Children and Youth Services Review 89 (2018) 289–297

Contents lists available at ScienceDirect

Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth

Creating a measurement framework for service coordination in maternal and early childhood home visiting: An evidence-informed, expert process

Allison West*, Anne K. Duggan, Kelsey Gruss, Cynthia S. Minkovitz

Department of Population, Family and Reproductive Health, Johns Hopkins Bloomberg School of Public Health, United States

ARTICLE INFO

Keywords:
Home visiting
Coordination
Early childhood
Systems of care

ABSTRACT

Home visiting is a preventive service strategy to promote child health and development by providing voluntary services to expectant families and families with young children in their homes. Home visitors provide direct services (such as screening for parenting risks and teaching parenting skills) and link families to needed community resources. Service coordination is a core element of most evidence-based home visiting models and offers potential benefits to families, local organizations, and communities. However, there is no agreed upon framework that recognizes the unique role of home visiting in service coordination. This paper describes the process used to create a measurement framework for service coordination between home visiting programs and other organizations within early childhood systems. The framework was developed using an evidence-informed, modified Delphi process. It is grounded in five key principles: family centeredness; equity; adaptability; an interdisciplinary perspective; and a focus on population health and well-being. The framework includes a logic model and 37 indicators to assess the strength of the implementation system, activities, and outcomes that theory and prior research suggest support successful service coordination. The framework may be used to support needs assessment, monitoring, quality improvement, and research around service coordination in home visiting.

1. Introduction

Home visiting is a preventive service strategy to promote child health and development by providing voluntary services to expectant families and families with young children in their homes (HRSA, 2017). The primary objectives of home visiting are to improve child outcomes by building supports and reducing stressors that effect parenting. Although the roots of home visiting in the US extend back to the late 1800's (Minkovitz, O'Neill, & Duggan, 2016), services have expanded in the past decade due, in large part, to the establishment in 2010 of the Federal Maternal, Infant and Early Childhood Home Visiting Program (MIECHV). MIECHV awardees – states and territories – are to prioritize families living in at-risk communities and to devote the majority of funds to implement evidence-based home visiting models (Adirim & Supplee, 2013). Currently, 20 home visiting models have been designated as evidence-based following a rigorous review of the research literature (Sama-Miller et al., 2017). In FY 2016, MIECHV provided services to 160,000 parents and children in 50 states, the District of Columbia and 5 territories (HRSA, 2017). Home visiting services in many communities also are supported by additional federal, state, and local public and private initiatives.

Evidence-based home visiting models provide an array of services that vary by program model, family needs, and available local resources. Home visiting programs often target families with multiple, complex challenges including poverty, poor maternal or child health, substance use, domestic violence, and child maltreatment (Adirim & Supplee, 2013). Services vary by model but typically include screening for developmental delays, substance use, poor mental health, and family violence; providing health and parenting education; and linking families with needed goods and services (USHHS, 2017). High risk families often require services that are beyond the scope of what home visiting programs offer; thus, referrals and linkages to other service providers are essential to achieving positive family outcomes. As a result, families enrolled in home visiting are often involved with an array of providers across multiple sectors such early care and education; family support; income assistance and services to address basic needs; physical and oral health; mental and behavioral health; employment training and education; child protection; and early intervention (Goldberg, Greenstone, Colon, Fauth, & Mingo, 2016).

Service coordination is a core element of most evidence-based home visiting models (USHHS, 2017). *Service coordination* refers to the deliberate organization of activities between two or more organizations to

* Corresponding author at: Department of Population, Family, & Reproductive Health, Johns Hopkins University Bloomberg School of Public Health, 615 N. Wolfe Street, E4140, Baltimore, MD 21205, United States.
E-mail address: awest25@jhu.edu (A. West).

https://doi.org/10.1016/j.childyouth.2018.04.037
Received 23 January 2018; Received in revised form 24 April 2018; Accepted 24 April 2018
Available online 26 April 2018
0190-7409/

