C-INTAKE:

Lessons Learned & Recommendations
The National Evidence-Based Home Visiting Model Alliance (heretofore referred to as the Alliance) includes representatives from 6 national evidence-based home visiting models: Child First, Healthy Families America, HIPPY, Nurse-Family Partnership, Parents as Teachers, and SafeCare.

The Alliance is motivated by a shared commitment to promoting effective use of home visiting as a mechanism to enhance the health and well-being of families, parents and children. The Alliance seeks to provide prenatal and early childhood intervention through evidence-based home visiting (HV) on a national scale and to make early home visiting an integral service focused on promoting positive outcomes for all children.

The collective mission of the Alliance is to improve the health and well-being of pregnant women, young children and their parents by elevating and advancing the field of evidenced-based home visiting through collaborative leadership. Our activities include identifying cross-model issues that affect outcomes of interest for each model, collaborations on research, innovations to improve service, and legislative and local advocacy. While each home visiting model is unique in intervention goals and outcomes, aspects of federal, state, and local mechanisms of HV implementation pertain to all.
National Evidence-Based Home Visiting Model Alliance

6 Models
- Child First
- Healthy Families America
- HIPPY
- Nurse Family Partnership
- Parents As Teachers
- SafeCare

282,388 Families Served in 2015

2,385 Program Sites

Serving 50 states & D.C., 110 Tribes, and 5 Territories

25% MIECHV Funding
75% State HV Initiatives, Other State/Federal initiatives, Private Funding*

*Funding allocations are based on the estimated number of individuals currently served through MIECHV funding and estimated levels of state and private investments.
The goals of this paper are to synthesize strengths, challenges, and lessons learned from states and local implementing agencies (LIAs) that have provided feedback about the development and implementation of c-intake systems, to provide recommendations to those considering as well as those implementing c-intake systems, and to identify directions for future research.

Why Are C-Intake Systems Important to Study?

While c-intake systems have been in existence for decades, they have become more widespread in recent years, in part due to support provided by the MIECHV legislation. In theory, c-intake systems may enhance the capacity of providers to better meet the needs of pregnant women and families with young children. In practice, the impact of c-intake systems – positive or negative – on families, communities, states and model outcomes is largely unknown.

Potential

C-intake was originally developed to provide a single entry point for families where screening could be used to systemically identify family needs, and then refer each family to the program that best fits the family’s needs (MIECHV Technical Assistance Coordinating Center, 2015). C-intake may also improve appropriate resource utilization by streamlining the referral process, allocating scarce resources to families most in need, minimizing duplication of services (e.g., when families enrolled in multiple programs without knowledge/coordination of providers), and minimizing the mismatch in referrals wherein family need does not fit with goals of the program to which the family was referred. C-intake systems also have the potential to improve access/risk screening for families who may be eligible for services, but who have not yet acquired them for myriad reasons and, therefore, may be at risk for ‘falling through the cracks.’

Systemically, improving coordination among HV models, as well as other existing infant and early childhood services where possible, may reduce costs, which is consistent with the cost containment goal of the Affordable Care Act. In addition, c-intake systems may reduce competition for referrals among HV and other infant and early childhood programs. C-intake systems also have the potential to improve data monitoring, as such systems may simplify or promote standardized data collection, thereby increasing the potential for cross-site, state and model comparisons on family and agency-level outcomes.
In practice, c-intake systems, where implemented, are a new step in the process of accessing HV services. In the past, each program simply recruited its own clients through whatever means it determined appropriate. As a new process, c-intake may affect family enrollment, engagement, and participation in HV programs, positively or negatively. Introducing c-intake may alter the existing intake and referral process, and may affect attrition either during intake or early in treatment. Although systematic data are limited, anecdotal evidence suggests the potential for both positive and less than positive effects. Specific components of the c-intake and referral process that have been associated with family level outcomes are described below.

**Mechanisms of C-Intake Process**

Research shows that initiating or continuing services with a new and unfamiliar provider contributes to higher attrition rates in families who use HV services (Ingoldsby et al., 2010; Korfmacher et al., 2008). C-intake invariably involves introducing a ‘new person’ or a ‘new step’ to acquiring services; in some cases, c-intake screens or referrals may be accomplished via web or over the phone. As families are twice as likely to accept services when assessed for program eligibility in person rather than by telephone (Duggan et al., 2000), it is important to examine the mechanisms through which families are screened, assessed, and referred to services, the types of technology used, and the corresponding impact of these variations on attrition rates.

