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An evaluation of the effects of an integrated services program for multi-service use families on child welfare and educational outcomes of children

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ABSTRACT

The purpose of the study was to evaluate a program that provides integrative case management for families dependent on at least two government services (e.g., child welfare, disability, chemical dependency, vocational rehabilitation). In the current study, we focused on effects of services on children's educational and child welfare outcomes two years after program exit. Children enrolled in the program were compared to a community comparison sample through propensity score matching. None of the group differences was significant. However, outcomes related to child maltreatment (number of child maltreatment reports accepted by Child Protective Services and out-of-home placements) improved dramatically within two years after exit. Outcomes in the education area were less uniformly positive. On the one hand, children's attendance was high and school mobility was low. In addition, there was a significant reduction in the number of children receiving special education services two years after exit. Nevertheless, a third of the children were still receiving special education services two years after exit, and their academic performance on standardized reading and math tests was quite poor. Thus, the intensive case management model was related to successful outcomes in an area directly targeted by the program (child maltreatment), but the gains did not generalize to another domain that was not an explicit focus of the program (academic achievement).

1. Introduction

1.1. An evaluation of an integrated services program for multi-service use families

Some families depend on multiple government services due to the myriad barriers they face. For example, a 2011 analysis of cases that reached the 60-month limit on Minnesota's welfare program (Minnesota Family Investment Program; MFIP) found that between 2008 and 2010, 38% had a chemical dependency diagnosis, and 74% had a serious mental health diagnosis (DeMaster, 2011). Other studies are consistent with these findings. A study of 284 randomly selected long-term welfare recipients from 1997 to 1998 showed that they were struggling with mental (57%) and physical health problems (53%), learning disabilities (23%), domestic violence (12%), drug abuse (20%), alcohol abuse (20%), and severe child behavior problems (23%) (Taylor & Barusch, 2004). A longitudinal study of service use by low-income mothers with newborns found that 11% of the sample were receiving an average of 7–8 types of services (e.g., health and dental care, food, employment, housing, parenting information, child care) (Spielberger & Lyons, 2009). Parents and children in the child welfare system have even greater needs than the low-income population in general. In one study, 73% of mothers involved with child welfare were found to be unemployed, 58% had experienced child sexual abuse, and close to half met criteria for Major Depressive Disorder (Marcenko, Lyons, & Courtney, 2011). About 35% of 0- to 3-year-olds involved in child welfare investigations need Part C services (Casanueva, Cross, & Ringeisen, 2008), about half of 2- to 14-year-olds investigated in child welfare have significant emotional or behavioral problems (Burns et al., 2008), and 30–50% of children reported for maltreatment have chronic health conditions (Stein et al., 2013). Indeed, the child welfare system in the US has been termed "a de facto public behavioral health care system" (Lyons & Rogers, 2004). Such multi-use families present significant challenges to the welfare system. A report on Minnesota's welfare system, for instance, found that families with multiple barriers to employment benefited less from the welfare program compared to less needy families, were sanctioned more for noncompliance, needed more extensions on their 60-month welfare limit, and had worse outcomes overall (McDonnell, 2004). The goal of the current study was to examine

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the effects of an integrated service program designed to serve the needs of these families. We asked whether there were differences in child welfare and educational outcomes at 2-year follow-up between the program children who had been involved with CPS and those who had not, and between the program children and a community control group.

Case plans from different service areas are often uncoordinated (at best) and conflicting (at worst); they may duplicate services and accessing services outlined in case plans may be a challenge, especially if timelines are involved. There is a growing recognition in the field that integration of services would benefit families, especially those with multi-service needs. In child welfare, researchers have called for integrated or coordinated services for maltreated youth (Burns et al., 2008; Lyons & Rogers, 2004). There have also been attempts to integrate services for families who are both on welfare and involved with the child welfare system (Ehrle, Scarcella, & Geen, 2004). As noted below, wraparound and systems of care approaches have been growing in use. The rationale for these integrated services is that they can ensure coordination of services, increase service completion/utilization, and decrease costs.

There is a growing trend toward providing integrated services for individuals with complex needs, including those with chronic diseases or multiple conditions. Integration can occur at different levels and have different meanings (e.g., Durbin, Goering, Streiner, & Pink, 2006; Ehrle et al., 2004; Grace, Coventry, & Batterham, 2012; Horwath & Morrison, 2007; King & Meyer, 2006; Marsh, Smith, & Bruni, 2011; Øvretveit, Hansson, & Brommels, 2010; Sterling, Chi, & Hinman, 2011). For example, there could be integration at the system or service levels (Ehrle et al., 2004). When there is service-level integration, there could be integration in terms of the overall philosophy and approach to intervention, perhaps with the same team (who may be cross-trained) delivering all the services within the same framework. Integration could also refer to coordination and/or co-location of disparate services, and regular communication among multiple service providers, each providing their service separately, either in parallel or sequentially. Closer integration can be achieved when agencies not only communicate but actively collaborate to develop and implement treatment plans. Sometimes a case manager is responsible for assessing the client's or family's needs from different perspectives, making appropriate referrals, helping families locate and access services and resources, and coordinating services across multiple sectors. Evaluating a program using this model of integrative case management is the purpose of the current study.

