

An Evaluation of the NW County Collaborative:

Our Children Succeed Initiative

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The Minn-LInK project at the Center for Advanced Studies in Child Welfare at the University of Minnesota School of Social Work relies on secondary administrative data obtained from statewide public programs. Minn-LInK provides a unique collaborative, university-based research environment with the express purpose of studying child and family well-being in Minnesota. The administrative data sets used in this analysis originate in the Minnesota Department of Human Services (utilizing the Social Services Information System, or SSIS) which oversees the state child protection system in Minnesota and student public school education records from the Minnesota Department of Education. All data use has been within the guidelines set by strict legal agreements between these agencies and the University of Minnesota that protect personal privacy.

Human service programs collect data for multiple purposes: program administration, compliance with federal and state reporting, fiscal management, and local outcome measures. Policy and practice research has rarely been the focus of either automated system development or data collection. While these realities do not prohibit the successful design, implementation, and completion of research, it does present researchers with unique challenges related to study design and time-frames for study group selection that do not occur when collecting and working with primary data. Instances in which data system conditions drove the structure of this study have been noted in this report.

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BACKGROUND

Introduction

This report presents the findings from a study of the *Our Children Succeed Initiative*, a system of care community in Northwestern Minnesota comprised of six counties, funded through the Substance Abuse and Mental Health Services Administration's (SAMHSA's) Comprehensive Community Mental Health Services for Children and their Families Program. The overall aim of the *Our Children Succeed Initiative* is to promote competent and coordinated services to children with social, emotional and behavioral concerns and their families through cultural relevant, family-driven, and youth-focused service delivery. The study presented here examines the *Our Children Succeed Initiative's* impact on educational well-being as it pertains to out-of-home placements by comparing the children enrolled in the *Our Children Succeed Initiative* with other comparable children on variables associated with educational well-being (e.g. attendance, dropout, special education), as well as out-of-home placement experiences. Results from the study's three research questions presented here provide a baseline for *Our Children Succeed Initiative* stakeholders that are a point in time analysis. Limitations and implications of the study are also described.

Review of Literature

OUT-OF-HOME PLACEMENT FOR YOUTH

Out-of-home placement affects a large proportion of children and is considered a serious and complex issue for families and the systems that serve them. Children are placed in out-of-home care, or foster care, for care or treatment when children's needs (e.g., safety, mental health, corrections) cannot be addressed immediately within the family home or with resources available to the family. These out-of-home placements encompass several different settings, including relatives' or kinship homes, family foster homes, group or residential care, and correctional facilities, to name a few (Children's Bureau, 2012). The

prevalence of out-of-home placements is a pressing national and local concern. Although the number of children in out-of-home care has decreased over time in Minnesota (and across the United States), the concern remains that a large number of children and youth experience out-of-home care each year (Child Welfare Information Gateway, 2012; Minnesota Department of Human Services, 2011). For example, in Minnesota in 2011 11,368 children spent some time in

In addition to the large prevalence of out-of-home placements, the concern for children in out-of-home care stems from the reality that children who experience out-of-home placement often are dealing with multi-issue challenges and therefore are engaged in multiple systems.

out-of-home care, whether by entering care that year or continuing in care from a previous year (Minnesota Department of Human Services, 2012).

In addition to the large prevalence of out-of-home placements, the concern for children in out-of-home care stems from the reality that children who experience out-of-home placement often are dealing with multi-issue challenges and therefore are often receiving services from multiple systems. These challenges include educational, mental health (Farmer, Mustillo, Burns & Holden, 2008), substance abuse and juvenile justice involvement (Ryan & Testa, 2005). While some challenges are associated with parental functioning (e.g., mental health, disability, substance abuse, ability to provide care) others are associated with child functioning (e.g., behavior, mental health, substance abuse). These compounded challenges put children at risk for poor outcomes in a variety of areas. For example, maltreated children placed in out-of-home care are at risk for a variety of poor mental health

outcomes, such as high prevalence of mental health diagnoses (Garland et al., 2001; Harman, Childs & Kelleher, 2000). A longitudinal study examining 141 youth aging out of the foster care system revealed that these compounded challenges carry over to adulthood (Courtney, Pilivan, Grogan-Kaylor, & Nesmith, 2000). Outcomes in adulthood of children who experienced out-of-home placement demonstrate risk of homelessness, unemployment and incarceration (Courtney et al. 2005) indicating the potential long term effects of the associated risk factors for children in out-of-home care.

Research studying children in out-of-home care found that children in out-of-home care were more at risk than other students, whether or not they are identified as academically at risk formally by school personnel.

EDUCATIONAL WELL-BEING

One particular outcome of interest is how children in out-of-home placement are faring educationally. Research studying children in out-of-home care found that children in out-of-home care were more at risk than other students, whether or not they are identified as academically at risk formally by school personnel (Rosenfeld & Richman, 2003). Similarly, the overall results described in a review of 29 studies on academic status of children and youth in out-of-home care indicate that across academic areas and placement settings, children and youth in out-of-home care exhibit several academic risks, including challenges in school functioning (e.g., attendance, grade retentions, and dropouts) as well as deficits in academic achievement (Piescher, Hong, & LaLiberte, 2012; Trout, Hagaman, Casy, Reid & Epstein, 2008). However, children and youth in out-of-home placements may also be at risk for academic vulnerability *prior to*, rather than as simply a result of, placement (Smithgall, Gladden, Howar, Goerge, & Courtney, 2004) and therefore caution is needed when discussing asso-

ciations between out-of-home care and educational outcomes with acknowledgment of pre-placement academic risks (Stone, 2007).

SYSTEM OF CARE AND WRAPAROUND APPROACH

Using a system of care framework is one approach to help youth and their families with co-occurring issues such as challenges associated with educational well-being and mental health. Created in the 1980's by the Child and Adolescent Service System Program (CASSP) of the National Institutes of Mental Health, the system of care framework aimed to address the rising concern about the poor and disorganized response to children and youth living with severe emotional disturbance (Winters & Metz, 2009). Within the system of care philosophy and framework, a wraparound approach or process is the most common service delivery method (Painter, 2012). The key goal of the process is to provide a coordinated continuum of care and services to "wrap" around youth and their families. By providing tailored services through an integrated case plan, service gaps are prevented with an aim of improving outcomes for children and reducing the need for out-of-home placement. Although not yet considered an evidence-based treatment, the effectiveness of wraparound services based on a meta-analysis of seven outcome studies showed promising results for improved school functioning and children's mental health (Suter & Bruns, 2009).

