March 2016

Collaborative Management Program Evaluation

Evaluation and Project Plan

Fiscal Year 2016

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Collaborative Management Program Evaluation
Evaluation and Project Plan

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1. THE COLLABORATIVE MANAGEMENT PROGRAM

In 2004, the Colorado General Assembly passed House Bill 04-1451 (referred to as HB 1451) to establish collaborative management programs that would improve outcomes for children, youth, and families involved with multiple agencies at the county level. Specifically, the General Assembly determined that the "development of a uniform system of collaborative management is necessary for agencies at the state and county levels to effectively and efficiently collaborate to share resources or to manage and integrate the treatment and services provided to children and families who benefit from multi-agency services."[1] The legislative intent of HB 1451 was to address the increasing number of families served by more than one agency or system (e.g., juvenile justice, child welfare, mental health, education), which has placed significant demands on agencies' resources.[2] The resulting Collaborative Management Program (CMP) is designed to improve both the quality and cost-effectiveness of interventions for Colorado children, youth, and families involved with multiple governmental programs and community agencies stemming from contact with health, education, child welfare, and juvenile justice systems.

The legislation reflects a long history of system reform in Colorado based on Systems of Care principles. Core elements include community collaboration, family involvement in service planning and delivery, and culturally competent services tailored to the unique needs of different populations. These elements are used to engage stakeholders outside state and local government in consensus-oriented efforts to manage public resources and collectively solve problems. In part, community collaboration has become a hallmark of social services reform in Colorado due to research indicating its effectiveness in engaging diverse disciplines to address issues that have multiple causes and solutions.[3]

The overall objective of the initiative is to improve outcomes for multi-system involved children, youth and families through cross-system service planning and coordination. Research has demonstrated that these collaborative practices yield important benefits[4] including:

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[1] Colorado Revised Statute, Title 24, Article 1.9. (2010). Retrieved from http://www.lexisnexis.com/hottopics/Colorado

[2] Goerge, R. M., Smithgall, C., Seshadri, R., & Ballard, P. (2010). Illinois families and their use of multiple service systems. *Chapin Hall Issue Brief.*

[3] U.S. Department of Health and Human Services. (2010). *Guiding principles of systems of care*. Retrieved June 1st, 2010 from http://www.childwelfare.gov/pubs/soc/socc.cfm.

[4] California Department of Education. (2007). *Handbook on developing and evaluating interagency collaboration in early childhood special education programs*. Retrieved June 1st, 2010 from http://www.cde.ca.gov/sp/se/fp/documents/eciacolbrtn.pdf.

increased probability of improvement in child, youth, and family outcomes; maximization of available resources for the provision of services; increased coordination within and among service delivery systems; and shared responsibility across systems and service providers.

The specific goals of the legislation are as follows:

