System Scan Design Guide

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Key Design Questions:

1. What is our targeted problem?
2. What do we want to learn about this targeted problem?
3. Which perspectives, settings, and data sources should we engage to help us understand these conditions?
4. What is the best way to collect the data we need?

Find this and other tools online at http://ablechange.msu.edu

A **system scan** is a process to understand community conditions influencing your targeted problem. This technique is used to gather information from diverse groups of stakeholders on the system, its problems, and possible solutions to inform your steps moving forward. Engaging different perspectives in the scan is essential for understanding the multifaceted characteristics of your system, as each group will have its own unique view and experience with your targeted problem.

System Scanning involves asking questions to identify system characteristics affecting the targeted problem and the interactions across these system characteristics. This information is then used to:

- **Identify Change Targets:** Identify parts of the system that are "getting in the way" of your goals or vision. These unaligned parts can become your effort's targets for change.
- **Promote Collective Impact:** Identify shared issues to collectively address with local efforts. This information can guide agenda development for local collaborative and coalition meetings.
- **Identify & Leverage Assets:** Discover and leverage system conditions that are aligned with addressing the targeted problem as well as underutilized strengths and resources across the community.

Step 1: What targeted problem do we want to focus our scan on?

What targeted problem or inequity is your effort attempting to address? Remember to define this problem at the population outcome level. For example, targeted population-level problems could include outcomes like "many residents are experiencing obesity" or "many teens are experiencing unwanted pregnancies" (vs. a problem like "not enough services in the community," which is not a population-level outcome).

Include any data you have about who is experiencing this problem or inequity, and where it is happening in your community/county/state. See the Equity Impact Assessment tool for more details on how to identify and understand local inequities.

Write your Targeted Problem at the top of the System Scan Question Table on page 7.

Step 2: What do we want to learn about this targeted problem?

Some communities ask **general questions** about a broad range of community system conditions contributing to their targeted problem, while others ask more **specific questions** related to particular community system patterns contributing to their targeted problem. Alternatively, some communities start with an exploratory scan, and then move to a more intentional scan as they learn about their system.

The following is a list of common system patterns found in many communities. Consider if you want to ask system scan questions about any of these patterns as they relate to your targeted problem (check these below). Note you will likely identify other conditions as you engage in your system scan.

- ☐ **Accessibility** of services, supports, and opportunities
- ☐ **Quality** of services, supports, and opportunities
- ☐ **Coordination** of services and efforts
- ☐ **Alignment** of services and efforts
- ☐ **Responsiveness** of the system to resident needs/voice
- ☐ **Shared Goals** and shared understanding
- ☐ **Residents' Engagement** in local services, supports, and opportunities
- ☐ **Social Determinants of Health**
- ☐ **Structural Inequities** leading to disparities in outcomes for particular portions of the community

How do you identify specific system conditions or patterns to potentially explore in your community's scan? Consider using any of the following processes:

- **Use a Root Cause Analysis** process to explore why targeted problems are happening. As you begin identifying root causes, see if they tend to fall within any of the above system conditions/patterns.
- **Follow Signs.** Explore issues or patterns that have come up in recent conversations, prior work, or evaluations.
- **Leverage Interest.** Examine issues or patterns that currently have some momentum behind them. For example, perhaps there is a new state-wide initiative or local movement related to addressing a particular system pattern (e.g., access to services).

See the *Example System Scan Questions* reference tool for some ideas of questions you can ask in your scan. **Add any system scan questions you would like to ask into the System Scan Question Table on page 7.**

Step 3: Which perspectives and settings should we engage to understand our targeted problem?

Consider the demographics of your local community (see http://www.brookings.edu/research/interactives/2015/diversity-explosion for a useful tool in identifying demographics for your area) when identifying potential stakeholders to engage, paying particular attention to groups experiencing the greatest inequities related to your targeted problem. Brainstorm potential perspectives to engage within each category below. Remember to be specific.

Consider these perspectives and settings	**Which stakeholders or settings are relevant to engage?** Be specific (e.g., teenage moms, Pre-K teachers, schools, family restaurants, etc.)
Residents Children, youth, and adult residents directly experiencing the problem	
Providers Public and private service providers working with those experiencing the problem	
Supporters Resident-led groups, faith-based, local businesses, neighborhood organizations, or informal supports	
Decision-Makers Funders, leaders from local institutions/organizations, or local officials who make decisions over changes and resource allocations	
Settings: Schools, hospitals, work sites, businesses, restaurants, grocery stores, neighborhood spaces, public service venues, etc.)	

Looking at this list, determine who/what settings you want to engage in your system scan to start with (you can add more groups as you go). **Write these prioritized groups in the System Scan Question Table starting on page 7.**

Step 4: What is the best way to collect the data we need?

