

## Issue Brief

Mary Anne Anderson, Jesse Chandler, Annalisa Mastri, Amanda Benton, and Gretchen Lehman

# How to Assess and Address Technical Assistance Needs: Insights from the Literature and Practice

Many stakeholders value and use training and technical assistance (TA) to plan for change and to develop innovative solutions to both long-standing and newly emerging problems.<sup>1</sup> Training and TA is commonly defined as the transfer of knowledge, expertise, and skills to people, organizations, and communities. It can reveal gaps in services or a need for new or different services. Federal, state, and local governments can provide training and TA to meet their policy objectives or to help people or organizations comply with program rules or adopt best practices. Grantmakers can require or encourage participation in training and TA as part of a grant, and organizations may provide it or seek it out to fulfill their missions. Whatever the reason, it is critical for providers to clearly understand why someone is using training and TA so that they can design it to meet recipients' needs.<sup>1</sup>

### Key Findings

- There is no consensus, either in the research literature or in practice, about the best way to assess recipients' needs for training or technical assistance (TA), and what form training and TA should take.
- Collecting information from potential training and TA recipients and program participants, using a structured needs assessment tool, and analyzing data about an organization or on the demand for training and TA can help TA providers understand recipients' needs.
- How training and TA is designed and delivered—who delivers it, when, and where—can influence how well it fills recipients' needs.
- TA recipients identified several valuable practices:
  - Tailoring training and TA to recipients' needs and contexts
  - Co-designing it with recipients
  - Giving them concrete and actionable steps they can take
  - Aligning cross-sector training and TA across efforts
  - Being clear about what recipients will be expected to do if they are going to participate in training or TA

<sup>1</sup> In this brief, we use the term “**provider**” for organizations that provide training and TA and “**recipient**” for organizations that receive training and TA. These groups are not mutually exclusive. We refer to the individuals and families who are served by human and social services programs as “**participants**.”

The federal government, foundations, and other organizations can also offer training and TA specifically to help organizations in different sectors collaborate toward shared goals. Such cross-sector collaboration can range from sharing information or sending referrals between partner agencies to sharing resources (like space or data) or coordinating strategy. Training and TA can be used to build connections between organizations, support time and space for joint learning, help overcome specific barriers to collaboration, and help spread program models and practices that are promising and evidence based.

In order to explore how organizations that fund and provide training and TA can assess recipients' needs and design and deliver training and TA that addresses these needs, we conducted a literature review, interviews with providers, and focus groups with recipients. (See the appendix for details on methods.) Throughout this brief, we share examples of training and TA in the context of cross-sector collaboration, which was an initial focus of the study. Overall, we believe the key takeaways will be of interest to federal and philanthropic staff and others that are involved with human services training and TA.

## How to assess the needs of recipients

To effectively address TA needs, providers must first learn what those needs are. A needs assessment can help clarify the goals and strengths of people receiving training and TA as well as the challenges they need to overcome.<sup>ii</sup> Recipients may already have some of this information, but sometimes there are gaps or inaccuracies a provider can help fill in or correct by conducting a needs assessment.

Providers can collect information on behavior (what people and organizations do), knowledge (what people know) and beliefs (what people think or feel).<sup>iii</sup> Although beliefs are, by definition, self-reported, and people might not accurately report or understand their own strengths and weaknesses,<sup>2</sup> it can still be useful to

know what their beliefs are. It can also be helpful to get information on their knowledge and behavior, which may be more directly related to their needs.

Providers can use a variety of methods to learn about recipients' needs. Our literature review found little evidence on the effectiveness of those diverse methods. The literature includes case studies and other examples of how providers assess and measure recipients' needs in practice. Once those needs are assessed, different methods and potential solutions, including training and TA, can be used to fulfill them. Generally, a needs assessment has the following steps:<sup>iv</sup>

- 1. Develop a plan to assess needs that takes the recipient's context into account**
- 2. Collect and analyze relevant and priority data on needs, following the plan<sup>3</sup>**
- 3. Agree with the recipient on which of the identified needs to address**

The providers we interviewed said they use a wide range of strategies to identify recipients' training and TA needs on cross-sector collaboration. Below are strategies reported by respondents as well as some additional examples from the literature.

