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## MCH Innovations Database Practice Summary & Implementation Guidance

# Cultivating Connections through Coordinated Referral Networks

Using technology paired with a collaborative implementation approach, Kansas Title V promotes cross-system referral coordination through the development of community-led networks that improve connections to needed services for families.



## Location

Kansas



## Topic Area

Service  
Coordination/Integration



## Setting

Community



## Population Focus

Cross-Cutting/Systems  
Building



## NPM

N/A.



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# Section 1: Practice Summary

## PRACTICE DESCRIPTION

Individuals and families experience disruptions in housing, transportation, food security, healthcare access, and social supports that can adversely affect their health trajectories and outcomes across generations. The initial development of IRIS and the Cultivating Connections implementation approach was sparked by needs identified through the Kansas Maternal, Infant and Early Childhood Home Visiting (MIECHV) Program. Data indicated that the vast majority of families accessing home visiting services in these communities had multiple risk factors in terms of priority population indicators (e.g., 56% met two or more factors). In those communities, there was not focused, community-wide coordination to connect families to ancillary services and system supports to address mental and behavioral health, child and maternal health, substance use, and domestic violence. Home visitors and maternal and child health providers were often unable to reliably track whether a family was engaged in other services in a community or coordinate communication among partners. As a result, families were often left to navigate services without a clear “map.” Local partners identified the need for a tool or system that would help link partners together, take into account the multiple ways families enter their system, prevent duplication of services and referrals, and facilitate communication between partners.

IRIS and Cultivating Connections were designed to address inefficiencies, disconnections, and invisible barriers between community partners and families’ experiences of feeling disconnected from services within their own community. Cultivating Connections guides networks through the adaptive work required for technology to be a meaningful solution to disjointed community referral processes in two important ways: 1) It addresses the process, time, and resources needed to facilitate, develop, and implement consistent protocols and practices across multiple sectors in order to improve coordination among a wide network of community resources and supports; and 2) It focuses on the implementation, outreach, and training needed to successfully leverage a technical solution (IRIS) to support effective connections through referrals.

## CORE COMPONENTS & PRACTICE ACTIVITIES

The theory of change guiding this work is that coordinated services and clear communication among community-based providers requires both a technical tool (IRIS) and an adaptive approach (Cultivating Connections) to implementing data-driven and transparent collaboration practices. Short-term outcomes include improved communication between service partners and improved referral networks. Intermediate outcomes include increased communication with service partner providers, improved use of data and lessons learned to inform practice, process, and protocol, improved family



engagement in referral and service initiation process, improved coordination of referrals between partners, effective collaboration between service partners, and additional collaboration opportunities between service partners. Expected long-term outcomes include family empowerment with the referral process, families getting connected to the right resources at the right time, and improved community health and well-being outcomes.

Social work practice and case management strategies are foundational to this work. Several studies have found that individuals and families who had positive experiences with coordination were more likely to participate in services, and to perceive that their outcomes had improved over time (Ervin, 2004; Selden et al., 2006). Furthermore, research suggests that coordination is particularly important when working with clients with complex or multiple needs (Bunger, 2010; Nylén, 2007).

IRIS leverages technology to support coordination. Research has shown that the right technology can help front-line child-welfare staff in streamlining collaboration, data-sharing, and referral processes with clinicians providing other needed services including behavioral health treatments (Collins-Camargo et al., 2019). Technology can bridge the gap in interagency community among partners, increase the likelihood that cross-agency referrals are made, and increase inter-organizational network effectiveness (Provan, 1984; Provan & Milward, 1995). However, technical solutions cannot bridge the divide between systems alone. Adaptive challenges associated with coordinating within and between social services, public health, and healthcare systems must also be addressed (Collins Camargo et al., 2019). Implementation science principles such as the Active Implementation Drivers (Active Implementation Research Network, n.d.; Fixsen et al., 2005) serve as an orienting lens to support the acceleration and progress of systems change effort and ensure flexibility to adapt to context and complexity (Ghate, 2016). This frame is the foundation for the Cultivating Connections approach to effectively bringing multi-sector partners together to better serve individual needs.