Studies of integrated services show mixed results in terms of client outcomes, partly due to methodological limitations of the research and partly due to differences in the operationalization of integration (Bedell, Cohen, & Sullivan, 2000). For instance, some studies of integrated services for individuals with chronic depression or major depressive disorder show no benefits of collaborative care on symptom reduction (Vlasveld et al., 2012), whereas others show improved outcomes (Haddad & Tylee, 2011). Integration of mental health services into primary care settings is found to improve patient outcomes in some studies (Bryan et al., 2012), but not others (Durbin et al., 2006). Results are also mixed for individuals with co-occurring mental health and substance abuse problems, with some studies showing no benefits of integrated services (Friedmann, Hendrickson, Gerstein, & Zhang, 2000; Milligan et al., 2010), some showing mixed effects (Craig et al., 2008; Essock et al., 2006; Morgenstern, Hogue, Dauber, Dasaro, & McKay, 2009; Niccols et al., 2012; Vanderplasschen, Wolf, Rapp, & Broekaert, 2007), and others showing benefits (Corsi, Rinehart, Kwiatkowski, & Booth, 2010; Milligan et al., 2011; Morgenstern et al., 2006; Rapp et al., 2008). There is not yet enough information to decide whether an integrated service model is more effective than usual care and which type of integration works best for each population (Bride, MacMaster, & Webb-Robins, 2006; Sterling et al., 2011).

In child welfare, the vision of better integration among multiple sectors serving children has been in existence for decades (Horwath & Morrison, 2011). More recent concepts of "systems of care" (e.g., Frankford, 2007; Stroul & Friedman, 1986) and "wraparound care" (e.g., Painter, 2012; Winters & Metz, 2009) represent attempts to bring together formal and informal supports in the community to work with the family in a collaborative and coordinated fashion to address children's multifaceted problems. However, it is hard to evaluate these programs because there are few agreed-upon definitions or structured interventions, and the concepts are implemented differently in different locales. Thus, evidence for their effectiveness is mixed (e.g., Carney & Buttell, 2003; Painter, 2012; Winters & Metz, 2009).

Intensive case management is another practice often used by service providers to ensure timely and effective service delivery through frequent, focused visitation and referral processes (often accompanied by reduced caseloads). Results of studies examining intensive case management of mothers with children are similarly mixed, with studies being plagued by low participation and high attrition rates. In a study by Jansson, Svikis, and Beilenson (2003), intensive case management services were offered to women with 0- to 2-year-olds exposed to drugs in utero. Despite small samples sizes, a 2-year follow-up showed that those who received 5 or more visits by case managers were more likely to be abstinent and to have retained custody of their children compared to those who received 4 or fewer visits. Another study of case management with substance-abusing pregnant and post-partum women found less use of drugs and alcohol in the study group compared to the control group (Eisen, Keyser-Smith, Dampeer, & Sambrano, 2000). However, the positive effects were not sustained at the 6-month follow-up. Similarly, intensive case management for substance-abusing women involved with the child welfare system resulted in fewer out-of-home placements, although there was no effect on number of incident reports. Nevertheless, the positive effects were not sustained once case management services were closed (Dauber, Neighbors, Dasaro, Riordan, & Morgenstern, 2012). Ryan, Marsh, Testa, and Louderman (2006) model included intensive case management focusing on substance abuse and child welfare for substance-abusing mothers whose children were placed in foster care. A randomized trial showed a decrease in substance abuse rate and an increase in reunification rate in the study compared to the control group, although the effects were small and participation rates were low. Likewise, another study of intensive case management for substance-abusing mothers showed improved reunification rates (Marsh, Ryan, Choi, & Testa, 2006). Finally, a case management model aimed at reducing families' dependence on welfare through addressing their multiple needs in an integrated fashion improved clients' self-sufficiency (Leukefeld, Carlton, Staton-Tindall, & Delaney, 2012).

Most of the studies of case management or integration cited in this paper were focused on the parents, and outcome measures were based on the mothers' functioning. Children's outcomes were not assessed in some of the studies, and were limited to several child welfare measures only in other studies. In other evaluation studies, outcome measures tend to be limited to core service needs. This variability across studies makes it hard to integrate results because each integration approach is tailored to a specific population with a specific service need.

In particular, educational performance is a vital outcome measure that needs to be emphasized to a greater extent in evaluation studies. Educational achievement is crucially important for a variety of short- and long-term outcomes that impact the children and their future families. It is well established that children in the child welfare system have poor educational outcomes (Stone, 2007; Veltman & Browne, 2001). For example, studies show associations between maltreatment and lower math and reading scores (Coohey, Renner, Hua, Zhang, & Whitney, 2011; Crozier & Barth, 2005; Kinard, 2001), between child welfare involvement and learning disabilities (e.g., Iversen, Hetland, Havik, & Stormark, 2010; Sullivan & Knutson, 2000) and special education needs (Jonson-Reid, Drake, Kim, Porterfield, & Han, 2004; Lambros, Hurley, Hurlburt, Zhang, & Leslie, 2010), and worse school performance