- **Talk to program participants about their experiences.** The individuals and families participating in human services programs can provide valuable information. For example, one provider we interviewed surveyed participants to find out their needs. Others included people with lived experience in conversations about the challenges people face when they seek out services. For states helping people who are facing the "benefits cliff" (large decreases in public benefits that can be triggered by comparatively small increases in income), ACF's Office of Regional Operations and the National Conference of State Legislators included participants in conversations about the issue.<sup>v</sup> Getting to know participants' perspectives can

---

<sup>2</sup> In particular, self-reports of relationships and climate are uncorrelated with the actual extent of collaboration (Greenwald and Zukowski 2018). For a conceptually similar finding for training outcomes see Alliger et al. 1997.

<sup>3</sup> The literature reveals little consensus about which types of data are most important to collect and analyze, and, in practice, this probably depends on context.

also help grantmakers and organizations that fund training and TA understand the realities facing local practitioners and program administrators.

- **Get information from recipients about their needs and any barriers to collaboration that they might be facing.** Providers can get this information in a variety of ways. For example, providers reported

talking with recipients about their needs in focus groups or listening sessions, site visits, or informal conversations. (See Box 1 for potential issues to explore.) They also indicated that they survey organizational staff and partners to learn about practices or beliefs that could interfere with cross-sector collaboration. In some cases, recipients might think a barrier exists when it doesn't, or misinterpret

### Box 1. Assessing cross-sector collaborations

**Aspects of collaboration to assess:** To assess cross-sector collaboration needs, consider exploring the following questions. Providers can use these questions, along with a logic model, to think about how to enhance current collaborations and develop relevant training and TA content. Research on collaboration has revealed the most important features of successful collaborations to be adequate trust, effective leadership, effective communication, and adequate resources.<sup>vi</sup>

- Who should be at the table to solve a problem? Are all the right people there?
- Does the collaboration have clear governance and ground rules?
- Are roles and responsibilities clearly defined?
- What skills and resources (financial or otherwise) are needed to make the collaboration work well?
- Does the collaboration have a strong leader?
- What is the political/social climate, and how might it affect collaboration?
- What can all of the partners get out of the collaboration?
- How motivated are the partners to make the collaboration succeed?
- What challenges does belonging to the collaboration create for partners?
- What capacities do the partners bring to the collaboration?
- Do partners agree on what problem they are trying to solve?
- Do partners have similar decision-making styles and attitudes toward risk?
- To what extent and how are partner goals in harmony or in tension with each other?
- How much do partners trust and respect each other?
- How do partners communicate with each other (frequency and style)?
- Do partners have a common language (do they agree on terms and definitions)?
- Are partners aware of each other's processes?
- Have partners collaborated successfully in the past?
- Do partners have similar goals and decision-making styles?

**Common collaboration needs:** Respondents who had received training and TA as part of a cross-sector collaboration said the training and TA had helped them overcome these common cross-sector challenges:

- Lack of buy-in on common or shared objectives and goals
- Lack of understanding about each other's objectives and missions
- Poor communication between partners
- Administrative hurdles such as data sharing and program eligibility rules that diverge from each other

something as a barrier. For instance, according to providers, misunderstandings about federal or state rules, requirements, or regulations seem to be common. After uncovering those perceptions, providers can help recipients better understand the actual rules, requirements, and regulations.

- **Analyze organizational data.** Providers can review an organization’s performance metrics to find out where training and TA is needed most. For example, providers discussed studying key participant outcomes, finding the areas where the organization falls short of its target outcomes, and then providing training and

TA in those areas. Another possibility is to measure collaboration by using social network analysis<sup>4</sup> tools to find out which partners are talking to each other and how often. This can help providers find gaps in communication or coordination that might interfere with successful cross-sector collaboration.

- **Use structured needs assessment tools.** Providers can use a variety of tools to clarify recipients’ needs and understand cross-sector collaboration.<sup>5</sup> These included driver diagrams,<sup>6</sup> surveys, and interview protocols. Box 2 gives an example of a comprehensive set of tools used for one project.

### Box 2. Spotlight on Spreading Community Accelerators on Learning and Evaluation (SCALE)

The Robert Wood Johnson Foundation funded SCALE, an intensive “learning and doing” program designed to help communities work across health, education, and other sectors to improve people’s health and well-being.<sup>vii</sup> The Institute for Healthcare Improvement, as a part of an initiative called 100 Million Healthier Lives, led SCALE by coordinating and delivering training and TA from multiple providers to communities participating in the program. Recipients included partner organizations and community members with lived experience. Training and TA included intensive three-day in-person training sessions, monthly webinars, peer-to-peer learning, a shared virtual platform for communications, and coaching.