Core Components & Practice Activities		
Core Component	Activities	Operational Details
Develop leadership	Train and prepare for implementation	Develop an understanding of the implementation process, the technology, key partners, and timeline
Build collaborative will	Identify key partners, conduct outreach, collect information about current processes	Identify and engage key partners, share vision for the tool, gather information from partners to guide implementation



Establish collaborative practice	Establish shared purpose based on network strengths and needs	Use partner information and collaborative conversations to develop a clear vision and outcomes
	Configure tool to meet needs	Collaboratively customize shared fields to meet network needs
	Develop shared expectations for use	Collaboratively develop standards to meet network needs
	Address data governance needs	Address any shared data governance needs
Launch tool and set of protocols	Organization level planning and preparation	Users participate in training, review standards, and plan workflow
	Utilize the tool and shared processes to make referrals	Users make and receive referrals in IRIS, in accordance with Community Standards
Monitor and improve collaborative practice	Use data to inform refinements	Facilitate collaborative opportunities to review data, reflect on use, refine processes and standards
	Plan and engage in network expansion	Identify needs for network expansion; collaboratively engage new partners

## HEALTH EQUITY

Navigating disparate systems without a clear ‘entry point’ is particularly challenging for vulnerable and underserved populations. Through a coordinated referral network, key access points and services can be effectively linked, allowing any door a family enters to be the right door for accessing needed services. Furthermore, warm handoffs to services and two-way communication between providers ensure fewer families fall through the cracks.

Using community-wide referral data, communities can develop a more comprehensive understanding of referral equity and outcomes. This may include collecting and disaggregating data about referrals by race, ethnicity, language, location, reasons for declining services, enrollment rates, etc.



Identification of potential inequities within the referral system provide a basis for community partners to explore solutions, implement changes, and measure impact.

## EVIDENCE OF EFFECTIVENESS

IRIS and Cultivating Connections were evaluated in two pilot communities to understand network development, partner communication, coordination, and the impact of shared processes on referral outcomes, and family experience. Both pilot communities developed their initial networks to facilitate connections to home visiting programs from coordinated intake before expanding. The evaluation period consisted of initial implementation and approximately two years of IRIS use.

Network development was measured through community mapping activities, referral data, and surveys. Social network analysis and content analysis were used to identify the number of partners who onboarded to IRIS as well as the composition of the network by sector. During the evaluation period, both networks expanded over time (Community 1: 8 to 66 partners; Community 2: 7 to 19 partners). The number of actual connections between organizations also increased. Both communities successfully engaged partners not typically invested in collaborative early childhood system work such as employment training, addiction treatment, physicians, and migrant education programs and the percent of multi-sector service partners participating in each community grew over time—reflecting the momentum built as partners recognized the value of intentionally aligning practices and processes to develop a coordinated referral system.

Network surveys were used to measure partner coordination and communication. The Levels of Collaboration Scale (LOCS) was used to measure the perceived collaboration between the individual respondent and each agency in the collaborative once per year during the project in both communities. Over the course of the project, as seen in referral data, organizations indicated an increase in the number of other organizations with whom they were coordinating. Information collected through pre- and post-launch IRIS surveys demonstrated that IRIS had a positive impact on various coordination priorities including communication, facilitating warm handoffs, and communicating capacity.

Referral outcomes (response time, loop closure, engagement in services) were analyzed through referral data collected in IRIS across three time points. The number of referrals sent, received, and completed were assessed as well as the time it took to complete the referral process from initiation to completion to examine change in the referral and service initiation process. More than 1,600 referrals were made across the two communities during the project. Data indicated that community partners generally used the tool in a way that aligned with community determined standards, including efficient response times and consistent loop closure. Communication and coordination surrounding services improved as indicated by lower percentages of rejected referrals. Further, families were connected to needed resources as evidenced by the increase in the percentage of completed referrals with successful enrollment in services.