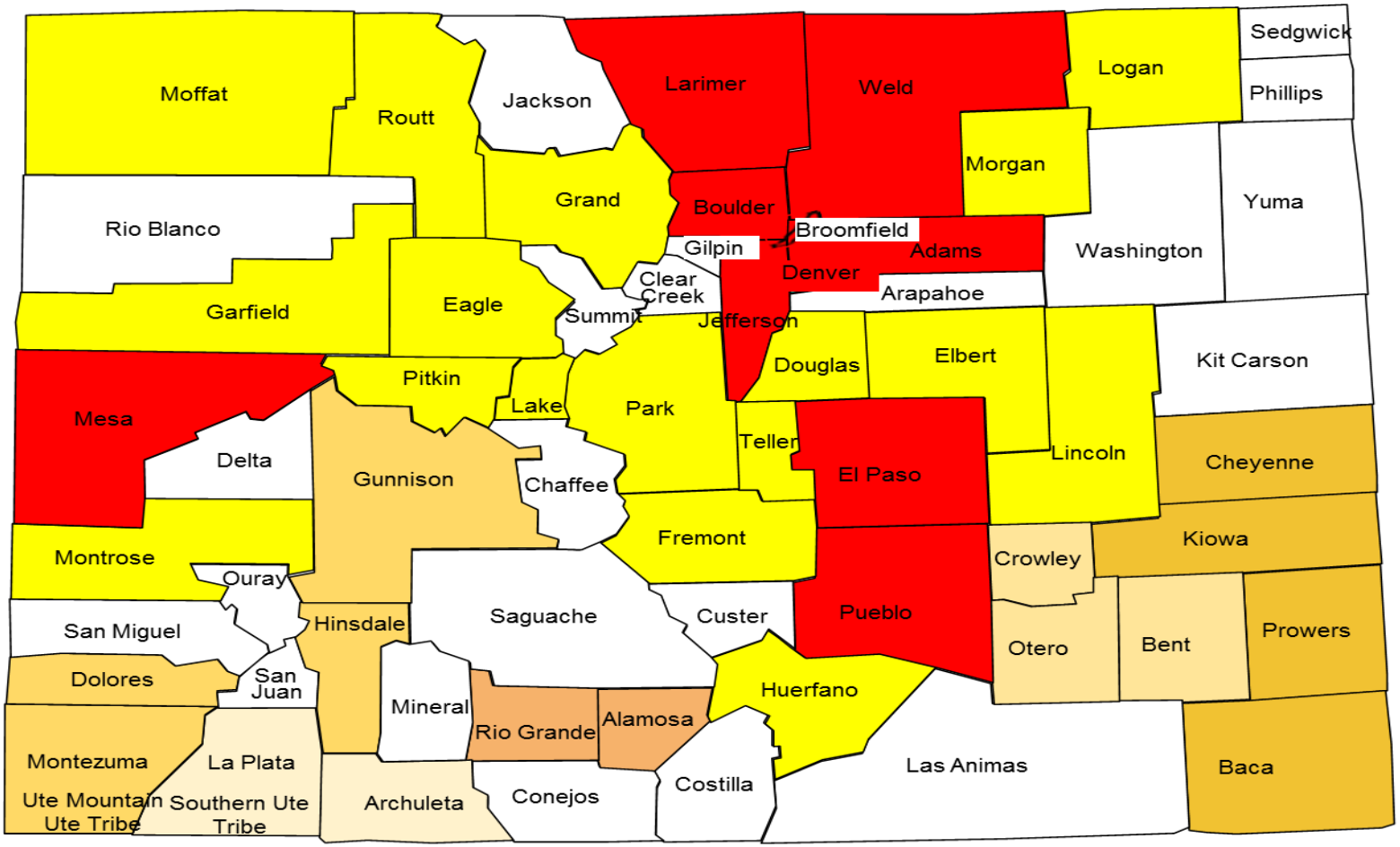
1. Develop a more uniform system of collaborative management that includes the input, expertise, and active participation of parent advocacy or family advocacy organizations.
2. Reduce duplication and eliminate fragmentation of services provided to children or families who would benefit from integrated multi-agency services.
3. Increase the quality, appropriateness, and effectiveness of services delivered to children or families who would benefit from integrated multi-agency services.
4. Encourage cost sharing among service providers.
5. Lead to better outcomes and cost-reduction for the services provided to children and families in the child welfare system, including the foster care system.

The legislation requires the development of local collaborative management structures and processes that bring together agencies and service providers. Most commonly, local stakeholders participate in the CMP through membership in an Interagency Oversight Group (IOG). To be eligible to receive earned incentive funding in support of the collaboration, the statute requires that all IOGs meet the following set of common elements:

- Inclusion of all ten mandatory partners including: county departments of human/social services, local judicial districts, health departments, school districts, community mental health centers, Behavioral Health Organizations, probation departments, Division of Youth Corrections (DYC), domestic violence service providers, and managed care agencies.
- Establishment of a collaborative process that addresses: risk sharing, resource pooling, performance expectation, outcome monitoring, and staff training.
- Implementation of Individualized Services and Support Teams (ISST) through which integrated services are delivered to children and families who would benefit from integrated multi-agency services.

County participation in the CMP has increased significantly since it was established, growing from six counties in its first year to 41 counties (representing 32 CMPs) in Fiscal Year (FY) 2016.

CMP Participating Counties



Mid & Small CMP Counties

Large CMP County

GH CMP Region

AL CMP Region

BCO CMP Region

BCKP CMP Region

SLV CMP Region

DM CMP Region

2. THE CMP EVALUATION

In 2008, House Bill 08-1005 outlined specific reporting requirements for local CMPs and authorized an annual external evaluation of the CMP. The legislation requires that local sites report on the following common elements:

- The number of children and families served through their individualized service and support teams and the outcomes of the services provided.
- Estimated costs and cost-shifting or cost-saving related to CMP efforts.
- Information relevant to improving the delivery of services to persons who would benefit from multi-agency services.

2.1. Evaluation Questions

This evaluation plan is specific to the time period of January – June 2016, but will be updated annually after discussion between the Colorado Department of Human Services (CDHS) and the evaluation team, which is comprised of evaluators from the Social Work Research Center (SWRC) at Colorado State University and IMPAQ International in Washington, DC.

