

A Data-Driven Approach to Service Array Guide



Capacity Building
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Introduction

Families are better able to raise happy, healthy children when their communities offer a wide array of supports and services. Families with limited resources, or those facing additional challenges, may need specialized services to help them meet basic needs or strengthen parenting and life skills.

Today's state and county child welfare systems are charged with creating individualized case plans and tailoring services to support children and families' unique strengths and needs. This approach has been shown to increase parental motivation, engagement, and competency (National Technical Assistance and Evaluation Center for Systems of Care, 2008). It requires a responsive service array, as well as service delivery that is coordinated and integrated with the courts, mental health, substance use disorder treatment, domestic violence, and numerous other systems that touch families' lives.

Data use is a vital component in the process of creating a service array that is well matched to the needs of the children and families served. Using data helps states and counties ensure that the right services are available, accessible, and effective.

A Data-Driven Approach to Service Array Guide is designed to support administrative leaders in states and other jurisdictions in using data to assess and identify ways to improve their service array. It offers guidance and tools to help state and county-based child welfare agency staff—including continuous quality improvement (CQI) managers, data managers, information systems (IS) managers, program managers, and others—build capacity to work collaboratively across systems to improve outcomes for children and families.

The materials in this guide are based in part on a technical assistance process originally developed by the National Child Welfare Resource Center for Organizational Improvement (NRCOI) and the National Resource Center for Child Welfare Data and Technology (NRC-CWDT), as part of a previous Children's Bureau (CB) cooperative agreement. This process, as originally outlined, included several onsite visits by NRCOI and NRC-CWDT consultants as well as offsite support and accompanying materials to help jurisdictions assess their service array.

This guide describes some of the materials from that technical assistance process and provides context for how a jurisdiction might use them independently to conduct a data-driven assessment of service array. The original materials can be found on an archive site for NRCOI: http://muskie.usm.maine.edu/helpkids/agency_col_servicearray.htm. In addition to this guide, the Capacity Building Center for States (the Center) can provide tailored services to support jurisdictions in these efforts. For more information, please contact your jurisdiction's Center [Tailored Services Liaison](#).

Each section of this guide covers a critical element of the process, including:

- Defining terms and key components
- Exploring reasons for using data to address service array
- Determining the focus of your assessment
- Convening a service array workgroup and engaging stakeholders
- Collecting data
- Using data to guide decision-making and improve service array

Defining Terms and Key Components

Service Array

Service array refers to the range of service options within a geographic area. An agency's service array includes services funded by the child welfare agency and those provided by other agencies and community organizations. When multiple service systems are involved with a family, agencies and organizations must form strategic partnerships to link and coordinate systems, both formal and informal, to holistically address the family's unique needs; minimize duplication of activities; and support continuous movement toward agreed-upon goals.

Families need available and accessible quality services to support the safety, permanency, and well-being of their children at all points along the child welfare continuum. Keep in mind that this will often not be a sequential progression; each of these service types may be used at multiple points along the continuum. These include:

- **During family stabilization**, to support the family in maintaining their child safely at home
- When a child is taken into custody, including services for the:
 - **Child**—meeting all of the child's needs, including physical, dental, mental health, and educational needs, and supporting regular contact with family members
 - **Child's family**—addressing the conditions that brought the child into custody and ensuring regular visitation to make progress toward reunification
 - **Resource family**—providing consistent support throughout the placement, including training that specifically targets the needs of the children in their care, timely linkage to appropriate clinical (e.g., individualized behavior management) and concrete (e.g., respite, transportation) services, and consistent contact to monitor children's adjustment, family capacity, and the need for additional intervention
- **Upon reunification**, including services of varying intensity, individualized to the child and family's needs, to ensure a permanent return home
- **As a teen or young adult prepares for and transitions out of foster care**, including skill building for independent living and assistance securing housing, further education, and/or employment
- **In the event of permanent legal guardianship or adoption**, including an array of prepermanency and postpermanency services for the child or youth and family to prevent disruption



As some resource families are licensed through private agencies, coordination of these services in partnership with the private agencies is an important consideration throughout the child's involvement with the child welfare agency. Services are delivered in accordance with the family's case plan and are adjusted as indicated by ongoing assessment of their needs.

Necessary services may include, but are not limited to, the following:

- Education services
- Employment and training services
- Health
- Behavioral health services
- Mental health services
- Substance use disorder treatment services
- Domestic/intimate partner violence services, including batterer services
- Housing services
- Services for children and youth with disabilities or special needs
- Foster care support services
- Lesbian, gay, bisexual, transgender, and questioning support services
- Children's legal services
- Human trafficking identification and treatment/support services
- Court services
- Independent living services
- Parent/caregiver support services, including in-home services for families (parenting skills, household management, family preservation, advocacy, transportation, safety services)
- Translation services

A Data-Driven Approach to Service Array

Historically, many decisions in child welfare have depended on “gut instincts” or anecdotal experience, mainly due to a lack of available data. While important, caseworker and administrator experience and knowledge is likely to have limitations and blind spots. Child welfare systems today benefit from a more balanced approach to decision-making informed by data.



