# Chapin Hall Issue Brief

Policy research that benefits children, families, and their communities

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# Illinois Families and Their Use of Multiple Service Systems By Robert M. Goerge, Cheryl Smithgall, Roopa Seshadri, Peter Ballard

#### Introduction

Illinois state agencies finance and administer services to the neediest citizens in the state. From foster care for abused and neglected children to psychiatric care to management of prisons to long-term care of the elderly, the state is charged to provide services for those who struggle to care for themselves. These programs and services comprised 85 percent of the state's \$50 billion FY 2009 annual budget.

Although some Illinois human service agencies do have data that are linked across programs, that data is seldom used to discern patterns that show whether and how populations are served by multiple programs. On the individual level, one person may have more than one problem or need and thus use more than one service from more than one public agency or service system. Within families, multiple individuals may be served by a number of programs and systems. To the extent that both individual and family overlap occurs, resources may be concentrated among a small percentage of families. This overlap of needs and service delivery has significant implications for the overall state budget and for how services might be organized and provided more efficiently and effectively.

The data needed to assess the amount of service overlap within and among Illinois families exist, but they are spread across different agencies and programs and are not in a format that allows for comprehensive or efficient analysis across agencies and systems. State leaders are only able to see the people receiving services through individual program perspectives and thus are lacking a more comprehensive picture of the service use of these families. This has four primary consequences:

- Services tend to focus on individuals instead of families as a unit.
- Agencies tend to treat all of the people they serve with their own services and programs, not with coordinated approaches across agencies and systems.
- Agencies have great difficulty tracking how services needs and costs change over time.
- State and local agencies primarily respond to crises defined by single problems happening at a point in time. There can be comparatively little focus on prevention and early intervention around future problems.

The State of Illinois and Chapin Hall are working together on a study to identify the numbers and characteristics of these families, whom we term *multi-*

system families—families that use services from more than one agency or service system. This information should help state and agency officials better understand the distribution of needs and service use among Illinois families and help with more efficient deployment of resources. This issue brief provides some preliminary findings from the study. First, we explain our approach to identifying the study population and the sources of data used for the study. Next, we explore the degree to which service overlap occurs, the costs of some of this service overlap, and which services tend to be needed by the same families. We conclude by mapping out some future directions for data development and analysis.

# **Approach to the Analyses**

In order to identify the degree to which families used multiple services, we face two challenges—associating families with the range of services used and identifying a family unit from state agency records. The study population includes all families who have been Illinois Department of Children and Family Services (IDCFS) cases (i.e., any member of the family has had a substantiated case of abuse or neglect) and a subset of families with Illinois Department of Human Services (IDHS) cases (e.g., has received TANF payments or food stamps). IDHS cases were selected

if they included a woman aged 18–45 years who had received food stamps between January 1, 2007 and December 31, 2008.

With regard to defining a family unit, we had to develop a way to include individuals that were part of the same unit of family activity. In some cases, this may include more individuals than parents and their children, e.g., grandparents, aunts, and uncles. The intent of the IDHS criteria is to select women who are more likely to have a family and to be a recent recipient of public assistance. Families were first constructed using identifiers from IDHS and IDCFS separately. Cases with members in common were combined to form one family. Next, IDHS and IDCFS families that shared members were combined to form larger family units. This resulted in 502,165 families with an average of 5.9 and a median of 4 members per family. Because women are more often the custodial caregivers, and are often unmarried, adult males tend to be underrepresented in the databases of these two public systems, and thus in these analyses as well.

This study focused on five important domains: foster care, mental illness in adults and emotional disorders in children, substance abuse, adult incarceration, and juvenile incarceration. The agencies that provide services in each of these domains and available data are presented in Table  $1^1$ .

Table 1 Data Sources for the Services Analyzed in this Study				
Service	Data Source	Agency	Dates	
Mental health care	Medicaid paid claims	Healthcare & Family Services	1994–2008	
Substance abuse treatment	Medicaid paid claims	Healthcare & Family Services	1994–2008	
Foster care	CYCIS	Children & Family Services	1977–2008	
Adult incarceration	Adult Admissions and Exits	Corrections	1990–2008	
Juvenile incarceration	Juvenile Admissions and Exits	Corrections	1993–2008	

<sup>&</sup>lt;sup>1</sup> Mental health and substance abuse services not financed through Medicaid are not included.