OUR CHILDREN SUCCEED INITIATIVE

The *Our Children Succeed Initiative* (OCSI) is an example of a system of care model that has been implemented in a collaborative of six counties in Northwest Minnesota. In 2006, after receiving a system of care grant from the Substance Abuse and Mental Health Services Administration's Comprehensive Community Mental Health Services for Children and their Families Program, the Northwest Minnesota Council of Collaboratives, a group of more than 50 different agencies in the six northwestern counties

of Kittson, Mahnomen, Marshall, Norman, Polk, and Red Lake, began the *Our Children Succeed Initiative*.

The *Our Children Succeed Initiative* parallels the identified goals of the system of care model, which are to increase the coordinated and comprehensive delivery of children's mental health services in a family-driven, youth-focused and culturally competent way. The OCSI is a partnership of children, youth, parents and caregivers who promote competent and coordinated services designed to enhance access to, and the effectiveness of, services for children and youth with social, emotional and behavioral concerns and their families in Northwestern Minnesota (Northwest

Counties Council of Collaboratives, 2012). Children and youth (aged 0-21) are referred by schools, mental health providers, social services staff, or caregivers.

Children enrolled in OCSI are assigned a care coordinator and a family partner; Evidence Based Prac-

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tices, such as Family Functional Therapy and Trauma Focused Cognitive Behavioral Therapy, are also used to support OCSI children and youth.

CURRENT STUDY

The main purpose of this study is to examine the associated effect of the Minnesota Northwest Counties' *Our Children Succeed Initiative* as it relates to child well-being for children who experienced out-of-home placement. The three main questions for this evaluation are:

1. What are the characteristics of children who receive services through Kittson, Marshall, Polk, Red Lake, Mahnomen, and Norman county social services and who experience out-of-home placement?
2. What is the associated effect of the *Our Children Succeed Initiative* on children's educational well-being as it pertains to out-of-home placement? Specifically, how do school attendance, school mobility, special education involvement, dropout and graduation rates, and academic achievement (measured via standardized test proficiency) change over time for children who are participating in the *Our Children Succeed Initiative* compared to a matched sample of their peers?
3. What is the associated effect of the *Our Children Succeed Initiative* on children's out-of-home placement experiences? Specifically, what do lengths of placements, restrictiveness of placement settings, re-entry rates, and placement stability look like for children participating in OCSI compared to a matched sample of their peers?

METHODS

Data Source

This study relied upon secondary data from the Minn-LInK project – a project that utilizes statewide administrative data from multiple agencies, including the Minnesota Departments of Human Services,

This study relied upon secondary data from the Minn-LInK project – a project that utilizes statewide administrative data from multiple agencies, including the Minnesota Departments of Human Services, Education, and Public Health, to answer questions about the impacts of policies, programs, and practice on the well-being of children in Minnesota.

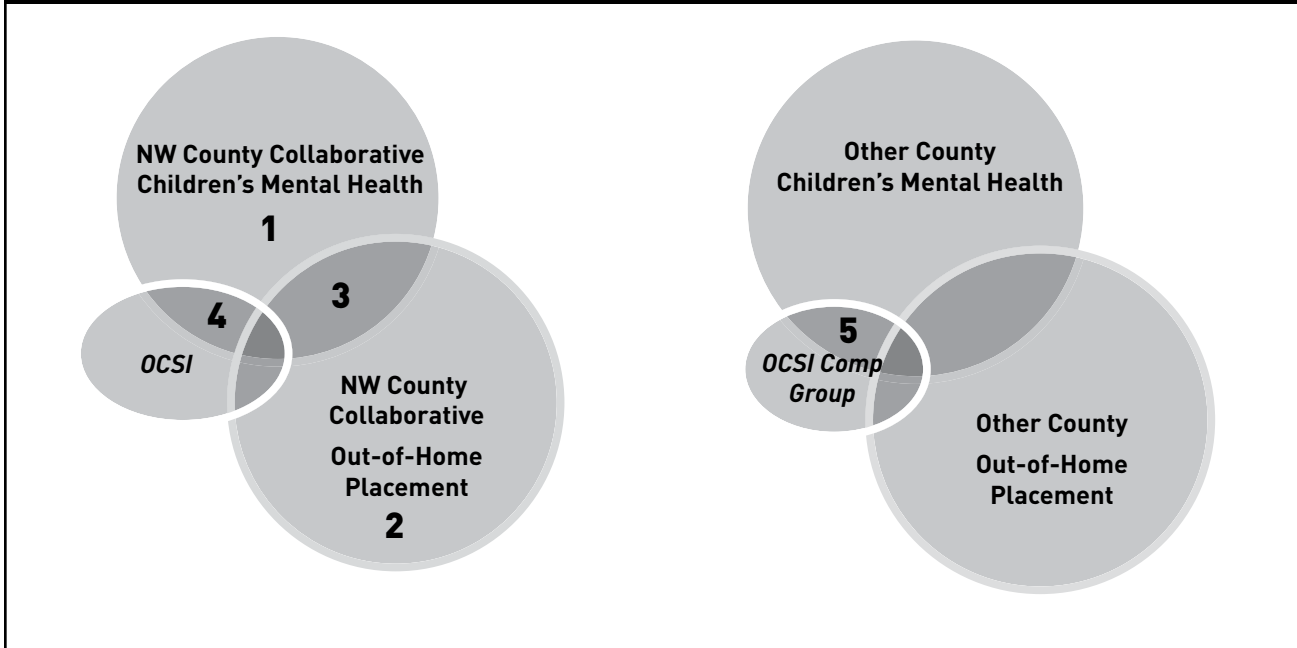
Education, and Public Health, to answer questions about the impacts of policies, programs, and practice on the well-being of children in Minnesota. For this study, data from the Minnesota Departments of Human Services (DHS) and Education (MDE) were used in accordance with data sharing agreements between the Minn-LInK project at the University of Minnesota and these State agencies. Additional data indicating the names and birthdates of children participating in the *Our Children Succeed Initiative* was supplied by Wilder Research (the primary evaluator for the initiative) through an additional data sharing agreement. Data-sharing agreements allowed for the use of identified data for the purpose of conducting research on families and children pertinent to this study. The University's Institutional Review Board approved the use of this secondary data for these purposes, and all identifiers were removed from the data file once cross-system matching was achieved (de-identification).