A data-driven approach to service array values decisions that can be backed up with verifiable data. This approach seeks to gather and use data to answer three basic questions:

- What are the current needs of children and families served?
- What services are currently available and/or being provided to children and families?
- What needs of children and families are currently unmet by the existing service array?

The success of a data-driven approach relies on the quality of the data gathered and the effectiveness of data analysis and interpretation.

A data-driven approach recognizes that service array is about more than just the presence of quality services in the community. It is not enough for an agency to demonstrate that it purchases a variety of generic, albeit “good,” services for the sake of having a wide variety of services available to its clients (e.g., substance use disorder treatment, domestic violence, parenting skills training). In other words, service array for the sake of availability is not sufficient to meet the individualized needs of the children and families served.

A truly data-driven approach informs the entire system design, including determining the specific array of services needed, and providing a measurement of the system's performance in supporting individual families with targeted services that improve safety, permanency, and well-being outcomes. It addresses not only the quality of direct services, but also the accessibility, accountability, and coordination among professionals and agencies.

Why a Data-Driven Approach to Service Array

Data should be at the heart of all strategic decision-making in child welfare. In assessing your service array, data can provide insights that help answer key questions such as, "How can we improve the array of services available in our jurisdiction to address [specific service area needs] in sufficient numbers and at sufficient levels of service to effectively meet client needs?" The power of data is that data analysis leads to insights; child welfare agencies and program managers can turn those insights into decisions and actions that improve the business of protecting children and improving outcomes for families.

CFSR Requirements and Round 3 Results to Date

One of the systemic factors on which the Child and Family Services Review (CFSR) evaluates states is their ability to provide a comprehensive array of accessible, individualized services to meet the unique needs of children and families.

According to the *CFSR Stakeholder Interview Guide*, Items 29–30, states must meet the following criteria (CB, 2014a):

- The state must have an array of services in place that:
 - Assess the strengths and needs of children and families and determine other service needs
 - Address the needs of families and individual children to create a safe home environment
 - Enable children to remain safely with their parents when reasonable
 - Help children in foster and adoptive placement achieve permanency
- The services should be accessible to families and children in all political jurisdictions covered in the state's Child and Family Services Plan.
- The services must be sufficient to be individualized to meet the unique needs of children and families served by the agency.

A comprehensive, data-driven approach to service array answers the question: How is the array of services available or provided to children and families uniquely approaching the objective of meeting human needs through an interdisciplinary knowledge base, focusing on prevention as well as remediation of problems, and maintaining a commitment to improving the overall quality of life of the children and families receiving child welfare services?

In addition, CFSR Onsite Review Instrument Items 16, 17, and 18 address the child's educational, physical (including dental), and mental/behavioral health (including prescription oversight) needs, respectively. For each item, cases are rated a "strength" if the agency assessed the child's unique needs and took steps to address those needs (CB, 2016a).

Because the latest round of state CFSRs has not been completed, information about current performance on this systemic factor is not available for the nation as a whole. Summary of analysis of Round 3 results thus far reveals that many states struggle in the areas of availability, access, and provision of services that are individualized to meet the unique needs of children and families. There are also issues noted related to payment for services (CB, 2017a). In individual Round 3 CFSR reports, some states cited the following specific areas of difficulty (CB, n.d.):

Service Array and Resource Development

- Notable gaps in availability of services, including functional family therapy, preschool and after-school programs, transportation, quality mental health services for children, services for cognitively impaired parents, independent living housing for older youth, and affordable housing
- Extensive wait lists for substance use disorder treatment, foster family homes, trauma-informed services, and mental health services, including psychological evaluation and treatment for children
- Gaps in accessibility of an extensive range of services, including in-home services, foster family homes, mentoring programs, trauma-informed services, substance use disorder services, therapy, parent aides, transportation, and residential treatment services
- Resource challenges, including significant budget reductions, a limited pool of qualified service providers, and complicated coordination and approval processes with behavioral health offices



Individualization of Services

- Limited ability to individualize services, dependent on the availability of funds based on the jurisdiction's budget and the caseworker's level of involvement in crafting such services
- Limited ability to meet the requirements of families with unique cultural needs or parents who have cognitive disabilities or face language barriers
- Challenges in accessing flexible funding, the agency has budgeted to be available to meet individualized needs for families when those needs arise

Importance of Data in Service Array Assessment

Policy changes in the child welfare field over the past 25 years have signaled the need to implement programs and services that better target the needs of children in their own homes, coordinate across child-serving systems, address service and decision-making disparities that result in the overrepresentation of children of color in the child welfare system, and more effectively engage families in the development of their own service plans. These include the following:

- Since creation of the Family Preservation and Support Services Program in 1993 (2006), child welfare systems have undergone many changes in policy, service delivery, and information technology system design to better address the needs of children, youth, and families. This law emphasized preventive services to help children remain safely at home. It also required states for the first time to engage in a broad, community-based planning process to ensure availability of the right mix of services and supports to meet families' individual needs.

