FROM THE FIELD

Developing Collaborative Maternal and Child Health Leaders: A Descriptive Study of the National Maternal and Child Health Workforce Development Center

Alina Nadira Clarke1,3 · Dorothy Cilenti1,2

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Abstract Purpose An assessment of the National Maternal and Child Health Workforce Development Center (the Center) was conducted to describe (1) effects of the Center’s training on the use of collaborative leadership practices by MCH leaders, and (2) perceived barriers to collaboration for MCH leaders. The Center provides services to strengthen MCH professionals’ skills in three core areas: Change Management/Adaptive Leadership, Evidence-Based Decision Making, and Systems Integration. Description This descriptive qualitative study compares eight interview responses from a sample of the Center’s participants and findings from a document review of the training curriculum against an existing framework of collaborative leadership themes. Assessment Systems thinking tools and related training were highly referenced, and the interviewees often related process-based leadership practices with their applied learning health transformation projects. Perceived barriers to sustaining collaborative work included: (1) a tendency for state agencies to have siloed priorities, (2) difficulty achieving a consensus to move a project forward without individual partners disengaging, (3) strained organizational partnerships when the individual representative leaves that partnering organization, and (4) difficulty in sustaining project-based partnerships past the short term. Conclusion The findings in this study suggest that investments in leadership development training for MCH professionals, such as the Center, can provide opportunities for participants to utilize collaborative leadership practices.

Keywords Leadership · Workforce development · Collaborative leadership · Collaboration · National MCH Workforce Development Center

Significance Leadership development programs for MCH professionals can strengthen infrastructure, programming, and outcomes by providing leaders with key tools in training and enhancing their skillset. In the current environment of health transformation, effective collaboration with partnering organizations can help MCH leaders streamline services to address systemic challenges for MCH populations. Assessing the effects of the Center’s workforce development training describes the use of collaborative leadership practices by MCH leaders and highlights barriers to sustaining collaboration in the field. Understanding these facilitators and barriers is necessary to strengthen leadership development training for MCH professionals.

Introduction

In recognition of economic and social forces affecting health systems, the Maternal and Child Health Bureau of the Health Resources and Services Administration (HRSA) funded the establishment of the National Maternal and Child Health Workforce Development Center (the
Center) at the University of North Carolina at Chapel Hill in 2013. The Center provides services to inter-agency teams to advance Title V leadership in health transformation and to strengthen MCH professionals’ skills in three core areas: Change Management/Adaptive Leadership, Evidence-Based Decision Making, and Systems Integration. Health transformation shifts the emphasis of health care from disease management to prevention and population health management, while improving access to affordable health care; utilizes an interprofessional/interdisciplinary approach to health care; integrates primary care, specialty care and public health; develops evidence-based, efficient health systems that better incorporate ongoing quality improvement; and drives partnerships across sectors to optimize the wellbeing of maternal and child health populations (Margolis et al. 2017).

Participants must propose a health transformation project and establish an inter-agency team in the Center’s intensive training model. The Center’s technical assistance includes a 2–3 day workshop to introduce the core skills, didactic instruction through webinars, an in-state technical assistance visit, and guided practice working with a Center coach. Each state team in Cohort 1 was led by an MCH state leader and included stakeholders from a variety of organizations, such as Medicaid, Departments of Education, Rural Health Associations, Local Health Departments, and parent advocacy groups. The Cohort 1 state teams’ health transformation projects all aim to improve health outcomes and service delivery for MCH populations.

This descriptive qualitative study offers two key assessments from the field: (1) What are the effects of the Center’s leadership training and development on the use of collaborative leadership practices by MCH leaders? (2) What are perceived barriers to collaborative leadership for MCH leaders?

**Systems Thinking**

Leaders can use systems thinking to map complex relationships between programs, organizations and agencies and to identify stakeholders and potential partners associated with a complex challenge, who can then be leveraged for collaborative support (Leischow et al. 2008).

**Vision-Based Leadership**

In the collective setting, partnerships and coalitions must align efforts and create and communicate a shared vision across collaborators (Larson et al. 2002).

**Collateral Leadership**

A horizontal power structure is more common rather than more traditional formal hierarchal roles in public health settings (Larson et al. 2002; Avery 1999; Fawcett et al. 1995). In this lateral power structure, leaders must convene representatives of interested parties across a system, thus creating informal leadership roles as these professionals work together toward a common goal (Larson et al. 2002).