Group Membership

Five groups were created for the purposes of this study (as represented in Figure 1 below). Groups 1-3 were created using DHS data available through the Social Service Information System (SSIS); Group 4 was created by merging Our Children Succeed Initiative data with SSIS and MDE Minnesota Automated Reporting Student System (MARSS) data; and Group 5 was created by using SSIS and MDE data to develop a matched comparison to Group 4. The groups are as follows:

- **Group 1 (CMH)** - children who received Children's Mental Health services through Kittson, Marshall, Polk, Red Lake, Mahnomon, or Norman counties between July 1, 2005 and June 30, 2006 (n= 767).
- **Group 2 (OHP)** - children who experienced out-of-home placement in those same counties between July 1, 2005 and June 30, 2006 (n=339).
- **Group 3 (OHP & CMH)** - children who received Children's Mental Health services through Kittson, Marshall, Polk, Red Lake, Mahnomon, or Norman counties and experienced out-of-home placement between July 1, 2005 and June 30, 2006 (n=78)
- **Group 4 (OCSI)** - children who were enrolled in the NW Counties' *Our Children Succeed Initiative*. The vast majority of children were served by Kittson, Marshall, Polk, Red Lake, Mahnomon, or Norman county social services but a small proportion were served outside of the county system (15%). Because the current study focused on educational outcomes for youth, this group was restricted to only those children who were school age at the time of entry into the initiative and were eligible to take the Minnesota Comprehensive Assessment (MCA-II; n=67). See Sample section [below](#) for additional information on the formation of this group.
- **Group 5 (Comp)** - children whose demographic characteristics were similar to the children served by the *Our Children Succeed Initiative* (as described in the Comparison Group section [below](#); n=67)

**FIGURE 1.
GROUP MEMBERSHIP**



Data Linking

The creation of each group used in the current study required data linking across systems at the child level. Children's education records (from the Minnesota Departments of Education Minnesota Automated Reporting Student System [MARSS] and Minnesota Comprehensive Assessment [MCA II] database) were sequentially linked to data from the Minnesota Department of Human Services Social Services Information System (SSIS) and *Our Children Succeed Initiative* records. Registry Plus™ Link Plus (NCCDPHP, 2010), a probabilistic record matching software developed for matching cancer registry records at the Centers for Disease Control (CDC), was utilized for data linking purposes. Child first name, last name, and birthdate were included as matching variables.

OCSI SAMPLE (GROUP 4) CREATION

Information about 227 OCSI participants was linked to DHS and MDE databases using Link Plus (as previously described). Of the 227 total OCSI participants, 193 were of school age; these children's

records were linked with educational records of the 2006 and 2010 school years. Because the educational outcome analysis relied on data obtained from the Minnesota Comprehensive Assessment-II (MCA II) in 2006, the sample was restricted to children in grades 3-11 who were eligible to take the MCA-II. Academic achievement scores for each student (i.e., MCA-II scores) were added resulting in a Group 4 sample size of 67 children

COMPARISON GROUP (GROUP 5) CREATION

To examine the effect of the *Our Children Succeed Initiative* on educational and out-of-home placement outcomes, comparison groups were developed through propensity score matching. A propensity score is the probability of a child from the general population matching the characteristics of a child in OSCI group. By applying the propensity matching procedure, nine covariates (county subprogram, out-of-home placement experience, school district type, race/ethnicity, gender, special education service receipt, eligibility for free or reduced lunch, and MCA-II reading and math scores in 2006) were used to create the matched sample that comprised Group 5.

Educational Measures

MARSS data included comprehensive student data inclusive of both educational outcome measures (i.e., attendance, school mobility, special education status, dropout, graduation) as well as student characteristic measures (i.e., gender, race/ethnicity, grade, and eligibility for free or reduced lunch – an economic indicator). MCA II data included data from a high-stake statewide and compulsory test in Minnesota, which measures student levels of proficiency in math, reading, and science. MCA II assesses students in reading in grades 3 through 8 and grade 10; in math in grades 3 through 8 and grade 11; and in science in

School attendance contributes significantly to achievement and educational attainment.

grades 5, 8, and in the year in high school when students finish a life science course (MDE, 2011). The merged MARSS and MCA II data provided information about student attendance, school mobility, special education status, and MCA II math and reading achievement levels.

Attendance. School attendance contributes significantly to achievement and educational attainment. Attendance, or lack thereof, is also closely associated with involvement in child welfare, as students, aged five to eleven, who miss more than the allotted seven unexcused absences in Minnesota are required to be reported to child protective services (Maltreatment of Minors Act, 1993). Within MARSS, the attendance rate for each student was derived by totaling the Average Daily Attendance (ADA, the days the student actually attended) and dividing it by the total Average Daily Membership (ADM, the required days of enrollment) for each student. Use of this ratio as opposed to another measure of attendance allowed for comparisons of students across school districts whose school year lengths vary in Minnesota. The attendance ratio could range from .01 (very low, or almost no attendance) to 1.0 (perfect attendance).

School Mobility. School mobility is an important indicator in predicting academic attendance and achievement, as students who have high mobility may miss school and/or educational content with each move. Therefore, school mobility was calculated using the Status End code in MARSS, which includes a transfer indicator. The total number of school transfers was calculated for each student in a given school year.

Individualized Education Plan (IEP)/Special Education. An IEP is a written commitment of resources and a management tool that enables students with disabilities to receive needed special education and related services in a way that is appropriate to their unique learning needs (IDEA, 1997). In MARSS, the Special Education Evaluation Status code (1=yes, 0=no) was used to identify students receiving special education services via an IEP.

Dropout. As indicated at MARSS, dropout codes include: left school with/without election, marriage, expelled, pregnancy, withdrawal, social, financial, or family environmental reasons, unknown, no graduation, and attending a GED program. The proportion of students dropping out during the study time period year was created for the current study.