Although families do not directly interact with IRIS, family focus groups were conducted in each community using a human-centered approach to gather information about family experiences accessing services. Data from the groups were synthesized by location across three domains: process of accessing resources, experiences with access to referrals, and ideal ways to connect to resources. Findings suggested that when families were connected with and able to access resources, resources were generally perceived to be helpful and beneficial. The biggest challenge that remained included scheduling and getting to the resource location.

## Section 2: Implementation Guidance

### STAKEHOLDER EMPOWERMENT & COLLABORATION

Successful implementation requires the engagement of multi-sector community partnerships. Although key collaborators may vary depending on the network vision, investment of time in leveraging existing relationships, building new relationships, and integrating this work into community priorities and initiatives are all critical to success. As key partners are identified, the Local IRIS Leadership Team conducts targeted outreach, sharing the vision for a coordinated referral network while gathering information about partners' needs and vision. This work then translates into the development of collaborative practice through facilitation of community discussions during which all partners' perspectives and needs are recognized and valued to design collaborative practice. Following launch, transparent data-driven discussions support the refinement of processes and address challenges to maintain effective collaboration.

While IRIS communities are typically developed to serve a specific neighborhood, town, county, or region, state partnerships can help to facilitate growth and sustainability. State leaders invested in this work may help ease perceived barriers to participation at the local level, advocate for funding to sustain use, and identify additional partnerships and/or initiative integration.

### REPLICATION

IRIS through Cultivating Connections has been implemented in 22 communities to date, both in and outside of Kansas, and ongoing evaluation of implementation is in progress. While the core components of implementation apply to all communities, the Cultivating Connections approach has expanded to include tools that address both perceived barriers and real challenges to achieving necessary milestones gathered from experience in a wide variety of communities. Recognizing that every community has unique challenges and a varied pace of implementation, the implementation phases, milestones, and tools are now available to local leaders in an online format that allows all



members to fully understand the path ahead and feel equipped to address challenges, with support from the IRIS Team, as they arise. This format has also allowed for standardization of the approach while adapting to community needs as well as increased efficiency around remote implementation. Recently, peer-to-peer learning has been added as a component of implementation support to enhance leader development and ongoing network refinements.

## INTERNAL CAPACITY

Successful implementation requires leadership from a community-based team, the engagement of network partners, and direct consulting and technical assistance from the IRIS Team.

### Local IRIS Leadership Team

The roles described below can be diffused across a team comprised of ideally two to three individuals. The Local IRIS Leadership Team are responsible for guiding and supporting community partners through implementing and sustaining the IRIS network and receive direct coaching and technical assistance from the IRIS Team.

- **Champion:** Leads implementation, communicates with partners, facilitates collaborative discussions during implementation and post launch, acts as the main point of contact between a community and the IRIS Implementation Team.
  - **Skills Needed:** Develop the trust and confidence of community partners, lead and facilitate collaborative discussion, embrace diverse perspectives, build consensus, guide shared decision making, communicate outcomes.
  - **Time Allocated:** Approximately 4-6 hours per week in the 4-6 months before launch. Less than 2 hours per week post launch.
- **Coordinator:** Plans and organizes ongoing community partner meetings, conducts outreach, helps organizations prepare to launch, acts as the point of contact for current and prospective IRIS partner organizations and users, both during implementation and post-launch.
  - **Skills Needed:** Confidently navigate IRIS, demonstrate strong organizational skills and attention to detail, build relationships with partners, communicate frequently with partners.
  - **Time Allocated:** Approximately 6-8 hours per week in the 4-6 months before launch. Less than 4 hours per week post launch.
- **Manager:** Acts as the local system administrator and data manager.
  - **Skills Needed:** Competently perform key technical functions in IRIS, comfortably interact with aggregate community data, demonstrate strong organizational skills and attention to detail, respond in a helpful and timely manner to inquiries from partner organizations.
  - **Time Allocated:** Approximately 6-8 hours per week in the month preceding launch and the first quarter of IRIS use. Less than 2 hours per week after the first quarter of use, except during periods of network expansion.