- The Adoption and Safe Families Act (ASFA) of 1997 (2006) codified the three principal outcomes of safety, permanency, and well-being, which continue to frame the mission for public child welfare services today. The emphasis on well-being in ASFA further encouraged child welfare agencies to attend to service array and coordination with other child-serving systems. ASFA also made explicit expedited timeframes for permanency, including providing incentives to states to increase adoptions.
- As noted earlier, the federal CFSRs, called for by ASFA and initiated in 2001, helped states to identify specific service delivery deficiencies and prompted further improvements.
- The last decade has seen increasing federal emphasis on the implementation of evidence-based practices (Haskins & Baron, 2011). A by-product of these efforts is an increased emphasis on evaluation and data to inform decision-making.
- Several Information Memoranda (IMs) issued by CB have addressed the importance of child welfare agencies attending to various aspects of child and family well-being. Some of these include:
 - IM-12-03: “Promoting the Safe, Appropriate, and Effective Use of Psychotropic Medication for Children in Foster Care” (CB, 2012a)
 - IM-12-04: “Promoting Social and Emotional Well-Being for Children and Youth Receiving Child Welfare Services” (CB, 2012b)
 - IM-14-03: “NEW LEGISLATION - Public Law 113–183, the Preventing Sex Trafficking and Strengthening Families Act” (CB, 2014b)
 - IM-15-08: “Linking health care to children, youth, and families who come in contact with the child welfare system” (CB, 2015)
 - IM-17-03: “Efforts by child welfare agencies, local communities, and federal agencies to end family and youth homelessness” (CB, 2017b)

Because of these policy and programmatic shifts, more state and county child welfare systems are using a data-driven assessment of their service array to inform and support efforts to prevent the removal of children from their homes and entry into the child welfare service system, and to move children within the system to permanency more quickly.

In addition to these policy changes at a federal level, using data to assess and improve service array simply makes sense for several reasons—both for the child welfare agency and for the children and families it serves. For example:

- Research has shown that children and youth receiving child welfare services experience increased needs for mental health services (Bernstein, 2005; Cooper, Banghart, & Aratani, 2010). Although this population generally has access to mental health care through Medicaid, gathering data helps to assess whether children have sufficient access, continuity, and quality of care to meet their needs.
- Child welfare agencies must be efficient in the use of funds and should be able to demonstrate that child and family needs are being met. When funding is tight, support programs that help improve child and family outcomes are at risk of being cut or curtailed. This situation is especially problematic for prevention services as well as evidence-based practices that must follow a specific protocol and are predicated on being carried out by highly skilled staff. Data on service availability and accessibility and critical unmet needs can be used to help ensure that states and counties target limited funds to programs that have demonstrated the greatest success in meeting families’ needs and improving outcomes, and target those services to the children and families who have the greatest needs.

- Thoughtful, data-driven assessment of a community's service array can lead to enhanced connections and better coordination among child welfare agencies and providers of other services, including education, health care, behavioral health, mental health, dental, parenting education, substance use disorder treatment, and others. Specifically, it can facilitate linkages to service providers for specific subpopulations of children and families who are presently underserved or more vulnerable.
- Working side by side with stakeholders and service providers to improve outcomes for children and families provides an opportunity to create a more collective approach and shared commitment to improving the lives of those who live in the community. Using data to establish common goals and outcomes can support this collaborative relationship between the agency and service providers.

The use of data is not without its limitations. Relying too heavily on data without complementary qualitative insights to inform decisions, increases the likelihood of making data-based decisions without proper context, overrelying on algorithms, or cherry-picking data. Data can be a useful means to better understand patterns within the child welfare agency or society; however, data and reports are created by people and as such contain inferences and assumptions that are “coded in.” Those coded-in values shape the output and can influence recommendations arising from the data if not viewed critically. Because data cannot account for everything or represent life in all its complexity, for the best results staff must balance data with human intuition and other forms of wisdom.

Nonetheless, data can quantify observed outcomes and provide a solid foundation either to challenge conventional wisdom and support change, or to justify continued allocation of resources toward solutions that are demonstrated to work well for children and families receiving child welfare services.

The process described in this guide is intended to highlight the types of data and contributing factors specifically related to service array. The activities described should be integrated into the jurisdiction's existing CQI process. Research findings suggest that in order for CQI efforts to succeed, staff at all levels of the agency and from private service provider agencies must fully engage in the CQI process (Brandrud, Schreiner, Hjortdahl, Helljesen, & Nelson, 2011).

The Center has several resources related to CQI and offers tailored services for jurisdiction-specific work. To find the contact for tailored services in each state or territory, see: <https://capacity.childwelfare.gov/map/>.

Determining the Focus of Your Assessment

Improving service array is a large task unlikely to be tackled effectively all at once. It is important to undertake an assessment with an appropriate and manageable scope. Assessment can be limited by geographic region and may encompass the entire array of services used to support children and families, or be targeted at specific types or aspects of those services.

Collaborative and early planning before your assessment will help to determine who needs to participate in the assessment process, what types of data will be most useful, and how to integrate the knowledge gained into the agency's CQI process.