To determine if the Collaborative Management Program is working as designed, the evaluation will answer the following key questions:

1. Is the CMP meeting legislative intent in key population, systems, services, and outcome components?
2. Are CMP structures and processes improving cross-agency collaborations at the local level?
3. What are the outcomes for CMP involved children and youth?
4. Which CMP models/components are most effective?
5. Are there cost savings associated with the CMP?
6. How are CMPs realizing systems improvements?

2.2. Evaluation Design

The evaluation consists of three components: a process evaluation, an outcome evaluation, and a cost evaluation. Collectively, the results of the three evaluation components will provide an understanding of the Collaborative Management Program so the evaluation team can answer the identified evaluation questions. Each component also addresses other relevant evaluation

questions to explore how the CMP is implemented at the county level, and to better understand the contextual and practice factors contributing to child and system outcomes.

Process Evaluation. The process evaluation will explore program successes and challenges, and provide contextual information for interpreting the results of the outcome and cost evaluations. The process evaluation will examine four key topic areas related to CMP implementation: (1) coordinated service provision; (2) collaborative structures and processes; (3) system integration; and (4) family engagement. The primary data sources for the process evaluation are the Efforts to Outcomes (ETO) database, Trails, collaboration surveys, and family surveys. Furthermore, process measures and lead indicators will be collected and analyzed to evaluate how each IOG is doing in regard to implementation fidelity.

Outcome Evaluation. CMPs affect positive change throughout their service systems by streamlining, coordinating, and providing high-quality services for families. The outcome evaluation will be based on quantitative data from multiple sources, including administrative data from Trails, ETO, and ICON/Eclipse data systems. The outcome evaluation will examine service improvements and child and family outcomes consisting of 19 standard performance measures across four domains: Child Welfare, Juvenile Justice, Education, and Health/Mental Health. The outcome indicators/measures for child and family outcomes include the following:

<u>Child Welfare</u>

1. Percent of CMP children/youth with no new open involvements after CMP services began.
2. Percent of CMP children/youth with no substantiated abuse finding after CMP services began.
3. Percent of CMP children/youth who experienced two or fewer moves while in out of home placement.
4. Percent of CMP children/youth discharged to a permanent home.
5. Percent of children/youth who safely remained in their home during CMP involvement.

<u>Juvenile Justice</u>

1. Percent of CMP youth who successfully completed probation or parole.
2. Percent of CMP youth diverted from being committed to DYC
3. Percent of CMP children/youth who were diverted from involvement with truancy court while involved in juvenile justice system.

4. Number of youth who did not enter into detention due to CMP involvement while involved with CMP.

Education

1. Percent of children/youth with improved school attendance rates while involved with CMP services.
2. Percent of children/youth with improved academic performance while involved in CMP services.
3. Percent of children/youth with fewer disciplinary actions while involved with CMP services.
4. Percent of children/youth who remain in school or increase ability to graduate within four years.
5. Percent of children/youth who had two or fewer school moves while involved with CMP services.

Health/Mental Health

1. Percent of CMP children/youth with decreased problem severity and improved level of functioning on CCAR or similar tool while involved with CMP services.
2. Percent of children/youth with decreased concerns according to the Trauma Screening Tool.
3. Percent of families with improved MST outcome indicators or successful completed mental health treatment.
4. Percent of children/youth who successfully completed 90-day inpatient substance abuse treatment or intensive outpatient treatment.
5. Percent of children/youth with established linkages to primary care, oral care, substance abuse, mental health, or health insurance provider.

Cost Evaluation. The cost evaluation will examine the monetary and resource costs associated with implementation of the CMP at the county level. The purpose is to describe cost-sharing practices among partners and agencies, estimate costs associated with CMP implementation, and estimate any savings that may have been achieved as a result of the program.

3. PROCESS EVALUATION

The process evaluation will examine the implementation of the program at the county and state levels to provide practitioners, policymakers, and stakeholders with essential information about how CMPs are working together to achieve the goals and outcomes outlined in the legislation. The evaluation team will utilize quantitative and qualitative methods that builds upon previous CMP process measures. This section provides a brief overview of the evaluation design that will be used in subsequent process evaluations and the associated tasks that will be completed during the FY 16 evaluation to help prepare for conducting the process evaluation.

3.1. Process Evaluation Design

The design for the process evaluation will consist of data collection to track process measures and metrics for ISST implementation, system integration, and coordinated service provision, and survey research to measure collaboration and family engagement. The evaluation team will pilot new data collection processes to ensure that the most reliable and valid data are being collected to capture the key processes of the Collaborative Management Program.