Graduation. MARSS data also includes information about student graduation. For the purposes of the current study, students who graduated during the school year were coded as 1. Graduation includes both students with an IEP who graduate and students who earn a traditional high school diploma. The graduation rate (number of students graduating during a given school year/number of students eligible for graduation based on grade level) was created for the current study.

MCA II: student achievement levels. A student's achievement level on the MCA-II falls into one of four categories: "Does Not Meet Standards," "Partially Meets Standards," "Meets Standards," and "Exceeds Standards." Among them, the "Meets Standards" and "Exceeds Standards" are considered proficient. Profi-

ciency levels are based on Vertical Scale Scores which are standardized scores ranging from 0-99; scores of 50 are considered proficient. In this study, vertical scale scores for MCA-II Math and Reading were used to demonstrate student achievement and considered as a key outcome.

Demographic characteristics. Demographic characteristics of each group were described using data provided in the MDE MARSS database, with the exception of service subprogram. MARSS data included gender, race/ethnicity (American Indian, Asian/Pacific Islander, Hispanic, Black, White, or Unknown), grade level, and eligibility for free or reduced lunch.

Social Service Measures

SSIS data was used to describe social service subprogram and out-of-home placement indicators. Out-of-home placement indicators focused on length of placement, restrictiveness of placement settings, re-entry rates, and placement stability.

Social Service Subprogram. Subprograms refer to areas of social service provision for families receiving public social services through the county in which they reside. For the current study, child involvement in the following subprograms was described: child welfare, child protective services, adolescent independent living skills, adoption/guardianship, child care, adult mental health, children's mental health, development disabilities, and community alternative care. For each category, the proportion of children involved in each subprogram was reported. As stated earlier, involvement in a social service subprogram was also used as a key variable for creating the matched comparison group.

Out-of-Home Placement (OHP). Several out-of-home placement variables were created for the current study. These variables were created to better understand differences in length of placements, restrictiveness of placement settings, re-entry rates,

and placement stability among children participating in OCSI and children not receiving this wraparound approach, as well as in the larger county structure. Variables were created using two different definitions of placement (Children's Bureau, 2006). A *placement episode* is defined as placement that occurs after

School mobility is an important indicator in predicting academic attendance and achievement, as students who have high mobility may miss school and/or educational content with each move.

removal of the child from his/her home. The episode is removal with one or more placement settings. *The placement setting* is the physical setting in which a child finds himself or herself during a placement episode. A new placement setting results when the foster care setting changes, for example, when a child moves from one foster family home to another or to a group home or institution. The placement episode ends with a permanency discharge (e.g., reunification with family, adoption, etc.). A discharge represents that point in time when the child is no longer in foster care under the care and responsibility or supervision of the State agency.

It is important to note that indicators of out-of-home placement were assessed to coincide with the academic year. For example, placement indicators for 2007 included those placements that ended between July 1, 2006 and June 30, 2007. The following out-of-home placement indicators were created:

- **Average number of placement episodes.** This indicator was created by summing the total number of placement episodes for a particular group and dividing that number by the total number of children in the group.

- **Average number of days per placement episode.** This indicator was created by summing the total number of days children in a particular group were in OHP and dividing that number by the total number of placement episodes children in the group experienced.
- **Average number of placement settings per placement episode.** This indicator was created by summing the total number of placement settings experienced by a particular group and dividing that number by the total number of placement episodes children in the group experienced.
- **Average number of days per placement setting.** This indicator was created by summing the total number of days children in a particular group were

in a placement setting and dividing that number by the total number of settings children in the group experienced. This ratio was used to describe the average number of days overall per placement setting as well as the average number of days in each placement setting type (e.g., family foster care, correctional facility, etc.)

- **Placement re-entry.** This indicator was created by dividing the total number of children who experienced placement re-entry (defined as entering into a placement episode within 12 months of being discharged from a previous placement episode) in a particular group by the total number of children in that group.



RESULTS

Descriptive analysis was first used to describe differences between the *Our Children Succeed Initiative* (OCSI) and comparison groups; chi-square and ANOVA tests were used when appropriate to investigate group differences. Table 1 provides descriptive information about the OCSI and comparison groups in Year 1 (2006). As can be seen in Table 1, the groups had slightly different representation based on demographic characteristics included in the study. In terms of gender, there were slightly more males in the OHP and OCSI groups than other groups; the CMH and comparison groups had slightly fewer males; and

Children in the OCSI group, on the other hand, were largely involved with Children’s Mental Health, followed by Child Welfare, and Child Protection; these children were not involved in any other subprograms.

the OHP & CMH group had the largest proportion of males. In regard to race/ethnicity, American Indians were overrepresented in the OHP, OHP & CMH, and comparison groups, as compared to the other two groups. In addition Black children were slightly overrepresented in the comparison group but absent from the OCSI group, Hispanic children were only represented in the OCSI and comparison groups. By design, all children in the CMH and OHP & CMH groups were involved in the Children’s Mental Health subprogram. Children in the OHP group were involved in a wide variety of subprograms, with the largest involvements in Child Protection, followed by Child Welfare and then Children’s Mental Health. Children in the OCSI group, on the other hand, were largely involved with



Children’s Mental Health, followed by Child Welfare, and Child Protection; these children were not involved in any other subprograms. The comparison group children were involved in Child Protection, Child Welfare, and to a lesser extent, Children’s Mental Health. In regard to age, the grade distribution of children was heavily weighted in middle school and early high school age groups, with the OCSI and Comparison groups having a slightly younger population due to the sampling criteria for these groups.

