October 23, 2014

Office of Children's Mental Health

Recommendation: *Integrated Data System*

October 2014

Background

The Office of Children's Mental Health (OCMH) is designed by state statute to "study and recommend ways, and coordinate initiatives, to improve the integration across state agencies of the mental health services provided to children and monitor the performance of programs that provide those services" (s.51.025(1)). Fulfilling this mission requires answering questions, such as:

- What mental health services are children receiving?
- Where do children receive services? (e.g., schools, private providers, the county, psychiatric facilities, correctional facilities, etc.)
- Do children receive more than one type of service at a time? If so, is there coordination across systems?
- Do services improve outcomes?
- Which children do best in which types of programs?
- Is the quality or extent of services markedly different depending on where in the state a child lives?
- Is there good coordination between child- and adult-serving systems for transition age youth?

Most of these questions cannot be fully addressed through existing data systems. Without a comprehensive view of how children are performing in different areas of their lives (e.g., school, law enforcement and treatment), the state lacks the essential information necessary to wisely invest in child-serving programs and systems.

Other states and the Federal government have encountered this type of problem when trying to assess the effectiveness and efficiency of their services. At the federal level, Rep. Paul Ryan recently authored a document which strongly recommended data integration as "critical" to understanding which programs work and how they could be improved.[1] With regard to mental health specifically, both the Department of Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA) and the Institute of Medicine (IOM) have been recommending data integration for several years in order to better evaluate programs and ultimately improve services and outcomes for patients and their families.

The solution, which has been long-standing in some states (IL, MI, IN, FL, WA, NC, SC) and metropolitan areas, is to create an integrated data system. Integrated data systems take existing records from a number of different government agencies and match them in order to provide a

[1] Ryan, Rep. Paul. "Expanding Opportunity in America: A Discussion Draft from the House Budget Committee." Washington, D.C., July 24, 2014, p. 67.

complete view of the individuals and families being served leading to answers to our core questions.

OCMH's Approach to Data Integration

In speaking with national experts on data integration, the OCMH appears to be well situated to successfully integrate data on children's social and emotional well-being. The approach recommended by experts and other data-integration states is to:

- pilot an integrated data system (e.g., DHS, DOC, DPI and DCF data)
- demonstrate the added value of integrated data
- expand to include other systems (e.g., DWD and DOT)

Over the course of the next budget cycle, OCMH proposes to create the infrastructure for this initial data integration effort, and begin showing the data-source agencies (e.g., DCF, DHS, DOC, DPI) the value of this combined dataset. Once a demand has been established for an integrated data system, we anticipate that agencies will become more willing—and even eager—to expand the system. OCMH is actively working with DHS's IT team-- and is reaching out to leadership across state departments—to ensure as much as possible that the system OCMH puts into place will be capable of scaling up, and/or be capable of linking with other, similar initiatives. The money outlined for data integration in this budget will allow for an initial feasibility assessment, the creation of the essential data integration architecture, and the availability of integrated data from several sources.

Relationship to Other Wisconsin Data Efforts

The OCMH is aware that other, complementary data integration efforts are either planned or underway within different state agencies. These efforts are similar in nature to OCMH's request, but distinct and not duplicative. Below is a list of other data integration efforts and their focus areas:

- Medicaid Information Technology Architecture (MITA) 3.0: A federal initiative aimed at integrating information systems across Medicaid programs. This process is intended to produce a system that integrates Medicaid data. Having an integrated Medicaid system will be incredibly useful for many actors, including the Office of Children's Mental Health. However, the Medicaid system will not incorporate other important data, such as school discipline and performance, juvenile justice information, or participation in non-Medicaid mental health programs such as Coordinated Services Teams.
- STAR: DOA is overseeing the STAR initiative. STAR is aimed at integrating personnel and human resources information across state agencies, so that there can be an integrated view of state employees. The STAR project does not integrate data on recipients of state services.
- Race To The Top-Early Childhood Longitudinal Data System (RTTT EC-LDS). DCF has received federal funds to construct an integrated database designed to track early childhood factors surrounding school readiness. The OCMH sees clear parallels between our charge and the work of the EC-LDS however the EC-LDS team has decided to focus

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their efforts on integrating data on early childcare programs (e.g., creating an integrated YoungStar data system). An integrated YoungStar system will be a helpful step towards developing a 360 degree view of children. However, the EC-LDS will not extend beyond YoungStar daycare settings to track children's interactions with other systems.

In sum, OCMH's data integration request is unique in that it is the only attempt to develop a 360 degree view of children and families from available state data systems. At the same time, in a broad sense our effort complements other state efforts to integrate various components of data systems.

Steps for Developing an Integrated Data System

In order to develop a functional integrated data system around children's social and emotional wellbeing, the OCMH requires both an addition to state statutes and financial resources.

Statutory Changes: The states that have had the most success making use of their integrated data systems have supportive statutes in place which authorize the data integration entity to collect data and authorize other state agencies to share their data. Wisconsin already has legislation authorizing data sharing to specific agencies for specific purposes, e.g. s51.30.4. This type of language could be extended to all the agencies that would provide information into the system, e.g. DOC, DPI, DCF and DHS.

Supportive statutory language helps the primary data collection agencies (e.g., DCF, DHS) feel comfortable submitting their data to the integrated system. The statute would need to be crafted in such a way that it acknowledges:

- the central role of the data collection agency as the current and future owners of the data
- the OCMH's responsibility for complying with applicable state and federal laws

Budget Options:

Option 1: $1,347,620

a. First two years of a sustained data integration effort (BITS data warehouse): **$748,800 in year 1; $580,320 in year 2.** The costs are based on labor from DHS's Bureau of Information Technology, which has staff costs at $90/hour

i. Year 1: $748,800

1. One Project Manager: 100%
2. Two Software Developers: 100%
3. One Software Tester: 50%
4. One Data Warehouse Architect: 50%

ii. Year 2: $580,320

1. One Project Manager: 70%
2. Two Software Developers: 70%
3. One Software Tester: 50%
4. One Data Warehouse Architect: 50%

b. Statistical software for complex data analysis of the integrated data by OCMH's Research Analyst: **$7,500 annually**

c. Presentation software for an interactive dashboard to continually display results of the analysis: **$11,000 annually**

Option 2: $86,000

a. In the absence of a comprehensive data integration effort, funds would be used to contract out stand-alone, fuzzy matching across two or three different data files (e.g., foster care, mental health, and school expulsions). This type of analysis would allow us to see how much overlap likely exists between those populations at one point in time. It would not create the infrastructure to allow for continued analysis going forward. While it would show the likely magnitude of the overlap between the two groups (e.g., an estimated 10% of kids receiving county mental health services receive county-based mental health services), it wouldn't identify individuals within each system, so more in-depth analysis of what other services or factors impacted someone's mental health and foster care records would be unavailable. In other words, we couldn't look at how that 10% of kids respond to mental health treatment vs. their peers who are not in foster care: **$25,000 annually**

b. Statistical software for complex data analysis: **$7,500 annually**

c. Presentation software for an interactive dashboard to continually display results of the analysis: **$11,000 annually**