When c-intake is used, the family moves from multiple proverbial ‘windows and doors’ of opportunity for service entry to a more streamlined process that consists of generally one door. Thus, families no longer experience invitations to engage with multiple services that are accompanied by diversity in messaging. It is possible that if the window of opportunity to engage with HV services is missed initially, or carried out in a way that is perceived as scary, threatening, cumbersome, or unfamiliar to families, this will result in greater hesitancy or reticence to access services. Additionally, limiting access to only one door can, in some communities, also prove problematic if families are not “touched” by c-intake and as a result end up without access to HV.
Duration of C-Intake Referral Process

Research shows that when families are required to go through a lengthy referral and enrollment process, they may lose interest and drop out prior to enrollment, find other resources, or leave prematurely once enrolled (Goyal et al., 2014). At the moment, it is unclear as to whether c-intake affects wait times for service or the duration of the overall referral process.

Referral Outcomes

High levels of participant satisfaction with HV program content have been shown to be associated with better family and program-level outcomes (Kelley, et al., 2007). While c-intake has the potential to expedite the intake and referral process, the effect of implementing such systems and the process of ‘matching’ families with specific HV programs is unknown. In addition, there appears to be wide variability in screening instruments employed, the level of clinical training and expertise that inform decisions about referral outcomes, and the primary drivers of the decision making processes. While determining the matching process is highly contingent on HV programming and other services available in local communities, not all existing c-intake systems incorporate family preferences into program selection and referral or whether they refer to programming outside of the HV field. Preferences can clearly vary among families: some families may prefer an expedited service (i.e., whatever is available), whereas others may be willing to wait for an opening in the program of their choice. Families may prefer a particular program because of a recommendation or a friend or family member’s experience with that program, its length, or their perception that it matches their needs.
C-Intake Models: Current Structures, Outreach Pathways, and Referral Processes

The terminology used to describe c-intake systems varies depending on the way in which the system is structured and relates primarily to: 1) **how referrals are processed** and 2) **how service placements are determined**.

While we note that the field and terminology are constantly evolving, we are aware of three common c-intake systems that are currently being implemented across the country. We describe them as: **the triage model, the shared decision-making model**, and **the market model**.

**Triage Model**

The triage model, typically referred to as ‘central or centralized intake,’ refers to a screening and referral mechanism that utilizes a single point of assessment and subsequent referral for families. When a family is matched with a service provider/LIA, the c-intake team exchanges pertinent information about the family with the receiving program(s). In this system, the c-intake team typically handles all aspects of screening and the selection of specific referral(s). The structure of the triage system prioritizes timely acquisition of services. However, when the c-intake triage system gets more complex, with a greater number of different programs and multiple necessary screenings/assessments required by the system, it also has the potential to slow down the referral process. In the triage system, families may have relatively little choice in the final referral outcome; similarly, individual models, LIAs, and other providers do not provide input on or follow families during the referral process, aside from service criteria previously provided to c-intake staff. It is important to note that referral determinations that are not made collaboratively or do not incorporate family choice may impact family engagement and participation in services, limiting the effectiveness of this single intake, rapid response system.

While some communities have elected to house the c-intake system within a large HV program or LIA currently serving the community, it is common for an external entity to be contracted to manage referral screening and allocation. Under these circumstances, all potential families must go through the external entity intake and referral process in order to enroll in HV programs or other services. This process becomes more complicated if there are multiple services available; yet a well-functioning, efficient system hinges on this process. The issue of family choice is also critical, and may be threatened by an automated system of triage that is not able to consider what a family might want or has requested. While automated systems may be utilized as a cost-saving measure, they may introduce an additional risk that families will not be successfully engaged in ongoing services.
Triage Model (continued)

Triage intake models work most effectively when there is a feedback loop between programs and providers and the c-intake staff that allows for continuous and consistent data exchange. C-intake staff must be extremely knowledgeable about the programs and families; yet, there are invariably “inappropriate” referrals that occur, e.g., if a receiving program learns new and pertinent information about a family after receiving the referral. In these instances, it is essential that the receiving program acknowledge that they are not really the best “match” and subsequently refer a family to another program that may be a more appropriate fit as rapidly and efficiently as possible. Otherwise, engagement of the family in services may be jeopardized. Such practices require collaborative understanding of family needs, available programming, and trusting relationships among the LIAs.

When utilizing a triage model of c-intake, it is critical that there is a clear understanding of the goals of receiving programs and that data sharing and exchange agreements are developed in advance.