Regardless of the focus, it is important to distinguish between service “availability” and “accessibility.” In addition to the service being available, the jurisdiction might want to define parameters such as an acceptable amount of time prior to service beginning (or time spent on a “wait list”), an acceptable distance or time someone would have to travel for a service, whether the service is available at a time that it can be accessed based on school and work schedules, or other factors.

Geographic region. Using data to assess and improve an agency's service array can be done at multiple levels, including statewide, in focused areas within a state, or at the county or other local level. Smaller geographic areas can focus only on their specific communities, whereas counties (parishes), regions (area offices), and states may need to include questions that provide for area comparisons and explore service gaps across the entire service area. For example, a local community might ask, "How many families receive substance use disorder services in our community?" A regional or area-focused team would also ask, "How many families receive substance use disorder services in each of the counties in our area?"

Service type. Jurisdictions may choose to focus on specific areas of their service array based on areas of greatest challenge identified through a previous assessment, CQI, or the CFSR. For example, previous reviews may have revealed that a community's in-home services or independent living services require a stronger focus. Rather than focusing on overall service array, the team might start with questions and analysis about one of these specific areas before moving on to others. One jurisdiction chose to focus on the services being received by youth transitioning out of foster care. Surveys were developed for youth, foster parents, and service providers to learn more about service provision. The makeup of the teams that participated in this process was planned accordingly.

Another major category of services assessed by many jurisdictions is foster and adoptive home availability. Often there is widespread agreement that a jurisdiction does not have an adequate number of available homes and/or slots (beds), but more specific information is needed to understand how best to target recruitment efforts (by geographic region, service needs, etc.). Within this category, a jurisdiction may choose to focus on placements for older youth, children with mental health needs, or another subset of foster and adoptive homes. Resources to support diligent recruitment can assist in this type of assessment.

Service customization and flexibility. Sometimes jurisdictions will identify a particularly challenging subset of the service array. For example, the jurisdiction may want to focus on customizable services available as part of a flexible funding program, or to inform the development of such a program. This may require additional data collection or analysis related to the specific identified needs that would warrant a more customized service.

Service effectiveness. After determining service availability and accessibility, many jurisdictions find it useful to consider the effectiveness and outcomes of their service array. Outcome measurement assesses the extent to which a program (or in this case, the service array, or a subset of the service array) achieves its intended results. Questions to consider include the following:



- What has changed in the lives of children and families due to this service or service array? If goals for the services were specified, were those goals met?
- Has this program or service array made a difference in addressing identified community needs?
- How are the lives of participants—and the community as a whole—better because of this service array?



Although the process of outcome measurement is beyond the scope of this guide, jurisdictions should keep this in mind as a logical next step in their service array assessment.

Convening a Service Array Workgroup and Engaging Stakeholders

To thoroughly assess whether the current service array is meeting the needs of children and families, convene a multidisciplinary workgroup or steering committee. This workgroup should include representatives from the child welfare agency serving at multiple levels and in various roles, as well as members of the service community and other stakeholders.

A multilevel teaming structure may be useful in allowing core agency staff to drive the work forward and manage tasks efficiently, while benefitting from a larger group that provides vital input into the key questions, shares ideas for data sources of which the agency might not be aware, and offers diverse interpretations of the data.

This guide will refer to the Agency Team (core group) and the Community Team (larger workgroup), although much of the work will require collaborative work by both teams. The makeup of your teams will vary based on your assessment's scope and areas of focus. The structures, roles, and tasks outlined in this guide are suggestions that can be adapted for your specific needs.

Also note that the teams and activities discussed below may stand alone or be integrated with ongoing initiatives, established stakeholder input activities, or the jurisdiction's established CQI process.

Agency Team Membership

The Agency Team's purpose is to develop plans and meeting agendas, recruit the Community Team, provide synthesized information and data analysis, and manage communication. Agency leadership should determine who will lead and coordinate this work, and should participate in setting the goals, objectives, and intended outcomes. Initial discussions about the scope of the assessment should take place at this level, and the Agency Team should clearly communicate the scope across the team and with other teams. Smaller committees may be formed as the work moves forward; these may be assigned tasks such as collecting and analyzing additional data, conducting targeted outreach to service providers, or communicating with agency staff and stakeholders outside of the committees.

The following list specifies potential members of the Agency Team. Although the specific makeup of the team is somewhat flexible, and staff titles may vary in each jurisdiction, certain core roles should have input early and often throughout the process. This will help to ensure the integration of efforts to assess and develop the service array with other initiatives and work plans, group access to all relevant information that might affect progress, and alignment on decisions made to change policy, practice, data collection, or other processes.

