



Evaluation Technical Assistance Brief

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Regional Partnership Grants Cost Study Framework: Implementing the Cost Study Pilot

Although there is evidence on the effectiveness of some interventions designed to address the emotional effects of trauma, much less is known about the cost of implementing them. Trauma-specific, evidence-based practices (EBPs) demonstrate an ongoing awareness of how traumatic experiences might affect children and families, and these practices integrate the best available research evidence with practice expertise in a given field (Child Welfare Information Gateway n.d.). EBPs vary in intensity, dosage, delivery method, and training requirements for staff, resulting in different resources needed for implementation. Mathematica collaborated with the Regional Partnership Grants (RPG) project teams in 2017 to develop processes to explore the costs of implementing EBPs for adults with substance use disorders and children at risk of or experiencing maltreatment. The research team [developed a report](#) that outlined specific considerations for developing the data collection instruments, collecting data, and analyzing cost data for EBPs (Burwick et al. 2017). Building on this work, Mathematica conducted a cost analysis for two EBPs used by RPG projects in 2022. A separate brief describes the findings for one of those EBPs and a report to Congress has additional technical details on the cost study (U.S. Department of Health and Human Services, forthcoming).

This brief describes the cost study team's experience implementing the cost study framework (Burwick et al. 2017) in the field to provide benchmark cost estimates for selected EBPs. The brief begins with an overview of the cost study design and then highlights the four phases of study implementation. It ends with an overview of the study strengths and limitations before offering concluding thoughts. Other programs could learn from the cost study team's process considerations and analytic adjustments to inform their own cost study design and implementation.

Who should read this brief?

The Children's Bureau in the Administration for Children and Families, U.S. Department of Health and Human Services funded this brief for groups that receive a Regional Partnership Grant or for other agencies that want to evaluate the costs associated with implementing evidence-based practices. The brief discusses considerations for implementing a cost study with evidence-based practices in mind, but these considerations also could apply to full program cost evaluations.

Cost study design

The 2022 RPG cost study focused on two EBPs that were commonly implemented by RPG projects: Seeking Safety and Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) (see Exhibit 1). The study included data from four grantees that were implementing one of these two programs. Three RPG projects were implementing Seeking Safety, and one project implemented TF-CBT.

The cost study team introduced the study to RPG project staff to discuss the data it would need to collect. The team collected cost data using a Microsoft Excel workbook to capture programmatic costs in eight categories (for example, personnel, supplies and materials, facilities, and indirect costs). The cost study team also facilitated staff survey and time log data collection to better understand the costs associated with specific tasks related to the implementation of the EBP. Using this data, the cost study team estimated total and per-participant costs to implement the EBP and used the staff survey and time log to explore costs associated with how staff allocated their time to various service activities (such as outreach, clinical service delivery, and case documentation).

Exhibit 1. Overview of evidence-based practices

Seeking Safety

Population: Adolescents and adults with a history of trauma and substance use issues

Format: Group or individual format

Setting: Various, including outpatient, inpatient, and residential treatment programs in correctional, medical, and school settings

Content: 25 topics focusing on cognitive, behavioral, and interpersonal safe coping skills

Program length: 29 sessions over 12 to 24 weeks, on average

Staff qualifications and training: No specific degree or experience is required

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)

Population: Children and adolescents ages 3 to 18

Format: Individual and joint parent–child sessions (as appropriate), group sessions as needed

Setting: Clinical office settings with a social worker, psychologist, or psychiatrist

Content: Psychotherapy model originally designed to address psychological trauma associated with sexual abuse; adapted to address other traumatic experiences such as domestic violence and loss

Program length: 12–16 sessions with child and parent, 60 minutes long

Staff qualifications and training: Therapists must hold a master’s degree or higher to be certified in TF-CBT

Source: California Evidence-Based Clearinghouse for Child Welfare 2019; California Evidence-Based Clearinghouse for Child Welfare 2020

Cost study implementation

The cost study had four phases: grantee recruitment, instrument training, data collection, and analysis (Exhibit 2).