Table 2 Number and the column percents of families who receive each type of service*				
Service	All Families (n=502,165)	Single-System Families (n=171,368)	Multi-System Families (n=114,355)	
Adult incarceration	56,649 (11%)	8,406 (5%)	48,243 (42%)	
Juvenile incarceration	8,564 (2%)	366 (<1%)	8,198 (7%)	
Mental health	220,878 (44%)	113,321 (66%)	107,577 (94%)	
Substance abuse	72,161 (14%)	3,675 (2%)	68,468 (60%)	
Foster care	106,784 (21%)	45,599 (27%)	61,185 (53%)	

<sup>\*</sup>The total percent in the "All Families" column is less than 100% because some families have no problems. The total percent in the "Multi-System Families" column is greater than 100% because some families receive multiple services.

# What Did the Analyses Show?

The outcomes for each of the five service domains were aggregated at the family level so that a family was counted as having received a service if it had at least one member that had at least one instance of the service. Of the families in our study population, 43 percent received none of the five services. About one-third (34%) used just one service. Statewide, 23 percent of families had one or more individuals who used two or more services, a proportion that varied in different sections of the state, ranging from 14 percent to 32 percent across Illinois counties. Table 2 presents the percent of families in the study that had contact with the various service agencies. As mentioned above, those that have contact with more than one service system are those we call multi-system families. A multi-system family may have had multiple members receiving different services, or one member receiving multiple services, or multiple members receiving multiple services. Slightly more than half of the multisystem families received services from two agencies, while slightly fewer than half received services from three or more. When the numbers of problems each

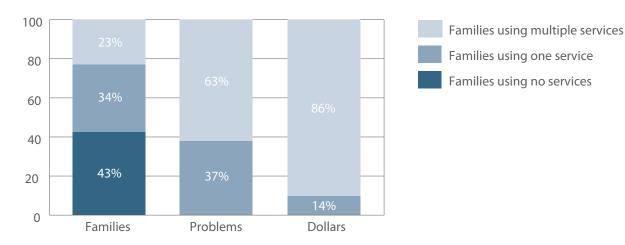
family had (which can range from 0-5) are summed, the multi-system families account for 63 percent of the problems for which the systems provide services.

According to the U.S. Census Bureau 2007 American Community Survey, there were 1,659,398 households with children in Illinois. This study found that 114,355 families were multi-system families. Although this is a rough comparison, it indicates that 1 in every 15 Illinois families (6.9%) is a multi-system family.

#### **Service Costs**

To determine costs, Medicaid claims data were used for health care costs. For adult and juvenile corrections and foster care, the number of days spent in each system was multiplied by an estimate of cost per person per day. The per diem costs were \$60 for adult corrections, \$236 for juvenile corrections and \$25 for foster care. We found that the multi-system families accounted for 86 percent of resources spent by the agencies over the duration of available data for the families in the study (Figure 1).

Figure 1 Few Families with Multiple Needs Use Most Service Resources



# What Are the Most Common **Combinations of Services Used?**

Families that received mental health treatment were a large proportion of the families who received services. Of the 285,722 families who received at least one service, 78 percent received mental health treatment, either in isolation or as one of multiple services, and 113,321 (40%) received only mental health treatment.

The most common combination of services used was mental health services and substance abuse treatment, with 25 percent of the multi-system families in this category. The next most common combination of services was seen in those families with both foster care and mental health service receipt; these families represent 18 percent of all multi-system families.

Juvenile incarceration, adult incarceration, and substance abuse were the services or system contacts least likely to exist in isolation in families—that is, families who confronted these problems confronted others as well. For example:

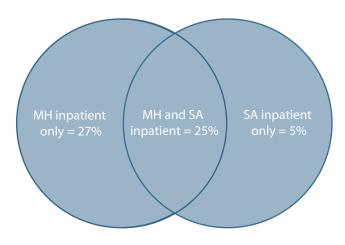
- Ninety-six percent of families with juvenile justice incarceration also received other services.
- Eighty-five percent of families with adult incarceration received other services.
- Ninety-five percent of families with members who received substance abuse treatment also received other services.

Although foster care was more often the sole service extended to a family, 58 percent of families who experienced foster care also received other services.

### **Inpatient Hospitalization for Mental Health** and Substance Abuse

Nearly 94 percent of all multi-system families received mental health services. Fifty-seven percent of multisystem families experienced either an inpatient hospitalization for mental illness or substance abuse treatment. Figure 2 shows the co-incidence of mental health and substance abuse-related inpatient stays among those families. Of the families who have experienced an inpatient stay for one of the two reasons, 75 percent have also had a substantiated investigation of abuse or neglect.

Figure 2 Co-incidence of Mental Health (MH) and Substance Abuse (SA) Inpatient Stays



#### **Adult and Juvenile Incarceration**

Sixty-eight percent of multi-system families with members who experienced juvenile corrections also experienced adult corrections, whereas about 40 percent of families without juvenile correction experience have had adult correctional experience. On the other hand, 11 percent of multi-system families with adult correctional experience have juvenile correctional experience, while 4 percent of families without adult correctional experience have juvenile correctional experience.