**TABLE 1.
GROUP CHARACTERISTICS**

	CMH (N=767)		OHP (N=339)		OHP & CMH (N=78)		OCSI (N=67)		Comparison (N=67)	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
Gender										
Male	369	(48.1)	199	(58.7)	51	(65.4)	37	(55.2)	32	(47.8)
Female	398	(51.9)	140	(41.3)	27	(34.6)	30	(44.8)	35	(52.2)
Total	767	(100)	339	(100)	78	(100)	67	(100)	67	(100)
Race/Ethnicity										
American Indian	109	(14.2)	111	(32.7)	13	(16.7)	15	(22.4)	15	(22.4)
Asian/Pacific Islander	5	(0.7)	2	(0.6)	1	(1.3)	1	(1.5)	0	(0)
Hispanic	0	(0.0)	0	(0.0)	0	(0.0)	6	(9.0)	1	(1.5)
Black	12	(1.6)	10	(2.9)	6	(7.7)	0	(0)	3	(4.5)
White	639	(83.3)	216	(63.7)	58	(74.4)	45	(67.2)	48	(71.6)
Unknown	2	(0.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Subprogram										
Child Welfare (General)	--	--	100	(29.5)	--	--	11	(16.4)	11	(16.4)
Child Protective Services	--	--	119	(35.1)	--	--	6	(9.0)	17	(25.4)
Adolescent Independent Living Skills (SELF)	--	--	2	(0.6)	--	--	0	(0.0)	0	(0.0)
Adoption/Guardianship	--	--	22	(6.5)	--	--	0	(0.0)	0	(0.0)
Child Care (General)	--	--			--	--	0	(0.0)	1	(1.5)
Adult Mental Health	--	--	2	(0.6)	--	--	0	(0.0)	1	(1.5)
Children's Mental Health	767	(100)	67	(19.8)	78	(100)	14	(20.9)	4	(6.0)
Developmental Disabilities (General)	--	--	26	(7.7)	--	--	0	(0.0)	2	(3.0)
Community Alternative Care - Adult	--	--	1	(0.3)	--	--	0	(0.0)	0	(0.0)
Not in Subprogram	--	--	0	(0.0)	--	--	36	(53.7)	31	(46.3)
Grade (K-12)										
Pre-K	9	(4.0)	18	(8)	0	(0.0)	0	(0.0)	0	(0.0)
Grade 1	7	(3.1)	11	(4.9)	2	(2.8)	0	(0.0)	0	(0.0)
Grade 2	9	(4.0)	8	(3.6)	1	(1.4)	0	(0.0)	0	(0.0)
Grade 3	12	(5.4)	6	(2.7)	1	(1.4)	8	(11.9)	11	(16.4)
Grade 4	23	(10.3)	10	(4.4)	2	(2.8)	10	(14.9)	10	(14.9)
Grade 5	13	(5.8)	9	(4.0)	2	(2.8)	4	(6.0)	10	(14.9)
Grade 6	22	(9.8)	10	(4.4)	3	(3.5)	16	(23.9)	9	(13.4)
Grade 7	17	(7.6)	11	(4.9)	4	(4.2)	9	(13.4)	8	(11.9)
Grade 8	26	(11.6)	28	(12.4)	9	(12.5)	11	(16.4)	9	(13.4)
Grade 9	26	(11.6)	38	(16.9)	14	(19.4)	0	(0.0)	0	(0.0)
Grade 10	28	(12.5)	27	(12.0)	17	(23.6)	7	(10.4)	6	(9.0)
Grade 11	23	(10.3)	31	(13.8)	11	(15.3)	2	(3.0)	3	(4.5)
Grade 12	9	(4.0)	18	(8.0)	6	(8.3)	0	(0.0)	0	(0.0)
Unknown	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(1.5)
Total (K-12)	224	(100)	225	(100)	72	(100)	67	(100)	67	(100)
Free/Reduced Lunch	163	(72.8)	160	71.1	45	(62.5)	58	(86.6)	59	(88.1)
IEP	105	(46.9)	111	49.3	43	(59.7)	37	(55.2)	32	(47.8)

In order to determine the associated effect of the Our Children Succeed Initiative on children's educational well-being as it pertains to out-of-home placement, the following indicators were measured in 2006 and again in 2010: attendance, school mobility, special education status, dropout and graduation rates, and MCA-II Reading and Math scores. In this analysis indicators were measured within the OCSI and Comparison group overall, as well as separately within each group for those youth experiencing out-of-home placement and those youth not experiencing out-of-home placement. However, statistical tests of significance were only utilized for overall group comparisons (i.e., comparisons between OCSI and Comparison group total columns in Table 3). It is also important to note that not all youth included in the current sample took the MCA-II tests in 2006 and 2010. Most often this was due to children not being eligible to take the test in 2010 (e.g., they were in a

grade in which the test was not administered, such as grade 9). Table 2 provides the total number of children who took each component of the MCA each year.

**TABLE 2
NUMBER OF STUDENTS TAKING MCA-II
IN 2006 AND 2010**

		OCSI			Comparison		
		OHP	Non-OHP	Total	OHP	Non OHP	Total
Reading	2006	24	32	56	33	26	59
	2010	11	16	27	10	9	19
Math	2006	26	28	54	32	21	53
	2010	12	10	22	16	5	21

Table 3 describes the educational outcomes of children participating in OCSI and children in the Comparison group. Results reveal that over time, children in both the OCSI and Comparison groups are

**TABLE 3.
EDUCATION OUTCOMES OF CHILDREN IN OCSI AND THE COMPARISON GROUP**

Indicator	Year	OCSI			Comparison		
		OHP	Non-OHP	Total	OHP	Non-OHP	Total
Attendance*	2006	92.2%	92.0%	92.1%	93.9%	91.8%	92.9%
	2010	82.2%	86.1%	84.2%	90.4%	87.8%	89.4%
School Mobility	2006	1.6	1.0	1.5	1.5	1.2	1.4
	2010	2.0	1.3	1.8	2.7	1.8	2.25
Special Education	2006	23 (74.2%)	14 (38.9%)	37 (55.2%)	21 (58.3%)	11 (35.5%)	32 (47.8%)
	2010	21 (80.8%)	16 (57.1%)	37 (68.5%)	18 (60%)	11 (55%)	29 (58%)
Dropout	2010	2 (6.5)	1 (2.8)	3 (4.5)	1 (2.8)	0 (0.0)	1 (1.5)
Graduation	2010	3 (33.3)	3 (60.0)	4 (50.0)	3 (60.0)	2 (50.0)	5 (55.6)
Reading**	2006	43.5 (17.2)	48.9 (15.9)	46.6 (16.5)	43.8 (14.4)	48.7 (16.9)	45.9 (15.6)
	2010	38.6 (10.3)	45.6 (10.0)	42.7 (10.6)	40.5 (15.4)	51.4 (14.1)	45.7 (15.4)
Math**	2006	42.5 (16.3)	43.4 (14.4)	43.0 (15.2)	39.5 (13.2)	40.3 (18.9)	39.8 (15.6)
	2010	32.8 (20.2)	35.9 (16.5)	34.2 (18.3)	28.1 (21.5)	46.0 (18.6)	32.4 (21.8)

Note. * $p < .05$, statistical difference between OCSI and Comparison group totals. **standard deviations are given in ().

faring worse educationally, as children are attending school at lower rates and experiencing higher school mobility. This pattern is also evident for MCA-II scores; children's proficiency on MCA-II tests of achievement generally falls over time, with a greater reduction in proficiency seen in regard to MCA-II math scores. The exception to this pattern is found in the Comparison group reading scores, which hold stable at both time points.