- Executive and agency leadership
- CQI manager
- CFSR manager
- Data manager
- Performance management staff
- IS and technology manager
- Program managers (foster care, adoption, independent living, in-home services, prevention)
- Frontline staff and supervisors
- Contracts and finance staff

- Licensing staff
- Resource development staff
- Youth, family, and foster parent advocates or representatives

The participation of the IS manager, CQI manager, and data manager is particularly important to ensure that all Agency and Community Team members understand and feel comfortable discussing the available data and the processes that may be required to collect or access additional data. These individuals have the skills necessary to elicit information from other workgroup members about how data are collected and used in the field, and they are best positioned to identify how to make improvements in this area:

- **The IS manager** plays an important role in explaining how relevant data are collected, who records the information in the system, how the data are viewed and reviewed, and how to collect additional data, if needed. The IS manager also has knowledge of planned enhancements to the information system, as well as current and planned data exchanges with courts, education, and other providers. The IS manager will share knowledge about data elements that may be present in the system but not utilized regularly, as well as other data quality considerations. The IS manager will also have the technical knowledge to help the group clearly define the concepts being assessed.
- **The data and CQI managers** also will have knowledge about current data quality, as well as a deeper understanding of how data are collected throughout the life of a case. They will share how data are currently analyzed and shared, whether through reports, an online dashboard, or other means. They also can help the team understand how data are used during regional or other meetings to provide context for a practice or to assess performance, and advocate for program funding with legislative bodies.

Community Team Membership

The purpose of convening a Community Team is multifaceted. First, it is important to have a broad range of stakeholder voices and perspectives represented in the assessment of service array. Ideally, involving the community in this process also will be mutually beneficial, will improve the agency's relationships with community members, and will foster broader support for the well-being of children and families (Morris & Baddache, 2012).

The Community Team should be multidisciplinary and involve the following:

- Key leaders, at the jurisdictional level, of the courts and tribes
- Leaders of child prevention, family support, and early childhood services
- Representatives of the juvenile justice, education, housing, food security, family and youth mentoring, domestic violence, health, mental health, and substance use disorder services systems
- Birth parents, family caregivers, and youth
- Other nontraditional partners, including other community organizations, the local business community, law enforcement agencies, faith-based organizations, parks and recreation departments, and local government



Membership of this group will likely differ depending on the scope of the assessment. For example, if the assessment focuses on the needs and services of older youth, agencies that serve this population should be targeted for involvement.

Workgroup Tasks

The **Agency Team's** work plan may include the following tasks:



- Recruit and retain a wide range of traditional and nontraditional stakeholders for the Community Team, which may include members of the private provider community, including people who have participated in other needs assessments in the jurisdiction.
- Plan for how to involve birth parents, family caregivers, and youth throughout the jurisdiction's service array development process.
- Ensure that all members of the Community Team, many of whom are not directly involved with the child welfare agency on a regular basis, have a common understanding of the following:
 - Child welfare agency's core mission, organizational structure, and children and families served
 - CFSR, the jurisdiction's most recent results, and results of other relevant reviews such as Quality Service Reviews
 - Sources of administrative data, such as Adoption and Foster Care Analysis and Reporting System (AFCARS), National Child Abuse and Neglect Data System (NCANDS), National Youth in Transition Database (NYTD), title IV-E eligibility, and other data reports used regularly by the agency
 - Foundations of the agency's practice model
 - Assessment tools used by the agency, including risk, safety, strengths/needs, and any other population-specific tools, such as those used to assess independent living skills and needs for youth
 - Agency's current process for determining service needs, making referrals, paying for services, and following up
- Study data from existing needs assessments or other documents in the state or jurisdiction relevant to child and family welfare to understand past and ongoing efforts. This will help ensure that the service array assessment builds on, rather than duplicates, existing planning processes and will help to align the work with agency efforts such as ongoing CQI, CFSR Program Improvement Plan (PIP) activities, and activities related to the CFSP and the Annual Progress and Services Report (APSR), or other state/jurisdiction initiatives.
- Synthesize the relevant information in these documents for the Community Team.
- Perform initial analysis of available data related to child and family service needs and the available array of services, and share it with the Community Team.
- Schedule workgroup meetings and secure meeting facilities.
- Facilitate meetings and support committees as they conduct assessments.
- Obtain additional data and conduct data analysis arising from meeting discussions.

The **Community Team's** core tasks may include the following:

- Prepare for meetings by reviewing any information provided by the Agency Team, which may include foundational information about the child welfare agency, data reports, and other documents.

- Share relevant data available through members' own community agency or organization.
- Participate actively in meetings, serve on committees, and complete other assignments as needed.

Collecting Data

Collecting data for an analysis of your service array starts with identifying the right questions. A focused approach is necessary when considering what data will be needed. There are probably numerous reports and data elements available, but not all will be useful to addressing the most critical questions to assessing your service array.

The *Service Array Data Inventory Sample Worksheet* contains examples of basic questions to guide the service array assessment process. It contains sections specific to different service or program areas and can be modified to meet the needs of the jurisdiction. The worksheet offers one example of how a jurisdiction might organize this information. If the jurisdiction has an existing methodology to collect and organize this kind of information, the example questions in the tool can be integrated into the existing process and used to initiate conversation among service array assessment teams. The jurisdiction may choose to include these questions in a spreadsheet or another format that can be adapted and modified as the process continues.