STATE AND LOCAL LEVELS:
By processing all referrals through a single agency in each region, the c-intake system in New Jersey increases coordination among programs, limits duplication, and improves utilization of available resources. With generous amounts of federal and state funding, the c-intake system supported expansion and integration of three evidence-based home visitation models (HFA, NFP, PAT) and improved coordination with prenatal care providers.

COUNTY-LEVEL:
By implementing c-intake at the county level, select counties in Kansas have been able to connect families with home visiting services as well as other community services. One county is developing communication processes between centralized intake and the home visiting programs to improve awareness of referrals generated through centralized intake and those conducted by specific service providers in order to reduce redundancy of recruitment efforts among the programs.
Shared Decision-Making Model

The shared decision-making model refers to a process of common screening and referral that involves post-assessment information-sharing among LIAs, HV models, and other early childhood providers in order to determine best HV model fit, and, when possible, the need for other infant and early childhood services. In this model, decisions about referral outcomes are made by a group of providers collectively or individually, as opposed to a single entity that has been appointed or with whom a contract has been established. Families may access this system by reaching out to any of the participating programs or through a unified outreach effort. This process of shared decision making among service providers has been described as ‘coordinated intake.’ Individual programs may include family choice or primary presenting problem as a factor when determining whether to retain the family or accept a referral into their program or refer the family to another home visiting model or service option. Coordinated intake systems are effective when there are multiple services for which a family is eligible and levels of trust are high among LIAs.

In some communities utilizing coordinated intake systems, relevant information about a referred family is provided to a committee of multiple providers by a state-based universal screening program and family fit is determined by the group. This labor-intensive process may not be scalable in many contexts. In other communities, the c-intake system is housed within a particular LIA or entity. Although collaborative in nature, the decision about which LIA or entity will house the c-intake system is typically determined by the resources available to a particular LIA to manage the process and make referrals as indicated, either by triage or by a group of providers, depending on arrangements made among stakeholders.

SharedDecision Making C-Intake System: Spotlight On Arkansas

COMMUNITY-LEVEL:
When implementing a c-intake system in select communities in Arkansas, a community-based participatory approach was used to address the problem of long-standing HV and other infant and early childhood programs that were recruiting independently because they did not receive state funding for c-intake.
Market Model

The market model is one in which families are given the most choice. The market model, often referred to as collaborative intake, requires that stakeholders who are in contact with families who may be eligible for early childhood services, such as early intervention programs, HV models, LIAs, and members of community recruitment networks develop shared materials for use with families when engaging in outreach and recruitment efforts. Families are then able to choose which program might be most appropriate for their own needs. Once families select a specific program, they are then enrolled directly in that program, with specific assessment procedures determined at the individual model level. In the market model, service choice resides almost exclusively with the family. Implementing a market model approach to c-intake requires a substantial amount of planning, communication, organization, and trust among providers at the LIA level.

Market C-Intake System: Spotlight On Tennessee

STATE AND LOCAL LEVELS:
Tennessee has piloted a market model of c-intake entitled the collaborative intake initiative that involved development of a standardized referral process to be utilized by all infant and early childhood/HV providers. The process includes preliminary assessments at the county-level to determine service availability and at the family level (child age) to determine program eligibility. Families are then provided with a list of three qualifying programs from which a family is then able to choose. The initiative also includes efforts to develop standardized outreach and documentation materials.
Factors to Consider:

**Resources & Community Characteristics Anticipated to Implement C-Intake Successfully**

While each c-intake system presents unique strengths and challenges, a number of common community characteristics are important to consider when selecting or implementing a c-intake system. Through qualitative interviews with key infant and early childhood stakeholders, five major factors were identified: family choice, level of trust among service providers, degree of coordination among service providers, LIA staff time required, and fiscal resources available. These factors are not mutually exclusive. The figures below represent the degree to which each of the three c-intake systems either require or prioritize each.
Many systems rely on existing universal screening practices that are used for targeted referral and delivery of other health care or social services. Universal risk screening is part and parcel of a preventive continuum of infant and early child and family services and has capacity to link families to non-HV services such as WIC, community-based play groups, new parent support groups, and specialist providers. States vary in their use of universal screening tools as a way to recruitment families. For example, in Florida, the statewide Healthy Start program uses a universal prenatal and infant screen as a single point of entry for various health care, home visiting, care coordination, education and support services. In Baltimore County, a vulnerability index is calculated from referrals from the Prenatal Risk Assessment, as the number of pregnant mothers outnumbers the availability of HV program slots. While universal screening instruments aid in early identification of vulnerable families, most screening instruments were initially designed to identify high risk pregnancies, potential birth problems or infant health issues; they may not necessarily provide a sufficient base of information on which to determine if a family might benefit from HV services or which HV programs would be the best fit.