Within the OCSI group, children who have experienced out-of-home placement were more likely to experience school absence, dropout, and school mobility than children who did not experience out-of-home placement. And, children experiencing out-of-home placement were less likely to be proficient in MCA-II tests and graduate than their comparison group. Mixed results were seen **within the Comparison group** between children who experienced out-of-home placement and those that had not. As with the OCSI group, children in the Comparison group who experienced out-of-home placement demonstrated lower levels of proficiency on the MCA-II tests and higher rates of school mobility and dropouts. However, children in the Comparison group who experienced out-of-home placement were attending school at slightly higher rates than children who experienced out-of-home placement. Children in the Comparison group who experienced out-of-home placement had slightly higher graduation rates than children who had not experienced out-of-home placement.

In **comparing children's educational outcomes across the OCSI and Comparison groups**, it appears as though children in the Comparison group were performing differently from children in the OCSI group. That is, Comparison group children were attending school and graduating at slightly higher rates, and had less school mobility and lower dropout rates than OCSI children. Results of MCA-II tests of achievement reveal a mixed trend. OCSI children were more likely to be proficient on the MCA-II math test but less likely to be proficient on the MCA-II reading test than children in the Comparison group. However, it is important to note that the only difference in

educational outcomes that reached statistical significance between OCSI and Comparison group children was found in attendance.

In regard to **special education service utilization**, over time special education service utilization increased for both the OCSI and Comparison groups. Also, within each group children who experienced out-of-home placement had a much higher rate of special education service utilization than children who didn't experience out-of-home placement. However, the fact remains that children in the OCSI group utilized special education services at higher rates than children in the Comparison group.

In order to determine the associated effect of the Our Children Succeed Initiative on children's out-of-home placement experiences, lengths of placements, restrictiveness of placement settings, re-entry rates, and placement stability were assessed for children in OCSI and Comparison groups over time. In this analysis indicators were measured within the OHP, OHP & CMH, OCSI and Comparison groups. Indicators were also measured during specific years (i.e., in academic year 2006-2007 and in 2009-2010 to correspond to OCSI implementation) as well as for the entire duration of OCSI service provision that was available to support this study (i.e., 2006-2010).

As can be seen in Table 4, out-of-home placement experiences for children varied according to the group to which they belonged. In general, OCSI children had fewer and shorter placement episodes than children from any other group during the time OCSI was implemented. For example, OCSI children averaged 1.4 placement episodes and stayed in each placement approximately 11 months (340 days on average) during the four years that OCSI was implemented. Children in other groups experienced slightly more placement episodes (ranging from 1.5 to 1.8 episodes), which lasted between 14 and 20 months. However, OCSI children experienced the highest placement instability (3.5 settings per episode) of all children.

TABLE 4.
CHILD WELFARE OUTCOMES OF OCSI AND ITS COMPARISON

Indicator	OHP			OHP & CMH			OCSI			Comparison		
	2007 (N=135)	2010 (N=8)	Total* (N=267)	2007 (N=28)	2010 (N=3)	Total* (N=42)	2007 (N=5)	2010 (N=9)	Total* (N=23)	2007 (N=2)	2010 (N=5)	Total* (N=13)
Avg. # Placement Episodes per Person	1	1	1.8	1	1	1.5	1	1	1.4	3	3	1.8
Avg. # Days per Placement Episode	280	915.1	408.7	209.3	202.3	425.3	113	143.1	340	150.8	651.1	613.9
Avg. # Placement Settings per Placement Episode	1.6	1.6	2.2	1.8	1.3	2.7	2	1.4	3.5	1.5	1	2.8
Avg. # Days per Placement Setting (Overall)	178.4	686.3	181.9	114.9	151.7	158.8	56.5	99.1	97.6	100.6	651.1	220.6
Avg. # Days per Placement Setting Type**												
Pre-adoptive home - relative	687 (5) 3.9%		637 (6) 3.5%			0.0 (0) 0.0%			0.0 (0) 0.0%			0.0 (0) 0.0%
Pre-adoptive home - non-relative	277.3 (10) 3.2%		427.3 (16) 6.3%	204 (1) 2.5%		204 (1) 0.8%			21.0 (1) 0.2%			0.0 (0) 0.0%
Foster family home - relative	176.4 (31) 62.8%		166.8 (64) 9.8%			177.5 (3) 2.0%			80.3 (5) 3.6%			63.7 (3) 1.5%
Foster family home - non-relative	215.5 (91) 22.5%	1708.5 (2) 41.5%	241 (242) 53.4%	194.6 (16) 56.9%	240 (1) 39.5%	265.2 (58) 58.3%	200 (2) 70.8%	137.5 (2) 21.4%	173.8 (36) 55.8%	143 (5) 79.0%	650 (9) 100%	369.1 (31) 88.9%
Group home	91.5 (14) 1.5%	1890 (1) 22.9%	113.4 (53) 5.5%	86.9 (6) 6.3%		78.1 (23) 6.8%	29 (1) 5.1%		77.8 (9) 6.2%	27.3 (3) 9.1%		70.3 (13) 7.1%
Residential treatment center	126.7 (17) 2.5%	81 (1) 1.0%	142.9 (53) 6.9%	221.5 (7) 18.7%		182.7 (19) 13.2%	44 (1) 7.8%	142 (3) 33.1%	100.8 (12) 10.8%			40.1 (4) 1.2%
Supervised independent living			89.5 (2) 0.2%			0.0 (0) 0.0%			0.0 (0) 0.0%			0.0 (0) 0.0%
Foster home-corporate/shift staff	548 (1) 0.6%	808 (3) 29.4%	652.9 (11) 6.6%			747 (1) 2.8%			0.0 (0) 0.0%			0.0 (0) 0.0%
Juvenile correctional facility (non-secure, 12 or fewer children)	28.5 (16) 0.5%	105.7 (4) 5.1%	40 (60) 2.2%	7.6 (6) 0.6%	122.3 (3) 60.5%	48 (26) 4.7%	13.5 (4) 9.6%	110 (5) 42.7%	53.6 (21) 10.0%			28.0 (1) 0.2%
Juvenile correctional facility (non-secure, 13 or more children)	111.9 (17) 2.2%		99.6 (57) 5.2%	125.2 (9) 13.6%		134.3 (21) 10.7%			134.7 (10) 12.0%	108 (1) 11.9%		22 (6) 1.0%
Juvenile correctional facility (locked)	18.7 (10) 0.3%	1 (1) 0.1%	12.5 (36) 0.4%	20.7 (6) 1.4%		11.8 (14) 0.6%	19 (2) 6.7%	12.3 (3) 2.8%	12.3 (13) 1.4%			0.0 (0) 0.0%
% of Re-entering OHP within 12 mos.	7.4%	0	19.5%	14.2%	0	19%	0	11.1	31.0%	0	0	33.3%