3.2. Describing Children/Youth Served by CMP

Trails and ETO will be used to describe the characteristics of children and youth served through ISSTs, as well as documenting the systems involved in the development of an integrated service plan. The ETO database includes age, gender, race, and ethnicity of children and youth, along with referral source, the number and categories of providers and agencies involved at the time of ISST enrollment, and family members present in ISST planning meetings.

3.3. Documenting Coordinated Service Provision

Coordinated service provision through Individualized Service and Support Teams is a key feature of the CMP initiative and is one of the primary methods by which local CMPs respond to HB 1451 legislative goals. This component of the process evaluation will quantify how much each CMP partner provides in-kind (e.g., staff time) at ISST meetings and Integrated Service Plan meetings as measured by sign-in sheets and the Trails framework screen. In addition, documentation on whether case plans were developed, including who is delivering and who is paying will be collected in aggregate form.

3.4. Measuring Collaboration

Identifying strengths and barriers to improve collaboration is a critical part of demonstrating the effectiveness of the CMP. To evaluate the collaboration among IOGs in implementing the CMP, the following structures, qualities, and processes will be measured: program planning, program goal setting, organizational aspects, contextual factors, barriers to implementation, and policies and procedures. In past evaluations of the CMP, the Collaborative Effectiveness Survey was administered to IOG members in participating counties. The survey provides scores in the following domains: overall quality process, community involvement, quality of services, duplication of services, and fragmentation of services. During the FY 16 timeframe, the evaluation team will engage the CMP Evaluation Subcommittee in a process to develop a more precise instrument for measuring collaboration. After selecting the instrument(s), the evaluation team will conduct a pilot administration with identified IOGs to determine the efficacy of measuring collaboration.

3.5. Assessing System Integration

System improvements that result in streamlined, coordinated, and high-quality services for families are at the heart of the CMP approach. Given the complexity of systems and the variation in local approaches, statewide progress in these areas can be difficult to quantify. Past CMP evaluations have gathered proxy indicators for systems change from the ETO database and collaboration survey. These data are used to address the question of whether CMPs are affecting positive changes throughout their social service delivery systems. The CMP process measures for FY16 are as follows:

1) **Interagency Oversight Group (IOG) meeting attendance**. *Measure:* Mandatory members of the IOG will be present 75% of the time at the four required meetings in a fiscal year. Sign-in sheets and meeting minutes will confirm attendance.
2) **Family agency or member participation on the IOG as a voting member**. *Measure:* A voting family agency or member will be in attendance at 50% of all IOG meetings held within the fiscal year. Sign-in sheets and meeting minutes will confirm attendance.
3) **Seventy-five percent (75%) of the agencies contribute resources at service level, either in-kind or actual monies**. *Measure:* All integrated service plans identify two or more agencies in the plan. A copy of those services plans will be retained by the CMP coordinators.

4) **Use of Evidence Based or Evidence Informed practices.** *Measure:* At least one evidence based or evidence informed practice will be implemented under the IOG, as reflected in the expenditures section of the annual report.
5) **Process of Continuous Quality Improvement used by the IOG.** *Measure:* IOG will meet no less than quarterly and meeting minutes will reflect the continuous quality improvement practices used to inform and improve efforts.
6) **Evidence of cost-sharing among IOG members.** *Measure:* Cost-sharing will be reflected in the expenditures section of the annual report.

Each CMP will be required to meet three of the six process measures in order to receive the meaningful minimum. CMPs can choose which three measures they will strive to meet.

The evaluation team will work with the Division of Child Welfare (DCW) staff and the CMP Evaluation Subcommittee to determine if the process metrics currently being used are sufficient to measure whether CMPs are reducing duplication, eliminating fragmentation, and improving the quality of services. If there are gaps, new metrics and measures will be identified and piloted during the FY 16 timeframe.

3.6. Evaluating Family Engagement

CMPs are growing in their efforts to involve families in their own service planning and/or engage family representatives to participate on behalf of other families. Historically, a variety of family-related measurement tools were shared across CMP sites, including family satisfaction surveys, pre-ISST family assessments, fidelity checklists, local-level process evaluation surveys, and family functioning assessments.

The Family Feedback Form was offered as an optional measure for FY 14, with strong endorsement by CMP state administration. Two data collection methods were employed: 1) a non-anonymous method whereby the measure is entered into the ETO database and linked to other case data; and 2) an anonymous method whereby families enter data directly into an online survey site where no identifying information is tracked other than CMP name. However, the response rate was only 7%, as the form was not mandated and was considered to be too long. Furthermore, the form was administered immediately after the ISST, even though some questions were about services that occurred up to 30 days after the meeting.