SCALE evaluated recipients’ needs in depth to develop training and TA while enhancing the capacity and connectedness of the communities. The tools SCALE used to understand needs included:

- **Driver diagram:** Partners defined a goal, identified factors that influenced the goal, and developed a logic model. This diagram helped communities and providers decide what to work on and how to do it.
- **Community transformation map:** Partners answered questions about the current and desired relationships between partners and other stakeholders. They completed the map individually and then as a group, using their own answers to start a conversation. They repeated this exercise every six months, so their progress toward strengthening the relationships could be measured. These maps helped communities and providers find gaps that needed to be bridged and monitor their progress in bridging those gaps.
- **Journey map:** Communities documented their activities, successes, and failures as they worked toward their goals. Journey maps helped communities and providers document their progress along with their learning experiences.
- **Feedback surveys:** During training sessions, after each activity, and at the end of every day, recipients gave feedback about the parts of training that were more and less helpful. Feedback surveys helped providers quickly revise sessions in response to recipients’ comments.

<sup>4</sup> Social network analysis is a methodological approach to mapping relationships—the links between people, groups, organizations, and communities—and exploring how those links affect behavior and change over time. For more information and examples, see this [overview](#) from Columbia University’s School of Public Health.

<sup>5</sup> Examples of instruments that providers can use to understand needs that are related to collaboration and might be filled through training and TA include: (1) the [Levels of Collaboration Scale](#), (2) the [Collaborative Values Inventory](#), and (3) the [Partnership Self-Assessment Tool](#).

<sup>6</sup> A driver diagram is a visual representation of a program or project team’s theory of what contributes to the achievement of a project objective or goal. For more information and examples, see this [page](#) on the Institute for Healthcare Improvement’s website.

- **Assess needs based on the demand for specific training and TA.** Providers can decide on the kind of training and TA they will offer based on what recipients seem to want. For example, the Domestic Violence and Housing Technical Assistance Consortium has an online portal that its providers use to track training and TA requests. Analyzing the types of requests they receive tells providers the kind of content that recipients would find useful.

## How to design and deliver training and TA to address recipients' needs

Based on the information they collect, providers can develop training and TA that is directly responsive to recipients' needs and is delivered by people with the right expertise. Providers can also think about how to address recipients' many identified, competing priorities. Co-developing solutions to problems

and creating a logic model mapping each solution to its intended outcomes can be helpful in guiding implementation.<sup>viii</sup> (See Box 3 for how to evaluate efforts to align training and TA to recipients' needs.) Recipients shared the following recommendations for making training and TA most valuable for them:

- **Ensure that training and TA is responsive to specific needs.** A few recipients said the training and TA they received was not as helpful as it could have been because it was not focused on a specific need or their own circumstances or context. In general, recipients said training and TA was particularly valuable when it was directly tied to a need, either one stated by the recipient or assessed by the provider. For example, respondents who participated in the National Center on Substance Abuse and Child Welfare's In-Depth Technical Assistance program said they had 18–24 months of tailored, individualized, and helpful assistance to address a specific problem or goal that was identified upfront.

### Box 3. Options for evaluating training and TA

Training and TA providers should consider evaluating their efforts to align them to recipients' needs. A few evaluation design options are described below. Additional information on evaluating training and TA will be included in the forthcoming learning agenda developed under this same project. When published, the learning agenda will be available at <https://aspe.hhs.gov/federal-agencies-helping-communities-coordinate-services-improve-client-outcomes>.

- **Case studies** provide an up-close, in-depth, and detailed examination of a particular experience with training and TA, such as how one organization used training or TA to solve a specific challenge.
- **Formative evaluations** assess whether a training or TA approach is feasible, appropriate, and acceptable before it is fully implemented. Formative evaluation is common during the development of a new training or TA approach or to modify or adapt an existing one.
- **Implementation evaluations** document how a training or TA approach is implemented. These evaluations often seek to understand if the approach is being delivered as intended, or with fidelity.
- **Outcome evaluations** describe training or TA performance by analyzing quantitative data. An outcome evaluation might assess changes in recipients' knowledge, skills, attitudes, or behavior before and after the training or TA approach (usually called a pre-post design).
- **Impact evaluations** assess whether a training or TA approach was effective in achieving its goal or objective. This type of evaluation typically compares outcomes across two groups, one that received the training and TA under study and one that did not or received a business-as-usual approach.