## **Abuse and Neglect Reports and Injuries Due** to Violence

We also looked at the incidence of substantiated abuse and neglect investigations among all multi-system

families. We found that 73 percent of them had a substantiated investigation. One would expect a much higher percentage of those families who had foster care cases would have had a substantiated investigation and that is the case, at 83 percent. However, one would expect many fewer of the multi-system families who did not experience foster care to have had no substantiated investigations. However, 63 percent of these multisystem families have had a substantiated investigation of abuse or neglect.

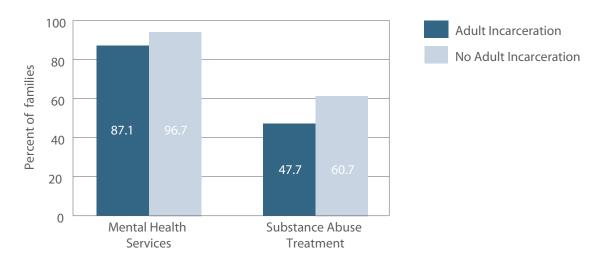
Of all of the multi-system families, nearly half have a member who experienced an injury likely due to maltreatment for which they received health care reimbursed by Medicaid. Eight-four percent of multisystem families had either a substantiated report of abuse or neglect or an injury due to violence.

# **Mental Health Service, Substance Abuse Treatment, and Adult Corrections**

Multi-system families that have members who have been in adult corrections are less likely to have family members who have received mental health services or substance abuse treatment of any kind. As Figure 3 shows:

- Eighty-seven percent of families with adult corrections experience also experienced outpatient mental health care, compared to 97 percent of those families without adult corrections experience.
- Nearly forty-eight percent of families with adult corrections experience also received outpatient substance abuse treatment, compared to 61 percent of those families without adult corrections experience.

Figure 3
Families without an adult who was incarcerated receive more mental health services and substance abuse treatments



# Geographical Distribution of Multi-System Families and Children in Chicago

Multi-system families and children in multi-system families were largely concentrated in the west and south neighborhoods of Chicago. Englewood, Washington Park, West Garfield Park, East Garfield Park and North Lawndale had the highest rates, with over 50 percent of the neighborhood children in multi-system families. Fewer than 5 percent of children were in multi-system families in ten communities, with Edison Park, Forest Glen, and Norwood Park with the lowest rates.

#### **Directions for Future Research**

The data presented here, though provocative, represent only a beginning. Much work remains to be done as we attempt to gain a more complete understanding of the dynamics of service use in Illinois. For the existing cohort, we plan on including additional program and service use including use of the Food Stamp Program,

TANF, Medicaid, and WIC; assets such as employment, child support, and housing support; and other problems such as long-term care and chronic conditions (for example, asthma, hypertension, diabetes). This will allow us to obtain a more comprehensive picture of the resources utilized. In the analyses so far, we have only looked at the incidence of service use. We will extend this to analyzing the magnitude of service use both in the number of family members who have contact with a system, and the number of repeat contacts an individual has with a system. We will also investigate any longitudinal patterns and trajectories that might shed light on potential connections among services.

These investigations represent a significant advance, both in terms of understanding the complex needs of the state's most troubled families, and in terms of the resources needed to meet their needs. It is more important than ever that state resources be deployed efficiently, economically, and effectively. This type of analysis can be of substantial use to government agencies as they allocate resources—both financial and service-oriented—throughout the state.

# ChapinHall at the University of Chicago

Established in 1985, Chapin Hall is an independent policy research center whose mission is to build knowledge that improves policies and programs for children and youth, families, and their communities.

Chapin Hall's areas of research include child maltreatment prevention, child welfare systems and foster care, youth justice, schools and their connections with social services and community organizations, early childhood initiatives, community change initiatives, workforce development, out-of-school time initiatives, economic supports for families, and child well-being indicators.

#### **Recommended Citation**

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#### **Related Publications**

Smithgall, C., Jarpe-Ratner, E., Yang, D., DeCoursey, J., Brooks, L., & Goerge, R. (2009). Family Assessment in Child Welfare: The Illinois DCFS Integrated Assessment Program in Policy and Practice. Chicago: Chapin Hall at the University of Chicago.

Goerge, R., Dilts, J., Yang, D., Wasserman. M., & Clary, A. (2007). Chicago Children and Youth 1990–2010: Changing Population Trends and Their Implications for Services. Chicago: Chapin Hall at the University of Chicago.

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