Collectively, members of the Local IRIS Leadership Team must have the time and willingness to devote the energy needed to this work. Awareness of unique community strengths and barriers around the referral process, credibility among partners in the community, and a growth mindset with a vision for the future are all important competencies for members of this team. Building the skills to address the technical and adaptive needs of implementation is provided throughout the process by the IRIS Team.

## Network Partners

- **Primary IRIS Contact:** Represents organization in collaborative network discussions during implementation and post launch, builds engagement in the practice in staff across all levels of the organization, responsible for workflow, staff training, and monitoring practice adoption.
  - **Skills Needed:** Posses confident understanding of IRIS, share perspectives, compromise, promote practice success by proactively monitoring referral data to inform organization refinements and collaborative community practice.
  - **Time Allocated:** Approximately 1 hour per week in the 4-6 months before launch. Two hours a month post launch.
- **User:** Responsible for making referrals to partner organizations, acting on received referrals, and adhering to the collaborative practice. Number of users is flexible and varies based on organization needs and workflow.
  - **Skills Needed:** Competently perform key technical functions in IRIS, monitor referral status changes, communicate with colleagues and supervisors about issues.
  - **Time Allocated:** Approximately 2 hours per week in the month before launch. Time allocated post launch varies depending on the volume of referrals the organization makes and receives.

## IRIS Team

The IRIS Team is comprised of implementation staff, evaluators, and technical support from the Center for Public Partnerships and Research at the University of Kansas. This team provides ongoing implementation support, consulting, technical assistance to the Local IRIS Leadership Team as well as direct user training and evaluation support to the network. Time is allocated based on the specific needs of the community, the needs of the Local IRIS Leadership Team, and network goals.



## PRACTICE TIMELINE

### Phase: Planning/Pre-Implementation

Activity Description	Time Needed*	Responsible Party
Identify community need and leaders	1-2 months 10 hours	Community Stakeholders
Train leaders and prepare for implementation	1-2 months 15 hours	Local Leadership Team and IRIS Team

### Phase: Implementation

Activity Description	Time Needed*	Responsible Party
Identify key partners, conduct outreach, collect information about current processes	4 to 6 months 30 hours	Local Leadership Team
Establish shared purpose based on network strengths and needs, configure tool, develop shared expectations, address data governance needs	4 to 6 months 20 hours 6 hours	Local Leadership Team Network Partners
Organization level planning and preparation	4 to 6 months 8 hours	Local Leadership Team and IRIS Team



## Phase: Sustainability

Activity Description	Time Needed*	Responsible Party
Utilize the tool and shared processes to make referrals	Ongoing	Network Partners
Use data to inform refinements	Quarterly 10 hours per quarter 4 hours per quarter	Local Leadership Team
Plan and engage in network expansion	As relevant	Network Partners Local Leadership Team

*\*Estimated hours reflect that of the Local IRIS Leadership Team and network partners. Local IRIS Leaders also provide ongoing support to network partners, reflected in the time allocated for overall capacity. Coaching, technical support, guides, tools, and activities are provided by the IRIS Team throughout all phases.*

## PRACTICE COST

Implementation of IRIS through the Cultivating Connections approach includes two main budget categories: 1) Cost of the tool, resources and time associated with implementation support from the IRIS Team, and 2) Time associated with local implementation activities facilitated by the Local IRIS Leadership Team. Both costs can vary based on community needs and capacity. Costs are highest in the initial year of implementation to account for increased time and support. As the network achieves integration of the tool and processes across partner organizations, costs typically decrease.