“Technical assistance needs to be very tailored and have a good understanding of what the barriers that we are facing happen to be—not generic, cookie-cutter.”

—Recipient

- **Include concrete, actionable steps as part of the training and TA.** Several recipients said it can be difficult to carry out what they learned from a training and TA engagement after it is over. They recommended that providers give clear, concrete follow-up steps that recipients can take toward their cross-sector collaboration goals. For example, one executive director of a community action agency said that her staff have sometimes found it challenging to implement the methods or strategies they learned about during training events. She said it would be helpful to continue TA after training so staff can keep getting feedback and support as they work to execute what they learned.
- **Choose people who know enough about the subject matter to deliver effective training and TA.** Some recipients said they received training and TA from a provider who was a recognized expert in the broader field, but whose experience or expertise on the specific topic seemed limited. Consequently, recipients felt like they wasted their time because the training or TA did not meet their needs. Several recipients emphasized that providers should understand the culture of the organizations they work with, and, ideally, that they would have worked at a similar organization themselves.
- **When possible, co-design training and TA with recipients.** Recipients said they appreciated the opportunity to work directly with a provider or funder to tailor the training and TA and its delivery to their needs. For example, one recipient from the Health Profession Opportunity Grant (HPOG) program said that she negotiated three different cross-sector TA engagements with federal staff and external HPOG TA providers: a “peer exchange festival,” an event to encourage innovation, and a meeting focused on post-grant program sustainability.

- **Strategically offer in-person or virtual training and TA, or a combination of both.** Both recipients and providers said that in-person training and TA should be available whenever possible, saying it is particularly important for relationship building, fostering buy-in into shared goals and objectives, planning, and networking. One recipient, who worked with a provider through the Domestic Violence and Housing TA Consortium to build an extensive cross-sector advocacy coalition in a major city, said that receiving in-person training and TA was critical to building relationships between staff from the different organizations. At the same time, recipients generally viewed virtual training and TA positively, saying that more people, especially frontline or direct service staff, can access training and TA when it is offered online. Several recipients said they especially appreciated interactive elements (such as using polling and small breakout rooms) to facilitate virtual training and TA activities. Although most recipients interviewed had attended one-time virtual training events, such as webinars, ASPE has also published early lessons on [strategies](#) for delivering ongoing virtual TA because of its potential to reach more recipients.

“There are times when we’ve asked for technical assistance, and we found we’re farther along than the expert.”

—Recipient

- **Create opportunities for recipients to connect with each other.** Recipients said they appreciate the opportunity to connect with peers, whether in person or virtually, and providers corroborated this. Several recipients and providers said that people taking up training and TA can benefit from meeting or talking with peers to see how other organizations might have solved problems they are also facing, and from problem-solving together. Recipients said that frontline staff in particular can benefit from discussing problems and solutions with their peers at other organizations.



“[Having the provider] see our coalition in action helped a lot—our relationship wouldn’t be as great if we hadn’t done any in-person [activities].”

—Recipient

- **Consider coordinating training and TA from different providers, especially for cross-sector training and TA.** Some recipients said they had gotten simultaneous training and TA from multiple providers, each with different expectations for scheduling and time commitments. These recipients said it was sometimes difficult to coordinate these, and that there was too much time involved overall. Some recipients also said that training and TA offerings can be duplicative, so they found ways to streamline or combine them. For example, one recipient said that she and many other partners were all participating in two different TA engagements, each with regular meetings.

The partners decided to combine those two engagements into one to cut down on the number of meetings. Recipients said that better coordination between federal agencies could reduce redundancy and ensure that training and TA engagements do not overwhelm recipients. (See Box 4 for more information on clarifying these expectations.)

- **Announce and regularly remind recipients about training and TA opportunities.** Some organizations offer training and TA “at will,” meaning that recipients can choose from a menu of options whenever they are ready or interested. Recipients said they would appreciate regular reminders about the training and TA opportunities that are available, because recipients’ needs and their ability to participate can change over time. Recipients also might not remember every opportunity that is available to them, so reminders during regular conversations with federal staff, for example, can help them stay aware of opportunities.

#### Box 4. Clear expectations can help recipients select and plan for training and TA

Recipients reported that they do not always have enough information to plan for their training and TA engagements. Grantmakers and providers can help recipients by being clear about whether participation in training and TA is expected as part of a grant opportunity, and what commitments it will entail.