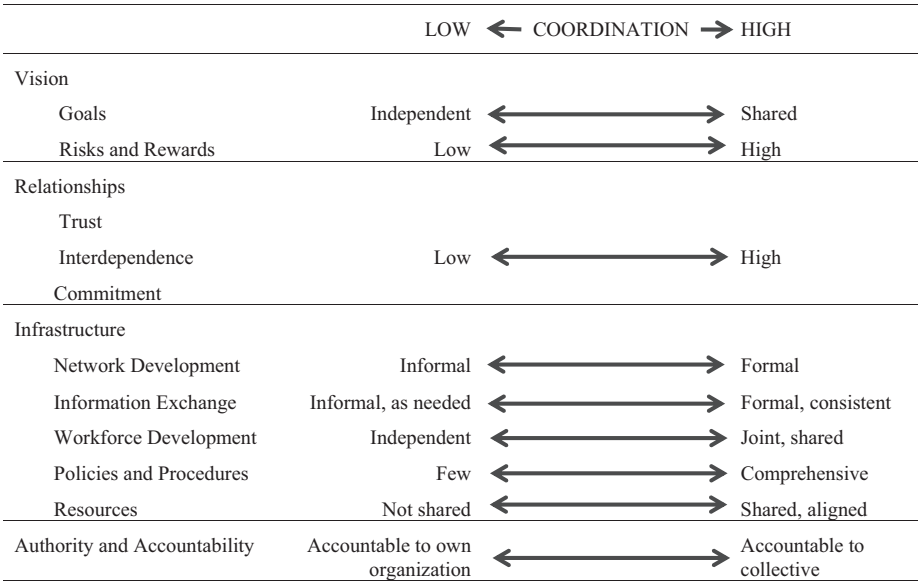

Fig. 1. Coordination as continuum.
Note. Adapted from Collins & Marshall (2006).

facilitate, in partnership with the family, the delivery of the right services in the right setting at the right time. Service coordination is more complex and more difficult to achieve than simple referral of a family from one service to another. Coordination implies purposeful efforts of organizations delivering services across settings and over time to improve client care. It entails shared goals, delegated responsibility, accountability, communication, aligned resources, and the exchange of information (AHRQ, 2014; IOM, 2012). Service coordination is not an all-or-nothing phenomenon; rather, it occurs along a continuum (Fig. 1). Coordination is high when partners share a vision; have trusting, interdependent and committed relationships; have a solid infrastructure; and have sufficient authority and accountability to all partners.

Service coordination has many potential benefits for families, home visiting programs, other agencies and community-based organizations, and early childhood systems. Linkage of families with needed services has been shown to strengthen family engagement in home visiting, for example (Duggan, Burrell, Crowne, et al., 2015). Integration of home visiting and family-centered medical homes has been shown to improve understanding and retention of anticipatory guidance, adherence to recommended schedules for well-child visits and immunizations, and satisfaction with care (Tschudy, Tommey, & Cheng, 2013). In South Carolina, home visiting service coordination with patient-centered medical homes led to increased access to both health care and home visiting services, consistent messaging across providers, and better care and coordination for children and families (Sides & Baggett, 2015). Other potential benefits of coordination between home visiting and health care providers include sharing results from assessments; facilitation of referrals to each other and to community resources; and mutual reinforcement of advice and anticipatory guidance. In addition, home visiting programs can share results of home-based assessments of living conditions, safety, and parenting risks, such as maternal depression, with health care providers (Toomey & Cheng, 2013). As a result of enhanced coordination, organizations may experience an increase in appropriate and timely referrals and feedback from other providers. Communities may benefit from increased awareness of early childhood services and family needs and stronger relationships across organizations and service sectors. Over time, these benefits may contribute to greater efficiency of service delivery; equity in health, development and life course trajectories; and population health.

Despite numerous perceived benefits, home visiting's coordination with other services often falls short of what is intended. Studies have shown that visitors often fail to identify and refer mothers who would benefit from community services for parenting risks, such as poor maternal mental health, substance use and partner violence (Duggan et al., 2004; Duggan et al., 2015). Duggan et al. (2004) suggested that such failures reflect inadequate implementation systems to support coordination; they noted lack of standardized assessments, inadequate training of home visitors and supervisors, and lack of formal referral arrangements with other community providers, for example. Moreover, when home visiting programs succeed in improving access to other services, such as pediatric primary care, there is little evidence of further coordination with such services (AHRQ, 2014; Gustin et al., 2014).

Prior research suggests that there is substantial *unintended* variation in home visiting referral and coordination practices, that is, variation that is explained more by community, organization, or staff features than by family needs and interests (Duggan, Caldera, Rodriguez, Burrell, & Crowne, 2007). Furthermore, home visiting activities required by national models and the MIECHV program, such as required screenings, may duplicate activities of other providers and send mixed messages to families if services are not aligned. All duplication is not bad; however, duplication that is unintended and uncoordinated may squander resources such as staff time and effort and generate frustration among families and providers.

Coordination must be considered within a much broader context. For example, federal and state economic and regulatory conditions may influence coordination funding, service availability, and family eligibility criteria for home visiting and other programs within the early childhood system (Hodges, Israel, Ferreira, & Mazza, 2007). To supplement MIECHV funding and expand home visiting services for eligible families, several states leverage funds from Medicaid, Temporary Assistance for Needy Families (TANF), philanthropic organizations, and other sources. Policy and program changes that limit or restrict funding for specific activities can have far-reaching implications for coordinated systems of care.

Moreover, home visiting is only one component of the comprehensive early childhood system of care. As in other complex systems, relations among multi-level inputs, activities, and outcomes are dynamic and nonlinear, with changes in one part of the system leading to changes in other parts (Best, 2011). These changes may be favorable, as in the case of positive feedback from families about experiences with one provider leading to more eligible families being referred to that