Your jurisdiction will need to decide which of the suggested questions are most relevant to your selected areas of focus and most critical to improving your service array. Additional questions may be needed for your unique situation. Once your team agrees on the questions, the worksheet will help you document the data-finding process by mapping current reports or data to the key questions.

Staff responsible for information systems development should continue to be involved at this stage. They will have specific knowledge of data collection fields, the quality of data available, and efforts to improve quality. They will also be able to provide information and considerations should the group recommend changes to the system, such as additional data fields or other changes.

Determining the Questions Data Should Answer

Assessing any service array requires teams to answer three basic questions:



- What are the current needs of children and families served?
- What services are currently being provided to children and families?
- What needs of children and families are currently unmet by the existing service array?

Identifying Key Questions

One of the first tasks a service array team should undertake is to identify the key questions, within these broad categories, that will guide the analysis and improvement of your service array. The worksheet can serve as a guide in this process. It provides sample questions for each of the three principal areas that require exploration.

Current Needs of Children and Families

In this section, questions address the following:

- Number of children and families served, and their demographics
- Overarching needs and related service needs by program area



These questions seek to determine details and specific counts, if available, of the service needs of children and families. For example, a question might ask, “Of in-home cases, how many families have been assessed as needing mental health services?”

Services Currently Provided to Children and Families

This section explores the types of services provided through the current service array. It includes questions about the following issues:

- Types of services available
- Number of services provided, number of agencies providing each service, and/or slots available for each service area
- Utilization of those services
- Accessibility of services based on location, time to begin service, and other factors
- How effectively the services provided are meeting the identified needs, such as changing caregiver behavior and/or improving outcomes for children and youth

For example, a question in the transitional living section of a jurisdiction’s service array assessment might ask, “How many youth in the caseload are receiving mentoring services?” Another might ask, “How effective are these mentoring services for youth transitioning out of foster care?”

Unmet Needs of Children and Families

The questions in this section analyze the following:

- Gaps between the needs of clients and the services currently provided
- Client needs that are unmet due to a lack of available services or barriers to service provision

For example, a question in this area might ask, “Of the families identified as needing mental health services, how many have actually received these services or how many are on a waiting list for services?”

Primary vs. Follow-up Questions

Within these three general areas, your service array team will have to decide which questions are most important to begin your analysis, based on the defined scope of your service array assessment. Primary questions are best defined by the group as what you “must know” to get a clear picture of the service array. Follow-up questions add depth to the analysis, but are not as critical.

For example, a primary question might be, “How many youth are currently eligible for transitional living services?” This question defines the scope of the need for such services. A follow-up question might refer to this same group of eligible youth, but ask about their current placement settings or case plan goals. This information provides depth to the analysis but is not essential to begin to get a basic picture of community needs.

Points to remember:

- Data availability alone should not determine the importance of a question. In other words, do not eliminate questions at this point strictly because of a perceived lack of data.
- Identify follow-up questions, but keep them in the inventory. They might become more important to your analysis as the team gathers more information and answers other key questions.

Documenting and Framing Questions

Someone on the team will need to document the process of selecting key questions. This can be done in the worksheet or another format.

Questions should be stated clearly, so that all agree and understand what information specifically is being sought, and should clearly define the following:

- Population being addressed
- Whether the question calls for a point-in-time analysis or trends over a defined timeframe
- Expectations for how to present the answer (e.g., calculations, aggregation by location, etc.)

Good questions begin with the phrase, “of the,” which helps to define the population to which the question refers. For example, “Of all youth in foster care...”

Adding “on January 1 of this year” to the prior example specifies a point-in-time population, or a snapshot of the population at a specific time. Another possible approach would be something like, “Of all youth in foster care at least 1 day during the last 3 months...” This question defines the population over a specified timeframe. If the team wants the question to address current needs or services, either will work—a point-in-time population or a period-of-time population, providing the time period is limited.

If the team wants to understand trends over time, it can adapt either of the above examples. For example, “Of the children in foster care on the last day of each of the previous 5 years, how many were receiving substance use disorder services?” This question provides a trend analysis over the past 5 years.

Finally, the question should state the calculations needed to answer the question—such as totals, averages, or both—and how the data should be presented for analysis, such as by county or service provider. For example, “Of all the youth in foster care on the last day of the year, how many and what percentage, by age and sex, received at least one transition service during the previous year?”

Reminder: At this stage in the process, it is not necessary to determine whether the data exist to answer your questions. However, it should be noted if someone knows where to find the data for a particular question, or if it is clear that you will want to collect data in some way as part of the assessment.