States and communities that do not have a universal risk screening assessment available must rely on targeted recruitment, assessment, and triage at the community-level. Targeted practices require LIAs to identify at risk families through referrals or existing recruitment networks and subsequently refer them to the c-intake system for intake and referrals, as opposed to their own agencies. While families may self-refer directly to the c-intake system, families who are either recruited by or self-refer to LIAs are usually referred to the c-intake system for intake and placement, as is the case in select communities in Arkansas and Georgia. Anecdotally, it appears that competition to fill capacity among LIAs or programs occurs more frequently in the absence of a standardized referral source, such as a universal risk assessment, that broadens a pool of potential participants who may be eligible for or benefit from HV and/or other infant and early childhood services. When there is not a previously identified ‘pool’ of families from which to draw, LIAs are left to identify and recruit potential participants, and may be influenced by funder requirements or capacity expectations. In addition, while some LIAs are supported through a state-funded c-intake and referral process, other programs located within the same community recruit and support families independently. Without a comprehensive community-wide c-intake system, LIAs may not be able to identify or prevent duplication of services to ensure that available resources are utilized most efficiently by matching client needs with available programs, regardless of how these programs are funded. In addition, a community-wide c-intake system could provide LIAs with information about the range of services utilized by each family, including mental health, early intervention, and literacy programs. Such systems function most effectively when there are high levels of trust and coordination among service providers.
Notably, there is virtually no research that assesses what HV model works best for whom under which circumstances—or whether c-intake systems affect these outcomes. Most research on HV models has compared a particular model to a control (often no service), not to another model. Consequently, decisions about the fit of a model to a family's needs are not research-based at this point. Large-scale comparative effectiveness trials would be needed to determine which families do better in specific interventions; however, such studies would be costly and time consuming.

C-intake systems have a number of potential positive benefits: improving the match between HV and other infant and early childhood services and families, expediting delivery of appropriate and ‘best available’ services to families, easing enrollment process of families by offering a ‘one-stop shop’ approach, and breaking down silos among local providers who share the same goal of supporting vulnerable families. Although LIAs cannot identify or prevent duplication of services and ensure that available resources are utilized most efficiently by matching client needs with available programs without comprehensive community-wide c-intake systems, we suggest careful consideration of the following community-level factors when determining when and how to implement c-intake systems.

1) **Number of HV programs or other infant and early childhood services available within a given community.** While MIECHV funding and continued support for home visiting by a variety of state agencies has established early home visiting in a growing number of communities, most families live in areas served by a single, or at most two, evidence-based home visiting programs. Unless a c-intake system has the capacity or inclination to extend their referral options to cover a wider range of early intervention and parent support services, the c-system may not represent a meaningful strategic investment and may in fact be an inefficient use of limited fiscal resources.

2) **Supply of families and demand for programming.** If the volume of families who are in need of services exceeds the number of HV programming slots available, then implementing a c-intake system may expedite the process of matching the most vulnerable families with the most appropriate services. If individual LIAs or programs are pressured to meet funder or capacity requirements, then a c-intake system may in fact lengthen the duration of time between identification of family and acquisition of services, as well as contribute to increased levels of distrust among providers.
C-Intake: Recommendations

The process of appropriate referral to one of several HV programs or other infant and early childhood services requires detailed knowledge of the specific strengths of different HV programs, as well as a sophisticated understanding of the underlying needs of the family who has been referred for services. In addition to the aforementioned preconditions, we offer recommendations relevant to the following domains: best practices, evaluation, and quality improvement.

Best Practices:

1) **Develop and implement data collection and data sharing procedures and agreements that facilitate reliable, consistent, and expeditious transfer of information among c-intake implementers, LIAs, and other relevant service providers and stakeholders (e.g., models and other groups invested in home visiting or infant and early childhood systems).**

Minimally, the following data should be made available and readily accessible in a timely fashion by all home visiting programs with or without access to a c-intake system: referred participants, eligible participants, participants, refusal rates (proportion of eligible participants who refuse services when offered), enrollment rates (proportion of those accepting services who receive one home visit), short-term retention rates (proportion of those accepting services who receive more than 1 home visit), reasons for disengagement, and child and family demographic characteristics. In addition, the time from initial contact to referral outcome should also be monitored.