Note. *N indicates the total number of children who had out-of-home placements that ended after 7/1/2005

** Average days given followed by (# of instances placement setting was used) and % time spent in each placement setting type

Table 4 also provides information on the number and length of placements experienced over time. The number of placement episodes children experienced remained stable over time. However, in almost all groups, the average number of days children spent in a placement episode increased and the number of placement settings children experienced decreased over time. This corresponds directly with an increase

Children in the OCSI and OHP & CMH groups spent the largest proportion of their time in a family or corporate foster care setting (59% and 63%, respectively) but also spent a significant portion of time in juvenile correctional facilities (24% and 16%, respectively) as well as a section of time in residential treatment centers (11% and 13%, respectively) and group homes (6% and 7%, respectively)

in the average number of days children spent in a particular placement setting over time. It is important to note, however, that the 2007 and 2010 out-of-home placement statistics represent a small number of children's experiences.

Children's placement settings also varied widely depending on the group to which they belonged. Across placement setting types, OCSI children averaged 98 days per placement setting (approximately three months) which was lower than all other groups. Children in other groups spent approximately five (OHP & CMH), six (OHP), and seven (Comparison) months in each placement setting. In terms of re-

strictiveness of placement settings, the OCSI group resembled the OHP & CMH group very closely and tended to have the most restrictive placements of the four groups (with the OHP group having the least restrictive placements followed by the Comparison group). Children in the OCSI and OHP & CMH groups spent the largest proportion of their time in a family or corporate foster care setting (59% and 63%, respectively) but also spent a significant portion of time in juvenile correctional facilities (24% and 16%, respectively) as well as a section of time in residential treatment centers (11% and 13%, respectively) and group homes (6% and 7%, respectively). Children in the OCSI and OHP & CMH groups spent little to no time in pre-adoptive placements (< 1%). On the other hand, children in the Comparison group spent a vast majority of time in family foster care (90%), with group homes (7%), residential treatment centers (1%), and juvenile correctional facilities (1%) accounting for the remainder of their time. Children in the OHP group also spent the majority of their time in family or corporate foster care (70%) but they were the only group to spend a significant proportion of time (10%) in pre-adoptive placements. These children

also spent some time in more restricted placement settings such as juvenile corrections facilities (8%), residential treatment centers (7%), and group homes (6%). Approximately one third of OCSI and Comparison group children experienced re-entry, whereas about one fifth of OHP & CMH and OHP children experienced re-entry.

Statistics about children's placement settings over time are also provided in Table 4. However, these numbers are provided for description only and should not be used for inferential analysis, as the samples of children were very small for some groups.

CONCLUSION

This study examined the *Our Children Succeed Initiative's* impact on educational well-being as it pertains to out-of-home placements by comparing the children enrolled in the Our Children Succeed Initiative with other comparable children on variables associated with educational well-being (e.g. attendance, dropout, special education), as well as out-of-home placement experiences. Findings from the study's three main questions provide insight into the characteristics of the children who reside in the six counties of the *Our Children Succeed Initiative*, including those who experience out-of-home care, as well as a closer look at children's educational well-being and experiences in out-of-home placements. Overall there were some important differences in child characteristics from the different samples. In the OHP, OCSI, as well as in the crossover OHP & CMH, there was a slightly higher representation of male children, as well as a small overrepresentation of African-American and a larger overrepresentation of American Indian children. This is not surprising given the demographic characteristics of children and families residing in the Northwestern counties and the population of children typically served by county social services (e.g., Children and Families, 2012).

The findings of children's educational well-being also showed differences among groups. The finding that the educational well-being of children enrolled in *Our Children Succeed Initiative* as well as children in the Comparison group (based on the identified measures) decreased over time requires further discussion. First, the decreasing attendance rates observed in both OCSI and Comparison groups are important to note. Over time both groups dropped below an average of 90% attendance. A ninety-percent threshold is one threshold researchers and policymakers use as a minimum attendance threshold (Larson, Zuel, & Swanson, 2009) though this 90% minimum threshold is relatively conservative. The researchers note, as an example, for a student in a district in which there are 180 required instructional days 90% attendance

translates to the student missing fewer than 21 days, or no more than four full weeks of school. Some researchers have begun to recognize degrees of attendance in assessing student outcomes with 95% as a recommended threshold for "A" attendance, 90% "B", 85% "C", and "D" equal to attendance 84% or lower

The finding that the educational well-being of children enrolled in *Our Children Succeed Initiative* as well as children in the Comparison group (based on the identified measures) decreased over time requires further discussion.