1) Grantee recruitment

The cost study team reached out to the nine grantees participating in the fourth and fifth RPG cohorts (RPG4 and RPG5) that were implementing one or more of the EBPs as part of their RPG project. In this outreach email, the cost study team briefly described the goals of the study, described what would be asked of grantees, and asked their willingness to participate in the voluntary study. Five grantees were implementing one of the selected EBPs, and four grantees agreed to join a call to learn more about the study.

The cost study team held a 60-minute workgroup call with RPG management staff to introduce the cost study to the four participating grantees. Most of the call was spent

learning about the various contexts in which the grantees operated Seeking Safety or TF-CBT, and understanding which staff provided those services. The cost study team also asked grantees during this call if their EBP implementation was impacted by COVID-19. While the mode of delivery may have changed due to COVID-19 precautions, the grantees did not report major cost changes due to the pandemic. See Exhibit 3 for an overview of the agenda for this introductory call.

2) Instrument training

The cost study team held a workgroup meeting to kick off cost study data collection with the RPG frontline staff who delivered the trauma-specific EBPs (those identified by RPG management staff in the first workgroup call). During this call, the cost study team presented an overview of the cost study, walked through the data collection instruments and instructions, and answered questions about the cost study. EBP staff were encouraged to reach out to study staff whenever they had questions.

Exhibit 2. Cost study implementation phases



3) Data collection

With this information, the cost study team refined the cost workbooks and staff surveys to make the cost categories in these documents relevant to the EBPs included in the study. To offer additional support during the data collection process, the cost study team held a third workgroup call about halfway through the data collection period to answer any questions. All RPG frontline and management staff were invited to attend.

Cost workbook instrument. This cost study used the “ingredient” or resource cost method (Levin and McEwan 2001). There are three steps to calculate costs using this method:

1. Identify the type and quantity of resources used to deliver a program or service
2. Determine the monetary value of these resources
3. Sum the values to estimate total cost

Exhibit 3. Agenda for introductory call with Regional Partnership Grants grantees

Agenda for the first workgroup meeting

1. Introductions
2. Goals of the cost study and research questions
3. Brief overview of study instruments and timelines
4. Information sharing

Grantee staff provided this data using the cost workbook, a Microsoft Excel-based tool that captures information about the resources used to provide programming and the expenditures for or estimated value of those resources. The workbook is organized around eight resource categories with a separate worksheet for each: (1) personnel, (2) contracted services, (3) volunteer labor, (4) supplies and materials, (5) equipment, (6) facilities, (7) miscellaneous, and (8) indirect costs (Exhibit 4).

Exhibit 4. Cost workbook resource categories



Personnel. Salaries paid to staff working on the EBP, based on full-time annual salary for each position, as defined by the grantee organization, and the average percentage of time spent on the EBP by the staff. Includes aggregated value of payroll taxes and other benefits for staff working on the EBP, reported as a percentage of salary or total amount.



Contracted services. Costs for contracted service providers and consultants working with the EBP. These might be available as totals or broken out by components of costs (for example, cost per counseling session or staff training), depending on partner type and terms of the contract.



Volunteer labor. For each volunteer position, number of hours worked per week, number of months worked per year, and estimated average hourly wage for a paid staff member in a similar position.



Supplies and materials. Expenditures for supplies and materials (for example, office supplies and educational materials); estimated value of donated supplies and materials.



Equipment. Original purchase price, year purchased, and expected useful life of any durable equipment or capital assets used by the EBP for more than one year. Examples include computer systems, automobiles, or office furniture.



Facilities. Value of annual rent, lease, or mortgage payments for space or facility and proportion used by the EBP. For donated space, estimated annual cost of space based on fair market value and portion of the year the EBP used the space.



Miscellaneous. Other direct EBP costs not included in above categories and might include training costs, communications, expenditures on cell phones and other utilities, transportation or mileage reimbursement related to providing services, staff travel expenditures for other purposes, postage/shipping, printer/copier, systems hardware or software, insurance, public affairs, legal services, banking fees, and taxes paid by the grantee organization.