Finding and Using Data to Answer the Key Questions

The next task in the assessment process is locating data to answer your key questions. This involves two steps:

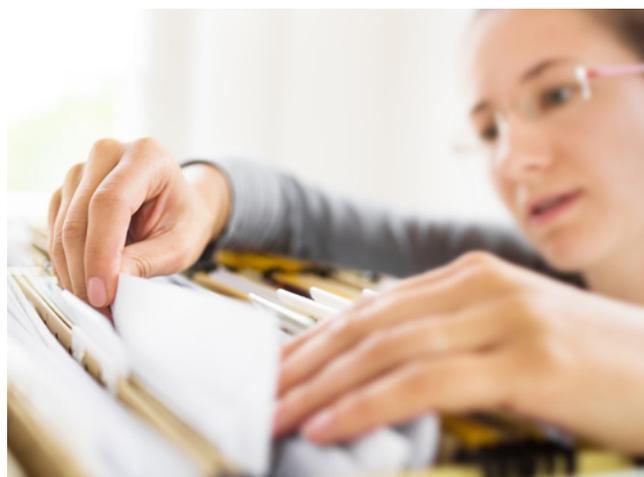
1. Identify existing reports that already address some of the key questions.
2. Set priorities for report development and/or data collection, where reports do not exist.

Using Existing Data Sources

Using the *Service Array Data Inventory Sample Worksheet*, identify any existing data reports that might answer each of your key questions. Make sure the report specifically addresses the question. That is, make sure the report addresses the population defined in the question and presents the data in a format needed for analysis. If needed, work with the data and IS experts on your team to modify the report to better address the question.

Some questions may call for more than one report, whereas other reports may answer more than one question. For example, one report may provide information about mental health services provided by county, and a separate report may present the same data by provider. On the other hand, you may find one report that presents the data by both county and service provider, as well as by clients' ages.

Some questions will require quantitative data, such as the number of services provided. Others will need qualitative data, such as information about how well the service met the child's or family's needs. How the question is posed will guide you in determining the types of data needed. Quantitative data is usually captured in data systems, whereas qualitative data might be captured in surveys or qualitative reviews.



Exploring and listing possible data sources as a team can help identify the specific data needed. You might begin by listing all the data systems or sources available that might address key questions (Some of these data sources are listed for the example questions in the worksheet). Explore current reports from those systems first. Some data sources available in your community may include the following:

- **Data captured regularly for federal reporting** is a good place to start. Data provided to these systems are available and reported from the state's child welfare information system, or a separate system, in the case of the NYTD. Federal reporting systems include:
 - NCANDS collects data on intake and investigation services
 - AFCARS captures foster care and adoption data
 - NYTD data on youth transitioning out of foster care
 - CFSR results and PIP-related data
 - Data used in assessments, such as the CFSR Statewide Assessment, the CFSP, and the APSR
- **Child welfare case management systems** capture information about child and family needs, service provision, and casework processes.
- **Child welfare payment or contract systems** serve as a reliable source of data about services.
- **Child welfare case reviews and quality assurance reviews** can serve as a source of additional qualitative data.
- **Other partner data** may be available through the school system, Medicaid, courts, or others.
- **Other public data** may include census data, public listings of available services, and clearinghouses or resource lists for special service areas such as domestic violence or substance use disorder treatment.

[The Child and Family Snapshot Workbook](#) is a tool developed to answer questions about a jurisdiction's service array using NCANDS and AFCARS data. The tool provides answers to many questions using the federal data. You will need access to the latest submission of these data files. NCANDS is reported by calendar year, whereas AFCARS is reported semiannually using the federal fiscal year, which begins October 1. The [Child and Family Snapshot Description](#) provides many sample service array questions and lists some of the other rich data sets available in many communities. These tools are historical documents and are not currently maintained, but may help to generate ideas for how data available to states can be used to support this process.

In the process of this discussion, someone on your service array team will likely mention a report or data source that could lead to a new key question being added to the inventory. Consider how each proposed question can be used to analyze the service array. If it is not directly related, it may not need to be answered.

Using Data to Guide Decision-Making and Improve Service Array

Once the work has been done to gather relevant data, discuss preliminary findings, and identify the need for additional problem exploration, there are several possible next steps. For the most effective improvements, agencies should integrate the data and early findings from this assessment into their CQI processes.

When Data Are Not Available

You may discover that available data are not sufficient to gain a full understanding of which areas need to be targeted for improvement. Depending on the issues identified, a plan may need to be developed to address gaps in the available information.

If key data are not available, it may be for any of the following reasons:

- **Needed reports do not exist.** In this case, the data you need are being collected, but reports addressing some key questions in specific areas of your service array may need to be developed.
- **Data are collected in a format that does not lend itself well to reporting.** For example, if frontline staff enter data on client service needs into the information system using text or comment fields, it is difficult, if not impossible, to aggregate those data. In this example, the data could be gathered by reviewing the text field for a sample of cases in a case review format.
- **Data may not currently be collected.** If the data to answer a key question or questions are not being collected, consider options for gathering data, such as a quick survey or case review. One service array group in a somewhat rural area needed data on transportation needs and sources. It decided to send a short email survey to agency workers asking how clients found transportation to visits or other appointments. In doing so the group found several resources it had not considered, in addition to getting a better picture of the need.

IS and data managers play a key role in gathering requirements and identifying ways that data can be collected more effectively. This may include modifying the information system to collect information in discrete fields rather than in text, or increasing the granularity of certain types of information. For example, the agency may have “batched” information related to how many hours a service provider billed the agency, but it may lack detail about what types of services were provided, how many individuals or families received the services, or associated outcomes. The way this information is gathered or reported may need to change to more fully understand what needs are and are not being met.