Thus, the evaluation team will work with DCW staff and the CMP Evaluation Subcommittee to identify and pilot an alternative instrument to measure this key process outcome. To make it more of an effective and efficient approach to evaluating family engagement (e.g., communication between providers and parents) in IOG activities, the evaluation team will develop an instrument that is mandatory, more consistent, and web-based.

3.7. Process Evaluation Project Plan

Figure 1 provides an overview of the project plan for the first year of the process evaluation, including specific tasks, associated task leads, and project deliverables.

Figure 1: Process Evaluation Project Plan

TASK / ACTIVITY	Period of Performance FY 2016					
	Jan	Feb	March	April	May	June
Task 1. Documenting Coordinated Service Provision (Leads: Marc Winokur, Helen Holmquist-Johnson)						
Collect demographic and service data from ETO database			▬	▬	▬	▬
Deliverable: Descriptive analysis in Evaluation Report						▲
Task 2. Measuring Collaboration (Leads: Helen Holmquist-Johnson, Chris Lee)						
Identify, develop, and pilot collaboration survey			▬	▬	▬	▬
Deliverable: Collaboration survey					△	▲
Task 3. Assessing System Integration (Leads: Helen Holmquist-Johnson, Marc Winokur)						
Collect process metrics from ETO database			▬	▬	▬	▬
Deliverable: Descriptive analysis in Evaluation Report						▲
Task 4. Evaluating Family Engagement (Leads: Helen Holmquist-Johnson, Chris Lee)						
Identify, develop, and pilot Family Engagement Survey			▬	▬	▬	▬
Deliverable: Family engagement survey					△	▲

Key: Draft: △ Final: ▲ Work Period: ▬

4. OUTCOME EVALUATION

The outcome evaluation will examine the effect of the CMP on outcomes of children/youth served by the program. The evaluation team will utilize an evaluation design that builds upon previous CMP evaluations and provides empirical evidence on the effectiveness of the CMP on the outcomes of children served by the program. This section provides a brief overview of the evaluation design that will be used in subsequent outcome evaluations and the associated tasks that will be completed during the FY 16 evaluation to help build the requisite capacity for conducting the outcome evaluation.

4.1. Outcome Evaluation Design

Previous evaluations of the CMP have utilized a descriptive research design to examine the outcomes of children served by the program. While these previous evaluations have provided important information on the outcomes of children served by the CMP, they have not compared these outcomes to a group of children who did not receive CMP services. Assessing the effectiveness of the program is dependent upon comparing outcomes for a "treatment group" of children who received CMP services to a "control group" of children who did not receive CMP services.

Randomized Controlled Trials (RCTs), which randomly assign children to either treatment or control groups, are considered the gold standard of program evaluation designs[5,6] due to their ability to ensure that the treatment and control groups differ only in whether they received the "treatment" (i.e., CMP services). However, considerable limitations, including costs, feasibility issues, and ethical implications, are often associated with the use of RCTs. As a result, it is not feasible to implement an RCT to evaluate the Collaborative Management Program.

Propensity Score Matching (PSM) balances the analytical rigor associated with RCTs while minimizing the considerable costs and the arduous implementation issues. Specifically, PSM avoids difficult ethical issues associated with withholding treatment services by assigning participants to a control group that does not receive treatment (e.g., children who were eligible

[5] Guo, S., & Fraser, M. W. (2014). *Propensity score analysis: Statistical methods and applications* (Vol. 11). Thousand Oaks, CA: Sage Publications.
[6] Imbens, G. W., & Rubin, D. B. (2015). *Causal inference in statistics, social, and biomedical sciences*. Cambridge, England: Cambridge University Press.

but did not receive CMP services). Thus, the evaluation team will develop and implement PSM to examine the effect of the CMP program on the outcomes of children served by the program.

An RCT will be replicated as closely as possible by constructing treatment and comparison groups with similar covariate distributions via a calculated propensity score. The treatment groups will consist of children served by the CMP, while the matched control group will consist of children who were eligible, but were not ultimately served by the CMP. The evaluation team will estimate separate propensity scores for the treatment and comparison groups by calculating the probabilities of whether children eligible for CMP were served by the program. The calculated propensity scores will be used to match members of the treatment groups to members of the comparison groups, with the goal of developing matched groups that are statistically identical on an extensive set of background characteristics, but differ only on whether they received CMP services. Upon completion of the matching process, the evaluation team will employ diagnostic processes to ensure that the treatment and comparison groups are balanced on observed covariates, thereby ensuring that the evaluation conditions replicate a randomized controlled trial as closely as possible. This approach should provide a high degree of confidence that estimated program impacts reflect CMP services and interagency collaboration, while ruling out extraneous effects.