When making decisions to seek out training and TA, recipients said they weigh several factors, including:

1. The amount of time (the number of hours, weeks, or months) involved
2. The level of involvement required by staff—especially frontline or direct service staff who might be taken away from their regular duties
3. The cost or funding level associated with different opportunities. Recipients said that when training and TA costs money, it might discourage participation, and when funding is attached, it is more likely that they would take advantage of it.

Several recipients discussed their frustrations with training and TA engagements that were not clear at the beginning about the time commitment involved, including the frequency or length of meetings or the amount of homework between meetings. In some cases, training and TA was a grant requirement, but these requirements were not clearly laid out in the grant opportunity.

## Appendix: Study Methods

This appendix describes the methods we used to collect information for this brief.

### Literature review

Using Google Scholar, we searched documents that cited one of three measures—the Levels of Collaboration Scale, the Wilder Collaboration Factors Survey, and the Partnership Self-Assessment Tool—that were published in 2010 or later and identified in an earlier literature scan.<sup>ix</sup> We also requested and reviewed documents shared by key informants (see next section) that described needs assessments used in the training and TA engagements that they offered. We reviewed article titles and abstracts and identified those that described cross-sector training and TA implementation, explicitly described or validated measures of cross-sector training and TA needs, or were reviews of research on cross-sector collaboration. We identified 26 measures of cross-sector collaboration reported in these articles or in articles they cite. The literature review was conducted in early 2020.

### Virtual interviews and focus groups

**Key informant interviews with providers.** We sought as key informants individuals who provided training and TA for initiatives and programs involving cross-sector collaboration. ASPE and Mathematica both worked to identify the following organizations and efforts from which interview respondents were selected:

1. National Center on Substance Abuse and Child Welfare (NCSACW) Regional Partnership Grant Programmatic Technical Assistance
2. Domestic violence training and TA provided by staff in the Office of Child Support Enforcement (OCSE), in the Department of Health and Human Services' Administration for Children and Families (HHS/ACF)
3. A prison reentry simulation training developed by a coalition of reentry organizations that included the Bureau of Prisons and presented in conjunction with HHS/ACF/OCSE
4. The Domestic Violence and Housing Technical Assistance Consortium (DVHTAC), funded by HHS and the Departments of Justice and Housing and Urban Development
5. HHS/ACF's Office of Regional Operations
6. TransCen, Inc., a non-profit organization that provides training and technical assistance focused on improving education and employment success for youth and young adults with disabilities. TransCen is part of the National Technical Assistance Center on Transition (NTACT), funded by the Office of Special Education Programs and the Rehabilitation Services Administration.
7. Spreading Community Accelerators Through Learning and Evaluation, funded by the Robert Wood Johnson Foundation
8. The Family Engagement Center at Ohio State University

Mathematica invited 14 key informants to participate in interviews and interviewed 13 of them. Excluding federal employees, no more than nine individuals were asked the same question.

**Focus groups with recipients.** We obtained approval from the U.S. Office of Management and Budget under the Paperwork Reduction Act to conduct focus groups. We sought individuals that received training and TA as part of cross-sector collaboration initiatives and programs for our focus groups. Some efforts were also identified from the key informant interviews. Focus group participants were recipients of training and TA related to the following efforts or programs:

1. DVHTAC
2. NCSACW's In-Depth Technical Assistance program
3. A prison reentry simulation training developed by a coalition of reentry organizations that included the Bureau of Prisons and presented in conjunction with HHS/ACF/OCSE
4. Health Profession Opportunity Grants, funded by the Office of Family Assistance in HHS/ACF



5. Community action agencies (CAAs) and statewide associations that assist CAAs; both receive funding from the Office of Community Services (OCS) Community Services Block Grant program in HHS/ACF
6. Community Economic Development program in HHS/ACF/OCS

ASPE and Mathematica worked with training and TA providers and federal program staff to find recipients to recruit for focus groups. Mathematica ultimately conducted focus groups with 32 of the 60 recipients invited to join.

### Data collection and analysis

ASPE and Mathematica developed semi-structured protocols to guide interviews and focus groups. Topics included respondent background, methods of determining training and TA needs, feedback on training and TA experiences, lessons learned, and recommendations to organizations that fund and provide training and TA. All interviews and focus groups were audio-recorded for accuracy.

Mathematica conducted telephone interviews with key informants from March through May 2020. Each provider interview was about 60 minutes long and conducted with one or two respondents from a training and TA effort or program. Central themes were identified after each interview, and earlier recordings were reviewed to ensure the consistent application of themes.

