current state helps to identify steps or targets for improvement. When doing this, it is important to map the process *as it actually exists*, and not an aspirational process.

In reviewing the processes targeted for improvement, process 'failures' will rise to the surface. Process failures are areas where the intended result of an action is either not working or is not working as well as intended. This also provides the opportunity for teams to quantify these failures. The quantification can be based on 'just enough' data, and does not need to include large sample size data sets. PIOHQI teams will be able to identify one or more processes to improve for each driver of change related to a strategy.

STEP 5
Identify Activities (Interventions)/Testable Ideas

Each team will identify those activities or changes that they feel will lead to an improvement. Each team is encouraged to develop a driver diagram that lists specific activities/changes to test. This will serve as a guide for the project team, and also a tool for sharing across states the various changes that are being tested. The Network will look for common activities across the states and use this to encourage cross-state sharing and learning during the monthly webinars. On the monthly webinars, teams will share progress, data, and learning, and they can benefit from peer support and the learning occurring in other states.

STEPS 6 & 7
Design and Execute Small Tests of Change & Make Decisions Based on Learning

This will be one of the most difficult steps to undertake. Most participants in change efforts wish to implement change on a large scale based on what they believe to be the right approach. The importance of using small tests of change to determine whether the predicted outcome is, in fact, the actual outcome cannot be emphasized enough.

PIOHQI teams will use one of two types of tools to document and track the results and learning that takes place from their tests of change. The first is the Model for Improvement, including Plan-Do-Study/Check-Act, and the other is a Before Action Review/After Action Review. Both of these tools present a structured way to ensure a QI approach and learning occurs.

By using these tools, the teams will have a sequential record of the tests and activities performed, and what was learned from each of the tests of change. Decisions about future tests and how to begin to systematize the changes will be based upon the learning that occurs along the way.

The data dashboard (dashboard) was created for teams to post at least one test of change each month. This dashboard will be used to harvest ideas for discussion on the monthly webinars. Teams will be encouraged to share what did not work in addition to what did work to foster cross-state team learning and information sharing about best practices and lessons learned in work to achieve the Aims.

STEP 8
More Small Tests of Change & Scale Up

It is often necessary to test a single change several times until it is achieving the desired outcome. In addition, a change that works reliably in one setting may need to be adjusted to achieve the desired outcome when the environment changes. The teams will learn from successes in one type of setting, and use that learning to inform different tests of change as the scale of the project increases.

STEPS 9 & 10
Implement Successful Activities & Develop & Execute a Sustainability Plan

After a given activity has been tested and shows success in a reliable, replicable way in a variety of settings, it is time to implement the activity on a broad scale. Part of ensuring sustainability is building in a way of measuring and monitoring whether the desired process or outcome is stable over time. If the reliability of the process or outcome decreases over time, there needs to be attention to how that will be addressed.

As teams consider a broad scale implementation of any given activity or change, the Network will facilitate a discussion of reliability in systems change. Considerations include setting institutional policies and procedures that specify the changes, and ensuring training about "the why and how" of the change is incorporated in staff training and on-boarding materials.

STEP 11
Plan for Spread as Appropriate

Spreading the learning from the Network will be a culminating activity. The Network is prepared to develop a strategic communications plan to disseminate findings with MCHB grantees and other state programs.

APPENDIX B

Long-Term Outcome

Pregnant Women:

By September 2019, increase by 15% over the state baseline the percent of women who have received oral health care, defined as prophylaxis, during pregnancy, as measured by the PRAMS (or equivalent) survey data.

Infants:

By September 2019, increase by 15% over the state baseline the percent of infants who have received preventive oral health care (including check-ups, dental cleanings, x-rays, fluoride varnish, sealants, and/or anticipatory guidance), as measured by the NSCH data on dental visits for 12-24 month olds.

Common Strategies and AIM Statements

STRATEGY 1

Strategy #1 – Increase oral health messages delivered to pregnant women and infants.
➤ **Aim 1.a. -** By August 2017, each state team will partner with at least one program impacting TARGETED pregnant women such as WIC, Healthy Start, or home visiting program, with broad geographic reach that will incorporate targeted oral health messages into routine business activities.
➤ **Aim 1.b. -** By August 2017, each state team will partner with at least one program impacting TARGETED infants, such as WIC, Early Head Start, Healthy Start, or home visiting program, with broad geographic reach that will incorporate targeted oral health messages into routine business activities.

STRATEGY 2

Strategy #2 – Improve state- or systems-level policies and practices.
➤ **Aim 2.a. –** By August 2017, each state team will develop, adopt, or improve operationalization of at least one pregnant woman-centered policy and/or practice at the state, clinical system, health plan, or dental or dental hygiene school curriculum level that helps to improve access to or quality of oral health care for those populations.
➤ **Aim 2.b. –** By August 2017, each state team will develop, adopt, or improve operationalization of at least one infant-centered policy and/or practice at the state, clinical system, health plan, or dental or dental hygiene school curriculum level that helps to improve access to or quality of oral health care for those populations.

Strategy #3 – Improve access to and utilization of preventive oral health care

➤ **Aim 3.a. –** By August 2017, increase by 10% over baseline the percent of oral health providers in the TARGET AREA★ who provide services to pregnant women.

➤ **Aim 3.b. –** By August 2017, increase by 10% over baseline the percent of OB/GYN providers in the TARGET AREA who perform oral health assessments for pregnant women.

➤ **Aim 3.c. –** By August 2017, increase by 10% over baseline the percent of primary care medical providers who serve infants < 1 year in the TARGET AREA that provide oral health services.

➤ **Aim 3.d. –** By August 2017, increase by 15% over baseline in TARGET AREA the rate of TARGETED pregnant women who receive preventive oral health services *(defined by grantees – will be a measurable service/services)* as measured by billing data, dental claims data, chart review, other timely evidence.

➤ **Aim 3.e. –** By August 2017, increase by 15% over TARGET AREA baseline the rate of TARGETED infants under age 1 who are covered by Medicaid who receive preventive services *(defined by grantees – will be a measurable service/services)* as measured by billing data, chart review, claims data or other timely evidence.

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★*The TARGET AREA determined by grantee and may be individuals under Medicaid, individuals in a certain geographic region, individuals at a selected site (i.e., FQHCs), etc.*

The voice for children's dental health.

children's
dental health
project