During planning calls in December 2015, DCW staff identified a strong need for additional capacity building in several key areas prior to conducting a rigorous outcome evaluation. Accordingly, the following capacity-building tasks will be completed during the FY 16 evaluation: (1) conducting a gap analysis, (2) developing an improved understanding of data use and reporting processes, (3) conducting a mid-year audit of CMP data, and (4) addressing data silos.

4.2. Conducting a Gap Analysis of CMP Client Identification Processes

During planning calls with DCW staff, the evaluation team learned more about how children served by the CMP program are identified within Trails and the ETO database. DCW staff described how information on children served by the CMP is recorded in the two databases and a subsequent matching process is used to ensure that children are not duplicated in the final evaluation dataset. While DCW has identified a detailed and thorough approach to removing duplicate data (including establishing the clarifying rule that children served multiple times are not considered to be duplicates), concerns persist as to the potential for incorrectly identifying and counting the children served by the CMP program. One area of specific concern to the

evaluation team is the use of the "CMP button" within Trails. This non-mandatory button plays a critical role by designating whether a child received CMP services, and the evaluation team has identified a need to develop a detailed understanding of how this button is used, any rules associated with the use of this button, and any potential for children to be incorrectly counted.

Accordingly, the evaluation team will conduct a gap analysis of the processes used to identify children served by the CMP. Beginning in late March, the evaluation team will work with DCW staff to understand the systematic processes associated with identifying children served by the CMP, and will document the formal steps by which CMP children are recorded in Trails and the ETO database, and highlight any gaps where CMP children are incorrectly counted. The results of the gap analysis will be incorporated into the evaluation report. This process of conducting a gap analysis of the CMP client identification process will strengthen the internal and external validity of the outcome evaluation by ensuring that the outcome data reported within annual evaluations accurately captures all children served by the CMP.

4.3. Engaging CMP Counties on Data Use and Reporting Processes

Currently, CMP counties utilize a self-reporting process to provide DCW with an assessment of their annual performance. The self-reported performance measures provided by the 41 CMP counties are then aggregated at the state level for each of the four outcome domains. While the self-reporting process has provided an efficient method for collecting and aggregating CMP data across the 41 counties, there is a need to develop an improved understanding of how the CMP counties collect, analyze, and report process and outcome performance data, and how these various processes could impact statewide performance data. Accordingly, the evaluation team will conduct detailed examinations of the data use and reporting processes used by CMP counties.

The evaluation team will utilize semi-structured phone interviews to engage each of the CMP sites on their use of process and outcome data and their associated reporting processes. These interviews with CMP staff, which are expected to be approximately an hour in length, will ask about the processes that counties use to collect process and outcome data, validate the data, and analyze the data. The results of the interviews will be summarized and incorporated in the evaluation report. This process will provide a detailed understanding of how counties are utilizing process and outcome data and the data reporting processes used by counties, any associated discrepancies or limitations in county processes, and an understanding of how these processes affect statewide CMP performance measures.

4.4. Conducting a CMP Data Audit

The CMP utilizes an established process for auditing CMP data entered into the ETO database. This semi-annual process consists of:

- Running data audit procedures in ETO database to identify missing, duplicated, or incomplete data.
- Exporting the results to Excel files and then sending the files to CMP counties for review.
- Working with counties and service providers to address any data issues identified in the audit.

In March 2016, the evaluation team will collaborate with DCW to conduct a mid-year audit of CMP data. DCW staff will lead the audit while the evaluation team will monitor the process to develop a detailed understanding of the audit process in preparation for conducting the audit in subsequent years. This audit will utilize the established processes for auditing the CMP data within the ETO database, and engage the CMP counties on any data issues identified during the audit. The results of the audit will be incorporated in the evaluation report. This audit process will provide a valuable opportunity for the evaluation team to obtain a detailed understanding of CMP data, which will be used to inform the development of the evaluation design that will be used in future outcome evaluations of the CMP.

4.5. Addressing Data Silos

The performance outcomes of the CMP are evaluated across four domains: child welfare, juvenile justice, education, and health/mental health. However, outcomes for only two of the domains – child welfare and juvenile justice – have been regularly reported in previous evaluations. The collection and analysis of child welfare and juvenile justice outcome data is conducted via existing data collection and data-matching processes utilized by DCW staff. In contrast, collecting and analyzing education and health/mental health data has been a more arduous process due to the absence of similar data collection and data-matching processes. As a result, education and health/mental health outcomes have received comparatively less attention than child welfare and juvenile justice outcomes. Accordingly, the evaluation team will work with the CMP Evaluation Subcommittee and relevant state staff to identify opportunities for addressing existing data silos and improving data collection and matching across the CMP outcome domains.