**Power Sharing**

Managing systems-wide relationships and informal leadership roles in a horizontal power structure requires shared planning and building consensus among partners in order to create mutually beneficial solutions (Larson et al. 2002).

**Process-Based Leadership**

Leaders must possess a variety of soft skills including listening, team building, and perspective taking to facilitate and sustain long-term collaborative action (Larson et al. 2002).

**Collaborative Leadership in MCH**

MCH leaders must similarly use collaborative practices to navigate the public health systems in which they work. Title V is the longest standing public health legislation in American history, providing programs and health services for maternity, infant, and child care since 1935. The federal government has supported Title V programming, MCH professional training, and leadership development since the 1940s (Kavanagh et al. 2015).

Collaborative leadership has been shown to be particularly useful in driving MCH programs. The importance of collaboration emerged as one of five key themes in 92 MCH programs that focused on strengthening urban public health
systems for MCH populations or improving access to care for urban children and families across the United States (Peck and Fitzgerald 1998).

The value of collaborative leadership for the MCH workforce has been reflected in core competencies and training assessments. The nationally adopted core competencies for MCH leaders identify collaborative practices, such as communication, conflict resolution and negotiation, and working in systems and communities, as necessary proficiencies (Association of Maternal and Child Health Programs 2009). One prominent training program for MCH professionals, the MCH Public Health Leadership Institute, highlighted enhanced systems thinking, collaboration, partnership creation, and stakeholder analysis in an evaluation report of trainees’ retrospective pretest and posttest (Fernandez et al. 2015).

**Description**

This qualitative study explores collaborative leadership development for MCH professionals by describing the Center’s leadership development approach to fostering collaborative practices for MCH leaders. We conducted key informant interviews by telephone with the Center’s Cohort 1 participants approximately 1 year after their formal completion of the intensive training program. Purposeful sampling was used to select eight key informants out of the total 40 participants based on the following criteria: participated in the Center’s Cohort 1 intensive training program as a co-lead of a state team, or identified by a co-lead as a suitable representative of the state team. Each state team in the cohort was represented by one key informant. The key informant interviews were structured using a five-question interview tool, shown in Table 1. The interview tool was piloted in a telephone interview with one state team leader of the eight. No adjustments to the tool were deemed necessary before widespread use, and this pilot interview was included in data analysis.

We analyzed the eight interview transcripts using ATLAS.ti software. ATLAS.ti software is an analytical tool used to code, link, and visualize qualitative data (Muhr and Friese 2004).

We managed and updated the codebook throughout data collection and analysis to capture emergent themes, which were then categorized as practices related to either systems thinking, vision-based leadership, collateral leadership, power sharing, or process-based leadership according to the five-part scheme by Alexander et al. (2001). The Alexander et al. framework was applied as an organizing tool in analysis because it provides a relevant description of collaborative practices between public health agencies, local government, social service agencies, insurers, physician groups, and health systems, which are all partners similarly engaged in MCH leaders’ work. A network diagram was then developed to map the process of collaborative work described by participants of this study and to present emergent interview findings that were not directly captured by the Alexander et al. framework.

The data collected in the interviews were also crosswalked with data from a document review of the Center’s Cohort 1 training curriculum to confirm and further describe the specific training components mentioned by key informants.

The Institutional Review Board at the University of North Carolina at Chapel Hill deemed this study exempt from review.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Interview tool</th>
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<tbody>
<tr>
<td>Question</td>
<td>Sub-questions/probes</td>
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<tr>
<td>1. The Center provided training and tools in several areas: establishing new and/or strengthening partnerships, team-building with interdisciplinary or interagency team members, consensus building, and systems thinking</td>
<td>In which of these areas did you learn the most? Which do you wish you spent more time learning about? Which do you find most useful and applicable to your work?</td>
</tr>
<tr>
<td>2. Could you provide an example of how you have applied some of these skills and techniques since the training?</td>
<td>Are you still working with any of your new partners identified in the development of your health transformation project? How were you able to sustain these partnerships? Have these partnerships expanded?</td>
</tr>
<tr>
<td>3. Would you please provide an update on your team’s health transformation project now at one year after your formal relationship with the Center?</td>
<td>Have you formed any new partnerships since the formal close of your relationship with the Center?</td>
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<td>4. Were you able to experience successes or achieve goals as a result of enhanced collaboration with partners?</td>
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<td>5. Do you have any other feedback regarding your experience with the intensive cohort experience?</td>
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Assessment

Leadership Practices by Collaborative Community Health Partnerships Theme

Each key finding from the interviews was independently mentioned by more than one participant or mentioned at least three times throughout the course of one interview. These key interview findings are grouped by the collaborative practice themes from the Alexander et al. framework in Table 2. Definitions of each collaborative practice theme can be found in the Introduction section.