We recommend that these data be shared across local community agencies, states, and national models to facilitate cross-sector initiatives that might improve c-intake implementation and other service delivery infrastructure.

2) **Encourage initial and ongoing outreach and referral efforts by all models and other infant and early childhood providers using c-intake systems in order to facilitate optimal access for vulnerable families.**

A shared commitment to and responsibility for spreading the word about the value of HV and other infant and early childhood services will heighten the awareness about such services and inevitably broaden the pool of families who are identified as eligible. Such efforts should maintain a ‘no wrong door’ philosophy and policy that supports all local creative engagement strategies to connect services to families.
3) **Consider community dynamics and capitalize on both internal and external resources when creating a c-intake systems.** For example, if there is only a single service option available for families, then implementing a c-intake system may not be necessary, and may in fact represent an inefficient use of limited fiscal resources that are available to serve families in need.

When planning at the state level, it is important to insure that the type of c-intake system selected for implementation is both community-driven and community-specific, and that the ‘big five’ factors are given ample consideration (refer to textbox with the bar graphs). A community-based participatory approach that includes LIAs and other local stakeholders in the initial planning processes—as well as during later phases of implementation and evaluation—will enhance the efficiency, effectiveness and long-term sustainability of c-intake systems.

4) **Establish policy that requires evidence from a c-intake feasibility/readiness assessment prior to allocating funding for such systems.**

In particular, we suggest including comprehensive community-specific cost metrics to accurately assess costs and benefits prior to implementing a local c-intake system.

**Evaluation Issues:**

1) **Engage in research and evaluation to support development of best practices in c-intake that will create reliable and appropriate methods for insuring families are referred to the most appropriate service while minimizing wait times.** Factors to consider include the family’s presenting service needs, the community’s available programs. In addition, c-intake systems should be developed with the goal of improving overall participant enrollment and retention rates.

2) **Examine how c-intake variables affect family acceptance, enrollment, retention, and referral outcomes in and across all programs and models.**

Specifically, there are limited data available that examine whether c-intake systems: a) expedite or delay the intake and enrollment process, or b) create additional barriers for families by employing stringent screening requirements or introducing another layer of relationship-building that threaten subsequent participant transition and engagement.
C-Intake: Recommendations

3) Examine whether c-intake efficiency varies by system type and program/model type (e.g., those that enroll families before the birth of a child compared to those that enroll families after the child has been born). For example, examining the average days from initial contact until referral acquisition is an important variable to track given its link to subsequent enrollment and retention.

4) Employ approaches to cost measurement and evaluation that extend beyond basic metrics (e.g., dollars required) and traditional cost-savings analyses. Utilizing novel and nuanced approaches to cost evaluation—such as cost-consequence, budget impact, cost-benefit, and marginal analyses will provide helpful information about the efficiency of c-intake and the anticipated return on investment of implementing such systems within particular communities.

Quality Improvement:

1) Ensure that all LIA and c-intake staff who interact with families are knowledgeable about the various programs available to families in their geographic catchment areas and that they are able to communicate model/resource-specific information to families. Developing ongoing training programs specifically for c-intake staff that adapt promising practices for enhancing HV family enrollment and engagement may be particularly useful. In addition, designing capacity-building initiatives that are directed at communities that currently or potentially will be served by c-intake systems will also enhance the utility and sustainability of such systems. Finally, establishing standards, or competencies that are related to knowledge about the breadth of available infant and early childhood programs in a given community, may be especially advantageous, as there is currently wide variability in the background, knowledge, and experience of individuals engaged in outreach and recruitment efforts with families.

2) Incorporate and include existing community-based HV and other family service programs regardless of their funding source (meaning, programs do not need to be MIECHV funded to be included) when developing c-intake systems.
As more and more communities are moving in the direction of designing, implementing and evaluating c-intake systems, it is critical to recognize that—similar to HV and infant and early childhood programming—there is not a ‘magic silver bullet’ with regard to c-intake that will universally address all potential pitfalls across all communities. Similarly, there is no ‘one size fits all’ solution, as communities are diverse in their existing infrastructure, funding sources, and current needs. Regardless of structure, efficient and effective c-intake systems have the potential to accurately identify each family’s needs and efficiently match individual needs with available program strengths. Successful design and implementation requires collaboration and trust among HV models, LIAs and other infant and early childhood providers; a commitment to serving families such that the level of need is matched by intensity of service; a firm commitment to prioritizing the needs of a particular community as a whole over those that may be program or organization-specific; and rigorous evaluation.

References


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