Held from April through May 2020, focus groups had 1 to 4 recipients participating and were 60 to 90 minutes long. Because these focus groups occurred during the initial stages of the COVID-19 pandemic, some recipients reported a need to prioritize pandemic response activities over focus group participation. Mathematica conducted focus groups over the WebEx videoconferencing platform.

Most groups included respondents from the same effort or program, though one included respondents from two different programs due to scheduling. To analyze data collected from the focus groups, Mathematica used NVivo, a software program that systematically codes qualitative data.

For both interviews and focus groups, Mathematica staff also reviewed documents, such as websites and evaluation reports, to collect background information on each training and TA effort.

### References

- Abazeed, Ali and Amanda Benton. "Improving Human Services Using Virtual Technical Assistance." Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, April 2020.
- Alliger, G. M., S.I. Tannenbaum, W. Bennett, Jr, H. Traver, and A. Shotland. "A Meta-Analysis of the Relations Among Training Criteria." *Personnel Psychology*, vol. 50, no. 2, 1997, pp. 341–358.
- Altschuld, James W., and David Devraj Kumar. *Needs Assessment: An Overview*. Volume 1. Sage, Thousand Oaks, CA: 2010.
- Brown, J. "Training Needs Assessment: A Must for Developing an Effective Training Program." *Public Personnel Management*, vol. 31, no. 4, 2002, pp. 569–578.
- Cooper, M., Y. Evans, and J. Pybis. "Interagency Collaboration in Children and Young People's Mental Health: A Systematic Review of Outcomes, Facilitating Factors and Inhibiting Factors." *Child: Care, Health and Development*, vol. 42, no. 3, 2016, pp. 325–342.
- Gazley, B., and C. Guo. "What Do We Know About Nonprofit Collaboration? A Comprehensive Systematic Review of the Literature." In *Academy of Management Proceedings* vol. 2015, no. 1, p. 15409, 2015. Briarcliff Manor, NY: Academy of Management.
- Goodman, R. M., and A. Wandersman. "FORECAST: A Formative Approach to Evaluating Community Coalitions and Community-Based Initiatives." *Journal of Community Psychology*, vol. 24, no. 2, 1994, pp. 6–25.
- Greenwald, H. P., and A.P. Zukoski. "Assessing Collaboration: Alternative Measures and Issues for Evaluation." *American Journal of Evaluation*, vol. 39, no. 3, 2018, pp. 322–335.

James Bell Associates and ICF International. "How Can Child Welfare Organizational Capacity Be Measured?" Arlington, VA: James Bell Associates, May 2017.

Lyons, J., S. Hoag, C. Orfield, and S. Streeter. "Designing Technical-Assistance Programs: Considerations for Funders and Lessons Learned." *The Foundation Review*, vol. 8, no. 5. 2016, pp. 68–78.

Mattessich, P. W., and B.R. Monsey. *Collaboration: What Makes It Work. A Review of Research Literature on Factors Influencing Successful Collaboration*. St. Paul, MN: Amherst H. Wilder Foundation, 1992.

National Conference of State Legislatures. "Whole Family Approach to Jobs: Helping Parents Work and Children Thrive Lessons from the Field." Denver, CO: National Conference of State Legislatures, 2019.

Rossett, Allison. *Training Needs Assessment*. Educational Technology Publications, Englewood Cliffs, NJ: 1987.

Stout, Somava. "Overview of SCALE and a Community of Solutions." SCALE 1.0 Synthesis Reports. Cambridge, Massachusetts: Institute for Healthcare Improvement, 2017.

## Endnotes

All authors and studies cited here are shown in full in the References list.

i Lyons et al. 2016.

ii Brown 2002.

iii Gazley and Guo 2015.

iv For examples, see Altschuld and Kumar 2010 and Rosett 1987.

v National Conference of States Legislatures 2019.

vi Cooper et al. 2016; Mattessich and Monsey 1992.

vii Stout 2017.

viii Goodman and Wandersman 1994.

ix James Bell Associates and ICF International 2017.

Follow us on    

Princeton, NJ / Ann Arbor, MI / Cambridge, MA / Chicago, IL / Oakland, CA / Seattle, WA / Tucson, AZ / Washington, DC / Woodlawn, MD

EDI: High Wycombe, UK / Bukoba, Tanzania / Dar es Salaam, Tanzania