The evaluation team will engage members of the CMP Evaluation Subcommittee and state staff from DCW, the Department of Education, the Office of Behavioral Health, and the Department of Health Care Policy and Financing, in identifying opportunities to obtain education and health/mental health outcome data that can be matched to the annual CMP dataset. This process will consist of exploring possible options, such as the development of Memorandums of Understanding and formal data sharing agreements, which can be used to obtain the requisite outcome data in the education and health/mental health domains. Furthermore, the evaluation team will communicate with IOG representatives from counties that have had success with addressing data silos as part of their local CMP evaluation. As a result of this process, the evaluation team should be able to conduct a more robust outcome evaluation that examines the effectiveness of the CMP across all four outcome domains.

4.6. Outcome Evaluation Project Plan

Figure 2 provides an overview of the project plan for the first year of the outcome evaluation, including specific tasks, associated task leads, and project deliverables.

Figure 2: Outcome Evaluation Project Plan

TASK / ACTIVITY	Period of Performance					
	FY 2016					
	Jan	Feb	March	April	May	June
Task 1. Conducting a Gap Analysis of CMP Client Identification Processes (Leads: Dallas Elgin, Marc Winokur)						
Work with DCW staff to identify gaps in client identification			▬	▬	▬	▬
Deliverable: Gap analysis results in Evaluation Report					△	▲
Task 2. Engaging CMP Counties on Data Use and Reporting Processes (Leads: Dallas Elgin, Maxwell Matite)						
Conduct semi-structured interviews with CMP counties				▬	▬	▬
Deliverable: Interview findings in Evaluation Report						▲
Task 3. Conducting CMP Data Audit (Lead: Dallas Elgin)						
Run audit procedures, identify and correct data issues				▬	▬	▬
Deliverable: Audit findings in Evaluation Report						▲
Task 4. Addressing Data Silos (Leads: Dallas Elgin, Marc Winokur)						
Meet with CMP Evaluation Subcommittee to address data silos			▬	▬	▬	▬
Deliverable: Plan to address data silos in Evaluation Report					△	▲
Key: Draft: △ Final: ▲ Work Period: ▬						

5. COST EVALUATION

Previous CMP evaluations did not include a cost component beyond documenting counties' estimated self-reported cost savings. Thus, the cost evaluation for FY 16 will feature a pilot phase, in which the evaluation team will: (1) estimate costs associated with IOG and ISST implementation; and (2) identify tasks that need to be completed before costs related to CMP implementation beyond IOG and ISST meetings can be estimated. These tasks may include decisions on the outcomes of interest, a review of existing literature and practices revolving around estimation of cost savings in programs like CMP, and aligning the outcome evaluation design with the cost evaluation. This section provides an overview of the cost evaluation design for the pilot phase, next steps for the ongoing cost evaluation, and the tasks to be completed during the FY 16 cost evaluation.

5.1. Cost Evaluation Design

Previous cost evaluations of the CMP have relied on counties to report cost savings. In 2014, only four counties reported cost savings, and the methodology behind these estimates was not explained nor was it uniform across counties. While these previous reports have provided important estimates of the cost savings of serving children through the CMP, they have not reported the total costs of the CMP or provided a rationale for choosing services that were prevented. Using methodology that more accurately captures the costs of the CMP and identifying outcomes that CMP may be impacting is paramount to determining whether or not the CMP is generating cost savings.

To estimate cost savings that occur by preventing the need for children/youth to receive services in and across the four outcome domains, the following comparisons will be made:

1) **Child Welfare:** CMP services vs. out-of-home placement
2) **Juvenile Justice:** CMP services vs. DYC commitment
3) **Education:** CMP services vs. day treatment
4) **Health/Mental Health:** CMP vs. hospitalization or 90-day inpatient substance abuse treatment or intensive outpatient treatment

Furthermore, the evaluation team will use results from the outcome evaluation, along with estimated costs of services related to the outcomes of interest, to generate an estimate of costs that were saved as a result of the CMP.

The evaluation team will develop and implement a pilot phase cost evaluation to estimate the costs of IOG and ISST meetings. It is expected that these costs will be good estimates of costs associated with IOG and ISST across all counties, lessening data burden on subsequent counties. During the pilot phase, the evaluation team will design a plan for analyzing cost savings that will be integrated with the outcome evaluation. Calls with DCW staff helped identify improvements that need to be made in data collection practices to allow for estimation of costs. The following tasks will completed over the course of FY 16 evaluation: (1) identifying pilot sites, (2) developing a cost survey, (3) administering cost survey to pilot sites, and (4) conducting a literature review and developing a data analysis plan.