(Heistad, 2008). According to this metric, the average OCSI group (driven primarily by OCSI children who are placed out-of-home) attendance falls in the "D" range, with children who have not experienced out-of-home placement (in both the OCSI and Comparison groups) registering in the "C" range; the only group rising above this level is children in the Comparison group who have experienced out-of-home placement (who are at the "B" level). Second, school mobility increased for children in both the OCSI and Comparison groups, which may compound the negative effects of low attendance on school performance. Children who move between schools may experience instability and disruption in their learning, as schools may have some variability in terms of the sequencing of grade-level subject matter leading to students re-learning material that had already been introduced or missing information altogether. However, some of this mobility in schools may be due to placement in a correctional facility and may be unavoidable. Finally, it is important to take a deeper look at academic achievement (as measured by performance on the MCA-II). Both groups (as well as the placement subgroups within them) generally experienced decreased proficiency on MCA-II Reading and Math tests. The only exception to this was found in children in the Comparison group

who did not experience out-of-home placement. For these children math and reading scores slightly increased over time. Academic tests such as the MCA-II become more difficult over time, as they become more comprehensive in nature as children progress in grade level. This is particularly evident in reading ability, as reading proficiency builds upon earlier developed skills; poor reading skills also impact other academic areas, such as math functioning. Decreased

Evidence suggests that the children's involvement in the juvenile justice system directly impacts educational involvement as well as children's stability

proficiency has been demonstrated on a state-wide basis in Minnesota for children experiencing out-of-home placement, so the results of this study are not surprising (Piescher, Hong & LaLiberte, 2012). However, average scores for all groups with the exception of the Comparison group reading scores (51.4 in 2010) fell below the 50% cutoff for demonstrated proficiency. If children are not able to pass these standardized tests of proficiency their graduation may be inhibited. And, in this study (low) graduation rates of 33-60% were evident.

Children's out-of-home placement outcomes also varied by their group membership. Children in the OHP group experienced moderate placement stability and the least restrictive placements of any other groups. Children in the OCSI group experienced the fewest placement episodes, and the shortest lengths of placements than children in any other group. Children in the OCSI and OHP & CMH groups had similar experiences to one another, in terms of experiencing more restrictive placement settings; however, the OCSI group had slightly more placement instability than the OHP & CMH group (3.5 vs. 2.7 placement settings per episode, respectively). Children in the

Comparison group experienced less restrictive-ness in regard to placement settings than the OCSI group. Findings of this study suggest that although the OCSI group of children experienced more restrictive placements than other groups, they had fewer and shorter placements. A system of care approach as implemented by *Our Children Succeed Initiative* which may facilitate appropriate referrals to a variety of placements (including correctional facilities) and may allow a step-down approach to be used in out-of-home placement settings. Therefore, placements for this group may appear more unstable. However, it may be that this approach is assisting in the overall and long-term well-being of those placed children by tailoring the out-of-home placement experience to better meet their needs. In addition, it is important to note that the Comparison group used in this study is not a control group; the group's similarities are limited to only the variables that were used

based on the data available to match them. Looking at the out-of-home placement settings of youth across the groups reveals that children in the OCSI group may have special needs that require increased use of juvenile correctional facilities (a highly restrictive placement setting) that are not apparent in the other groups. The use of these types of placement settings may also contribute to placement instability, as these types of placements are typically time-limited placements, thus increasing the number of placements per episode. Moreover, when considering that some children spent most of the year in a juvenile justice placement, these findings point very clearly to the profound relationship between the juvenile justice system and children enrolled in the *Our Children Succeed Initiative*. And finally, evidence suggests that the children's involvement in the juvenile justice system directly impacts educational involvement as well as children's stability (Leone & Weinberg, 2010). Again, this is an indication of the high level of need for the *Our Children Succeed Initiative* group as well as the need for further analysis of how juvenile justice involvement impacts the relationship between children's out of home placement and well educational well-being.

Limitations

There are several limitations to this study. The data sets used for this study consisted of educational data from the Department of Education, social service utilization data from the Department of Human Services, and data from the *Our Children Succeed Initiative*. The use of administrative data limits the type and availability of data. In addition, the data used was at the child level, limiting the ability to look at associations with parent level, as well as system level variables. Another factor that limits the analysis of the study is the lack of juvenile justice data for the children and youth in the *Our Children Succeed Initiative* both when creating the comparison group as well as being able to deepen the overall analysis of the findings. Anecdotally from *Our Children Succeed Initiative* staff, this gap is significant due to high levels of juvenile justice participation for the children and youth they serve.

Future Directions

The results of this study provide a baseline for the *Our Children Succeed Initiative* to develop a more comprehensive understanding of the children they serve in relation to a relatively comparable (though slightly less-risky) group of children in Minnesota counties. However, due to the limitations of this study outlined above, further evaluation and/or analysis may be warranted. For example, further analysis of data regarding those children who are doing well versus those children who are struggling with their educational outcomes may be conducted to provide information about what improvements or enhancements to the current *Our Children Succeed Initiative* could be made to better support children's educational well-being. Additional evaluations that take children's juvenile justice involvement into consideration are also warranted.

The implications for this study are several. The children enrolled in the *Our Children Succeed Initiative* are clearly at risk and experience multiple challenges, such as the number and length of juvenile justice facility placements. Therefore, there is the need for

ongoing vigilance in providing coordinated care, with high levels of efficient and effective communica-

In order to provide the network of emotional, social and behavioral care required to accommodate the needs of the children and families the OCSI serves, increased training and cross-training of systems must continue to be a top priority for system of care communities, such as the *Our Children Succeed Initiative*.

tion across the range of multiple systems engaging these children and their families. In order to provide the network of emotional, social and behavioral care required to accommodate the needs of the children and families the OCSI serves, increased training and cross-training of systems must continue to be a top priority for system of care communities, such as the *Our Children Succeed Initiative*. The inclusion and examination of system level variables such as quality of schools where children are attending could also be included in the analysis of children's educational well-being to be able to more fully comprehend the complex issues at hand when examining the impact of system of care communities on out-of-home placements and educational well-being. Lastly, given the high rates of school mobility, dropouts, and placement disruptions, paying particular attention to educational outcomes and providing coordinated care with high levels of efficient and effective communication across the range of multiple systems engaging children and their families is of utmost importance. As children who move between schools may experience instability and disruption in their learning, coordinated services and effective communication could be helpful in ensuring a continuity of educational services and in improving academic achievement.

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