## Budget

Activity/ Item	Brief Description	Quantity	Total
IRIS: Tool and Implementation Support	<p>Technical assistance, consulting, tools, and resources to support the implementation process</p> <p>IRIS software and secure data storage</p> <p>Configuration of system to meet network needs</p> <p>User training, webinars, and ongoing TA support</p>	<p>Initial Implementation: First 12 months</p> <p>Maintenance: Annually</p>	<p>Initial Implementation: Approximately \$8,000-15,000*</p> <p>Maintenance: Approximately \$4,000-\$8,000*</p> <p>Depending on community size, readiness, and needs for support.</p>
Local IRIS Leadership Time	<p>Assessment of existing referral networks and community readiness</p> <p>Formation of leadership team and coalition of key partners</p> <p>Facilitation of the implementation process with partners</p> <p>Continuous quality improvement, network refinement, and expansion activities</p>	<p>Initial Implementation: Approximately 12 months, 2-3 staff, totaling 15-20 hours per week</p> <p>Maintenance: Annually, 2-3 staff, totaling 8 hours per week</p>	Varies based on staff capacity and compensation
<b>Total Amount:</b>			<b>Varies.</b>



## LESSONS LEARNED

Lessons learned are described in greater detail in Miller, et al, 2018, but include the following:

- 1) Engagement is vital to success.
- 2) A comprehensive implementation guide is critical.
- 3) Piloting the program provides opportunity for refinement.
- 4) Ongoing support addresses barriers
- 5) Senior leadership facilitates success.

## NEXT STEPS

To continue to ensure IRIS and Cultivating Connections meet the diverse needs of communities and partners, the following next steps have been identified:

1. Continue technical improvements to IRIS, as needed, including refining features to streamline integration into workflow, improve communication, and facilitate data interpretation.
2. Expand evaluation of the tool and implementation approach across launched IRIS networks.
3. Replicate and evaluate IRIS and Cultivating Connections in new community networks.
4. Develop publications outlining implementation and outcomes.
5. Continue to collaborate with multi-sector partners to refine guidance to ease sector-specific barriers to participation (data governance, workflow planning, etc.).
6. Support networks with examining the root causes of determinants that impact health inequities in their community, using community referral data to identify gaps and spark community recognition of needs.
7. Support networks with embedding family voice and perspectives in ongoing collaborative decision-making.

## RESOURCES PROVIDED

- [Connectwithiris.org](https://connectwithiris.org) serves as an initial resource to the tool and approach for communities exploring implementation. During implementation, local leaders are encouraged to introduce the tool to partners using a short overview [video](#). Access to the Cultivating Connections Implementation Guide, consisting of the phases, milestones, and corresponding tools for implementation, is provided as part of initial implementation through an interactive web-based guide.



## APPENDIX

- N/A.

## REFERENCES

- Active Implementation Research Network. (n.d.). Frameworks. Retrieved from <https://www.activeimplementation.org/frameworks/>
- Bunger, A. C. (2010). Defining service coordination: A social work perspective. *Journal of Social Service Research*, 36(5), 385-401.
- Collins-Camargo, C., Strolin, J., & Akin, B. (2019). Use of technology to facilitate practice improvement in trauma-informed child welfare systems. *Child Welfare*, 97(3), 85-108.
- Ervin, N. E. (2004). Assessing interagency collaboration through perceptions of families. *Journal of Community Health Nursing*, 21(1), 49-60.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). Implementation research: A synthesis of the literature. Tampa: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication No. 231). Retrieved from <https://nirn.fpg.unc.edu/sites/nirn.fpg.unc.edu/files/resources/NIRN-MonographFull-01-2005.pdf>
- Ghate, D. (2016). From programs to systems: Deploying implementation science and practice for sustained real world effectiveness in services for children and families. *Journal of Clinical Child & Adolescent Psychology*, 45(6), 812-826.
- Nylén, U. (2007). Interagency collaboration in human services: Impact of formalization and intensity on effectiveness. *Public Administration*, 85(1), 143-166.
- Provan, K. G. (1984). Interorganizational cooperation and decision making autonomy in a consortium multihospital system. *Academy of Management Review*, 9(3), 494-504.
- Provan K.G. & Milward H.B. (1995) A preliminary theory of interorganizational network effectiveness: A comparative study of four community mental health systems. *Administrative Science Quarterly*, 40(1), 1-33.
- Selden, S. C., Sowa, J. E., & Sandfort, J. (2006). The impact of nonprofit collaboration in early child care and education on management and program outcomes. *Public Administration Review*, 66(3), 412-425.