All eight key informants mentioned collaborative practices related to process-based leadership, which are the soft skills necessary to sustain collaborative efforts and relationships. Each interviewee felt that they were able to strengthen a partnership or organizational relationship as a result of either working with that partner on their inter-agency state team or working with that partner in the continuation of the health transformation projects.

Key informants described ways that systems thinking (identifying and engaging players in a complex problem) practices laid the foundation for vision-based leadership (aligning partners’ efforts) by generating buy-in for partners. Six interviewees explicitly mentioned systems thinking, and many discussed perceived benefits from guided practice with the systems thinking tools, systems mapping, and systems building provided by the Center during training. For example, one key informant stated, “I think the tools around systems thinking were the most useful for what our project was focused on and what we needed.”

Eight interviewees mentioned practices related to Collaborative Leadership, which refers to creating informal leadership roles when working with collaborators across organizations. Five of these eight interviewees referred to significant support and opportunities provided by the Center to convene stakeholders and partners for their health transformation projects and also mentioned carrying this experience forward in their work since training. For example, one key informant said,

We brought together a pretty wide stakeholder group for the cohort [training] including Medicaid, primary care physicians, local MCH agencies...this [project] helped us bring that group of diverse stakeholders together to work on workforce development issues as they relate to Title V.

Key informants mentioned two main practices related to power sharing (managing decision-making with partners): shared planning and consensus building. Five interviewees discussed engaging stakeholders and partners in the planning process of their projects, and three mentioned

Table 2 Collaborative leadership practices as described by participants and categorized according to the Collaborative Community Health Partnerships leadership framework by Alexander et al. (2001)

<table>
<thead>
<tr>
<th>Collaborative Community Health Partnerships: Leadership Theme</th>
<th>MCHWDC training (related training in the Center’s Cohort 1 curriculum)</th>
<th>Interview results: key findings (number of participants out of eight that mentioned related components)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems thinking and vision-based leadership practices</td>
<td>Systems thinking tools, systems mapping training, root cause analysis, systems science webinar</td>
<td>Systems thinking</td>
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<tr>
<td></td>
<td></td>
<td>Identifying new potential partners</td>
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<td>Systems building</td>
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<td>Systems mapping</td>
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<tr>
<td>Vision-based leadership</td>
<td>Systems mapping training, state assessment tool, future of health reform webinar/training, health transformation training, future of health reform webinar, aim statement and project charter development</td>
<td>Build partnerships/generate buyin</td>
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<td>Assessing the future</td>
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<td></td>
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<td>Collective impact</td>
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<tr>
<td>Collateral leadership and power sharing practices</td>
<td>Technical assistance</td>
<td>Convening stakeholders/partners</td>
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<tr>
<td>Collateral leadership</td>
<td></td>
<td>Convening specifically clinical stakeholders</td>
</tr>
<tr>
<td>Power sharing</td>
<td>Consensus building assistance, coaching</td>
<td>Shared planning</td>
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<tr>
<td></td>
<td></td>
<td>Consensus building</td>
</tr>
<tr>
<td>Process-based leadership practices</td>
<td>Process mapping, impact matrices, networking, PDSA tool action item lists</td>
<td>Strengthening partnerships/relationships</td>
</tr>
<tr>
<td>Process-based leadership</td>
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<td>Sustaining partnerships</td>
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<td></td>
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<td>Process mapping</td>
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<td>Communication</td>
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<td>Utilizing the Center’s network</td>
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</table>
consensus-building practices. For example, one interviewee said,

Our project was actually bringing together a variety of stakeholders, and through the consensus building activities, we were able to move forward even though it wasn’t 100% agreement, and I think that this is the first time that I’ve been in that kind of an environment.