You also may discover that changes are needed to make more direct connections between family needs and the services being provided. The agency can consider whether data collected during the initial and ongoing assessment process give a clear indication of what services will give families more opportunities for success and, if not, how to adjust the data collection process to better meet this need.

If the data are collected, but there are data quality concerns, the IS, data, and CQI managers can collectively develop a strategy to improve the quality of the data.

Systems typically have some data that have a history of being incomplete or inaccurate for several reasons, including: system problems, such as not providing the appropriate answers in drop-down values; or data entry problems, such as staff commonly selecting the wrong item in a drop-down. Solutions to this type of issue may not be quick or easy. In the meantime, the group might consider looking at cases or areas where best practices in data entry are commonly used.

Solutions may involve sharing the data with those responsible for entering it, providing training and coaching, and/or making changes to the data collection process. Agencies electing to participate in the Comprehensive Child Welfare Information System (CCWIS) funding are required to develop a systemwide plan for improving the quality of their data (CB, 2016b). Any strategies to improve data quality should be integrated into that comprehensive plan and should include systemwide participation.

If the data are available but not accessible to the agency, such as data collected by service providers, the agency may decide to pursue a data exchange.

Data or reports from a licensing, payment, or other external service system can be difficult to acquire. Consider this issue when selecting partners for your service array team. Solutions may involve developing data exchange agreements, Memoranda of Understanding, and automated means of regularly exchanging data. CCWIS encourages the use of automated data exchanges; participating agencies are encouraged to consult with their assigned Division of State and Tribal Systems federal analyst.

Geographic Information Systems

As mentioned previously, as data are analyzed, data quality improved, and new data sources developed or accessed, it is important to thoughtfully share relevant data with various audiences. This can be done through simple reports, dashboards, or other innovations.

Several jurisdictions have used Geographic Information Systems (GIS) to aid in visualizing service array need and availability. GIS uses geographic and spatial data to store, analyze, and present information. In child welfare, it can help to assess whether children and families can access the services they need, and/or whether transportation may present a barrier.

The city of Philadelphia uses GIS as part of its Improving Outcomes for Children project. GIS has been used to help determine where the city's 10 umbrella agencies should be located, to measure distances between children's homes of origin and placements, and to map where community resources are available. The overall goal is to keep children living and receiving services in their own communities (Brunsink, 2016).

Arizona has used GIS to support data-informed diligent recruitment efforts. By studying which communities are in the greatest need of placements, and which areas are home to the people most likely to complete the licensing process, Arizona has improved recruitment of foster and adoptive families (AdoptUSKids, 2015). Arizona also uses a process called market segmentation, whereby marketing data are used to support very targeted recruitment strategies (AdoptUSKids, 2015).

For more information about GIS, see the following resources:

- ["GIS for the Advancement of Child Welfare"](#) (CB)
- ["Geographic Information Systems \(GIS\) & Market Segmentation"](#) (NRC-CWDT)

Strategies to Improve Service Array

After collecting, gathering, and analyzing data from various sources and discussing potential root causes for gaps in service array, the agency may feel that there is enough information to proceed with strategies to improve the array of services available to children and families. These strategies may include the following:

- **Working with existing service providers to enhance and improve services, provide a different kind of needed service, or allow for more customization based on the need.** Data may suggest that a number of individuals would use a certain kind of specialized service and may provide the impetus for a service provider to invest in resources needed to provide such a service.
- **Providing data to legislative bodies, blue ribbon panels, or other stakeholders to advocate for additional funding for specific services.** For example, one jurisdiction used survey data to provide support for the need for substance use disorder services for youth transitioning out of care. It was able to obtain additional funding to develop these targeted services.
- **Increasing service accessibility, either through additional service locations or improving access to transportation.** The use of GIS may be particularly helpful in this area, by visualizing where services are located relative to where families live or where children are placed.
- **Working with other governmental agencies** (e.g., health, mental health, education, early intervention, and substance use disorder systems) to collaboratively develop further resources.

Regardless of the gaps identified, agencies should integrate ongoing efforts to make service array improvements within their comprehensive CQI system. This may include:

- Conducting periodic reviews of the data and discussing performance and gaps
- Reevaluating the data being used, and the analysis being done, to monitor performance
- Sharing data with several audiences in a way that is customized to their needs and areas of interest
- Eliciting feedback from field staff, service providers, youth, and families
- Making changes to policy, practice, training, and coaching

Continued investment from agency leadership, engagement with the service provider community, input from youth and families, and strategic integration with ongoing efforts to assess and improve outcomes can help to ensure that children, youth, and families will receive timely and customized services that will support their success. A strong CQI system helps agencies move toward well-defined, targeted outcomes on an ongoing basis.

The Capacity Building Center for States offers various [resources related to CQI](#), including learning experiences, [tailored services](#), [constituency groups](#), and events.

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