What approaches or methods can you use to ask your system scan questions? Make sure to draw upon any approaches you currently use to collect information in your work or efforts. **Fill in your method ideas into the table on page 7.**

Conversations

- **Ask questions at regularly scheduled meetings or gatherings**: ask 2-3 questions per month during regular collaborative, staff, or project meetings. Ask a few key system scan questions with residents during regular gatherings (e.g., Head Start meetings, church gatherings, play groups). Get on the agenda of other collaborative groups in town and ask the same 2-3 system scan questions.
- **Conversations through direct service touches:** have staff ask residents one or two brief system scan questions during service visits, or have a representative ask residents these questions while in a waiting room or when they enter or exit a setting.
- **Small group conversations (focus groups):** Ask small groups of people (8-12) a short list of system scan questions.
- **Interviews:** schedule interviews to ask key individuals system scan questions; this is especially effective for stakeholders in positions of power.
- **Photovoice:** engage residents (adults and/or youth) in taking pictures in response to several framing questions related to your system scan. Bring the group together to discuss their pictures and talk about action steps.
- **2 hour large group meeting process**: take advantage of an existing organizational or collaborative meeting to ask multiple system scan questions. Give participants time to fill out questions for each system condition on a worksheet, and then facilitate small group discussions about what people wrote. Collect worksheets at the end of the meeting.

Surveys

- **Constituent surveys through direct service touches:** have staff give a survey with system scan questions to residents at the end of service visits, or have a representative give the survey to residents while in a waiting room or when they enter or exit a setting.
- **Surveys at resident gatherings or events:** distribute surveys to residents attending regular gatherings (e.g., Head Start meetings, church gatherings, play groups), or set up a booth at local events where residents can get information about services - while they are there, give out a brief survey with one or two system scan questions.
- **Intake forms:** have partner organizations add one or two brief system scan questions to their intake forms and then share what they learned during upcoming meetings or in a private phone call/email.

- **Staff surveys:** distribute a system scan survey to staff using partner agencies – staff can fill out survey online or during staff meetings.

Observations

- **Community Audit.** Track the condition or existence of physical structures (grocery stores, fast-food restaurants, parks, playgrounds with broken swings) and patterns of individual behaviors in the community (e.g., people engaging in physical activity, interacting with neighbors, etc.).
- **Immersion.** Participate with stakeholders' (e.g., residents, staff, community partner) in their daily routines and experiences to better understand local barriers and opportunities.

Impact Assessments

- **Health Impact Assessment (HIA).** Draw upon a variety of HIA methods (e.g., literature reviews, estimation of effect size) to determine the impact of current and future policies on health outcomes.
- **Racial Equity Impact Assessment.** Draw upon a variety of REIA methods to examine how different racial and ethnic groups will likely be affected by a proposed action or decision.

Existing Data Sources

- **Existing datasets**: take advantage of data that has already been collected, for example through community forums, prior staff or community surveys, or service delivery records (e.g., service referral records).
- **Policy records**. Look at current policies relevant to your targeted problem within local organizations and at community, city, county, state, or federal levels. For example, review local organizations' policies around information sharing or service referrals, existing land-use policies (e.g., commercial, residential, rental), law enforcement policies, industry standards (e.g., pollution), facility maintenance policies (e.g., trash, playground equipment), etc.

System Scan Question Table

Use the following table to summarize what questions you want to ask in your system scan. List these questions in the first column, and then check off which perspective groups or settings are best positioned to answer or inform these questions in the remaining columns. Add more rows to this table (or print additional copies) as necessary to capture all of the questions you would like to ask in your scan.

Targeted Problem (step 1):					
What do you want to learn about the targeted problem (step 2)? Add system scan questions into the rows below	**Who/what settings should you engage to understand your targeted problem?** **Which questions should you ask them? (step 3)** Write your prioritized perspective groups/settings in the headers below, and then check off which system scan questions you want to ask with each perspective. Note: some system scan questions are more relevant for certain perspective groups or settings than others. (E.g., policy questions may be more relevant for leaders, while questions about barriers to service access may be more relevant for residents).				
System Scan Questions	**Perspective 1:**	**Perspective 2:**	**Perspective 3:**	**Perspective 4:**	**Perspective 5:**
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

System Scan Methods Table

Use the table below to identify the methods you want to use with each of your prioritized perspective groups from step 4. Refer to the questions you checked off in the System Scan Question Table on page 7 for this perspective group, and identify which questions to use with each of these methods. **Note**: in some cases you will find it useful to re-word the system scan questions so they are easier for each group perspective to understand and answer, and fit with your selected method (e.g., a survey question might have a series of options for people to respond to, where conversation questions are more open ended). Fill out a separate table for each of your prioritized stakeholder groups.

What is the best way to collect the data we need about the Community System Conditions? (step 4)

Perspective Group:			
Methods	Method 1:	Method 2:	Method 3:
System Scan Questions	*Add system scan questions to use with this method below*	*Add system scan questions to use with this method below*	*Add system scan questions to use with this method below*
Target # of perspectives to engage	N =	N =	N =

# engaged to date	N =	N =	N =

System Scan Schedule

Chart out when each of your data collections will happen in the calendar below. Try to align these with existing meetings as much as possible. Add additional months as necessary.

- **Collect your first data.** Many communities start with conversations and use these to inform question for subsequent surveys.
- **Reflect on first data collection.** Pause after you collect your first data to:
  - Check if you are getting quality information and decide if you need to adjust your methods in any ways (e.g., ask more follow-up questions, give more time for discussion, etc.).
  - Think about what you are learning so far and decide if you need to adjust your questions moving forward (e.g., Do you need to reword any questions so they make more sense? Have you learned enough about some issues that it doesn't make sense to ask any more questions about them? Are there new questions emerging from what you've learned so far that you should ask in your next data collections?)
- **Revise questions and methods if necessary** based on above reflection.
- **Collect remaining data** following the same pattern described above.

Month: ___________

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Month: ___________

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