5.2. Identifying Pilot Sites

The evaluation team will engage the members of the CMP Evaluation Subcommittee in identifying four pilot sites for the cost survey. These four sites will be representative of counties participating in the CMP. Therefore, urban and rural counties, along with other selection characteristics, will be used. Furthermore, counties that reported cost savings measures in previous years will be considered for inclusion in the pilot phase. This process will consist of engaging counties that may volunteer to be pilot sites and reaching out to counties identified by the Subcommittee.

5.3. Developing Cost Survey

The evaluation team will work with the CMP Evaluation Subcommittee and DCW staff to develop a cost survey that will capture costs related to IOG and ISST meetings. The survey's intent is to determine the time allocated to such meetings, the persons involved, and the resource costs associated with them (e.g., salaries, benefits, etc.). In 2015, the evaluation team implemented comparable surveys with SafeCare Colorado sites for the prevention evaluation. It is anticipated that these surveys, along with previous cost studies completed by the evaluation team, will serve as platforms for the development of the current cost survey.

5.4. Administering Cost Survey to Pilot Sites

The evaluation team will administer cost surveys to pilot sites. It is anticipated that pilot sites will help determine the best methods for setting up and administering the survey, and will offer comments on any improvements that may be made to the survey before moving on to the comprehensive stage. The results of these surveys will be incorporated into the evaluation

report in the aggregate in order to keep respondents anonymous, which should strengthen the internal and external validity of the cost evaluation.

5.5. Conducting a Literature Review and Developing a Data Analysis Plan

The evaluation team will conduct a review of existing literature and identify any published evaluations that may be comparable to the current evaluation's proposal. The purpose of this review will be to identify mainstream practices in estimating cost savings through prevention. The evaluation team will then develop a data analysis plan that will capture costs of collaboration between agencies within counties, the costs of receiving services if CMP is not successful, and arrive at an estimation of total cost savings as a result of implementation of the CMP. This final estimation will be dependent on the outcomes study because in order to estimate cost savings, an estimate of the success of the CMP in preventing future services must be compared to a control group, or services as usual.

5.6. Cost Evaluation Challenges

Testing the cost-savings hypothesis assumed in the legislation is complicated given the range and diversity of existing programs, processes, and outcomes. The challenges associated with cost analysis at the state level for CMP have been described in prior evaluation reports and are briefly summarized here. In many CMPs, models have not become standard enough or implemented with sufficient fidelity to enable accurate cost assignment to efforts or to savings associated with achieving outcomes directly from those efforts. These factors impede the ability to aggregate cost information across sites. There are options the evaluation team could explore to move the CMP a step closer to measuring costs savings. For example, the cost evaluation could pilot actual measurement of service costs and outcomes with a subset of CMP sites with clear service models. In addition, with multiple years of statewide indicator data available in future years, the evaluation will be positioned to analyze change from year to year in a select set of indicators (e.g., out-of-home placements) to provide estimated costs associated with identified changes. Finally, the evaluation could provide technical assistance regarding cost measurement to counties interested in exploring measurement options for their selected ISST model. With continued investment in model specification and aligned cost measurement through evaluation in this area, it is hoped that over time, there will be an opportunity to specify a cost model and conduct related analyses.

5.7. Cost Evaluation Project Plan

Figure 3 provides an overview of the project plan for the first year of the cost evaluation, including specific tasks, associated task leads, and project deliverables.

Figure 3: Cost Evaluation Project Plan

TASK / ACTIVITY	Period of Performance					
	FY 2016					
	Jan	Feb	March	April	May	June
Task 1. Identify Pilot Sites (Leads: Kristy Beachy-Quick, Zach Timpe)						
Work with CMP Subcommittee to select pilot counties			▬	▬	▬	▬
Deliverable: Sites will be selected				▲		
Task 2. Develop Cost Survey (Lead: Zach Timpe)						
Develop cost survey for IOG and ISST meetings				▬	▬	▬
Deliverable: Cost survey						▲
Task 3. Administer Cost Survey to Pilot Sites (Leads: Zach Timpe, Kristy Beachy-Quick)						
Collect cost survey data from pilot counties					▬	▬
Deliverable: Aggregated cost data results for Evaluation Report						▲
Task 4. Conduct Review of the Literature and Develop a Data Analysis Plan (Lead: Zach Timpe)						
Review literature; develop plan for measuring cost savings			▬	▬	▬	▬
Deliverable: Literature review and data analysis plan						▲
Key: Draft: △ Final: ▲ Work Period: ▬						