Barriers to Sustaining Collaboration for Participants

Five interviewees mentioned that sustaining long-term partnerships is particularly difficult in their work. This study highlights four key barriers to sustaining collaborative work with partners for the participants: (1) a tendency for state agencies to have siloed priorities, (2) difficulty achieving a consensus to move a project forward without individual partners disengaging, (3) strained organizational partnerships when the individual representative leaves that partnering organization, and (4) difficulty in sustaining project-based partnerships past the short term. The process of sustaining long-term collaboration with key barriers as described by the key informants is shown in Fig. 1.

Key informants reported that they generally come into the Center’s intensive cohort training with extensive experience in building inter-agency partnerships, however, the opportunity to engage/re-engage key stakeholders and partners is a particularly useful benefit of the training structure. As described, the struggle to break individual organizations from a “what’s in it for me?” mentality in order to take a systems approach continues. Consensus building practices were seen as a necessity to sustain coalition members’ engagement and promote timely progress despite a lack of unanimous agreement.

Even though six state teams mentioned working with current partners before, three mentioned that these efforts are largely project-based. Key informants found that their collaborative relationships with partnering agencies generally waned at the conclusion of a specific project until a different opportunity to engage surfaced. Interviewees described particular difficulty in sustaining partnerships when a previous individual collaborator/contact has left their position. In fact, one key informant is the only team member still working in her state system since the end of the intensive cohort training, including external partners. She is currently facing significant challenges in garnering support and buy-in from these new contacts, who have not worked with her before.

Conclusions for Practice

Lessons Learned

Key informants tended to mention systems thinking and vision-based leadership practices together, and also paired collateral leadership and power sharing practices when describing their experiences, which is mirrored in the structure of the Alexander et al. (2001) framework. process-based leadership actions for sustaining partnerships and working collaboratively were mentioned as overarching facilitators encompassing softer skills, such as effective communication, to maintain engagement. The health transformation project
seems to provide a key opportunity for systems thinking, power sharing, and process-based leadership experiences in Cohort 1, with technical assistance and mapping/planning tools providing additional exposure and support.

While the Center does not train on the Alexander et al. (2001) framework explicitly, nor is collaboration one of the Center’s founding core areas of focus, this opportunity to assess a key skill for the future directions of Title V leadership and MCH workforce development provides valuable insights for the field as collaborative leadership is an essential component in accelerating health transformation in MCH. The participants’ described experiences highly aligned with the Alexander et al. (2001) framework and the existing body of literature on facilitators and barriers to sustaining collaboration. This alignment demonstrates a comprehensive nature of the Center’s workforce development approach.

While participants generally feel that their work with the Center has provided opportunities for improvement in their perceived skillset in sustaining partnerships, the described four key barriers that prevent long-term collaboration in practice are mirrored in other research. Green (2000) attributes a disengagement from collaboration to partners’ lack of satisfaction (feelings of solidarity, appreciation, and evidence of impact) and Kreuter et al. (2000) shows similar findings. Investing time in these collaborative relationships as core work grows more complex and resource intensive is a challenge for MCH professionals. Training may be enhanced by acknowledging these barriers and planning strategies to circumvent or overcome barriers prior to blockages.

**Limitations**

One limitation of this study was the use of single-coder for data analysis, but the use of a published framework as a structured reference for analysis and a cross-walk of the training curriculum document review against key informant interview responses mitigate possible biases.

This study is also not generalizable to all MCH leaders because the eight individuals sampled for interview volunteered to join the Center’s first intensive leadership development cohort training, and they may have different perspectives and experiences compared to the larger population of MCH leaders. However, this study’s 100% response rate, with one key informant from each state team, has represented the span of perspectives across all state teams.

**Conclusion**

In the current environment of health transformation, effective collaboration with partnering organizations is necessary for MCH leaders to address the systemic issues that affect their target populations. Collaborative leadership is crucial to convene and engage necessary stakeholders for a systems approach in solving MCH issues, particularly as this work grows more complex and resource intensive.

The findings in this study suggest that investment in leadership development training for MCH professionals, such as the Center, can provide opportunities for participants to utilize collaborative leadership practices. Further research and evaluation should be done to investigate key collaborative leadership competencies for MCH professionals and barriers to sustaining long-term collaboration in order to strengthen leadership development training curriculum design.

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**Compliance with Ethical Standards**

**Conflict of interest** The authors declare that they have no conflicts of interests.

**References**