Indirect costs. Indirect (overhead) costs allocated to the EBP (for shared functions within an agency, such as human resources, technology, marketing, communications, or building maintenance) and not reported under other resource categories.

A person from the grantee organization familiar with project finances completed a workbook for each EBP and reported cost data for a recent 12-month steady-state period. This was typically their most recent fiscal year.

Common questions about cost workbook data. Once respondents submitted the completed workbook, cost study staff followed up with emails and phone calls to clarify entries to fully understand project costs. The cost study team's follow up was typically about five main topics.



Confirmation of staff salary amounts and whether any additional staff associated with the intervention needed to be included in the workbook.



Confirmation of per-unit costs versus total costs reported for equipment that supported the implementation of the EBP.



Confirmation of the square footage of the facilities used to support the EBP because grantees often reported using very small amounts of facilities space to implement the intervention.



Confirmation that there were no duplicated costs across worksheets in the workbook. For example, confirming that staff listed in the personnel worksheet were not also included in the indirect costs worksheet and that costs listed in the miscellaneous worksheet were not included in the indirect cost worksheet.



Clarification on whether the entries related to evaluation services were specific to the RPGs or whether they were typically used to implement the EBP. See the Analysis section below for implications.

Staff survey and time log instrument. The cost study team trained RPG staff at the four participating grantee programs to administer the staff survey and time log. All staff who spent time delivering either of the two selected EBPs, supporting service delivery, or administering activities associated with either EBP were asked to complete the staff survey and time log over a one-month period. The staff response rate was 100 percent.

The staff survey and time log included two parts: (1) a brief survey about staff's positions, work hours, and training related to the trauma-specific EBP; and (2) a daily log for entering the number of hours each staff member spent

on activities related to the trauma-specific EBP during the one-month data collection window. The cost study team used the survey data to allocate costs across program components based on how staff used their time to deliver program services.

Best practices for staff survey and time log data. Though they did not have any follow-up questions for respondents about the staff survey and time log, the cost study team introduced the instruments by recommending the following best practices for the time log:

- Staff should save a few minutes at the end of the day to complete an accurate time log. We recommend that staff print a hard copy and keep it on their desk or set a reminder on their work calendar to complete the log.
- Staff only need to complete the log for time spent delivering the specific EBP in the cost study. They do not need to record time spent on other EBPs or activities. Staff should write "0" in days they do not deliver the EBP to confirm that they completed the time log for that day.

4) Analysis

After data collection was complete, the cost study team discussed and determined the analytic adjustments needed to make the data comparable across grantees. The study team applied the following decisions to the cost workbook:

- **Removing costs for evaluation services.** All grantees responded that the evaluation services they entered on the contracted services worksheet were only costs they incurred because of the RPG evaluation requirements. Therefore, to estimate the costs of delivering the EBPs that extend beyond the RPG program, the cost study team removed these entries from all four cost workbooks.
- **Estimating the value of donated space.** If respondents reported using facilities at no cost to the program, the cost study team estimated the value of the office space using commercial rental rates for comparably sized buildings in the metropolitan area where the program operated.
- **Adjusting to national averages.** Because these programs operated in different parts of the country with varied costs of living, the cost study team adjusted costs to the national average for comparison. To do so, the cost study team calculated the wage index using the average hourly wage for substance abuse, behavioral disorder, and mental health counselors at local (where grantees are located) and national levels. The team then applied the index to all costs to adjust them to a national standard for comparison.

Following the adjustments, the cost study team summed the cost values in each category to calculate the total cost per category and an overall EBP cost. The team then used administrative data to identify how many participants were involved in the EBP during the evaluation time frame to calculate a total cost per participant.

Design strengths and limitations

As is the case with all research studies, there are design strengths and limitations for this implementation of the cost study framework (see Exhibit 5).

Exhibit 5. Cost study strengths and limitations

Strengths

- Costs were restricted to capture only the costs associated with implementing the EBP.
- Costs were adjusted to a national value to allow for cross-site comparisons.
- The study provided total costs to implement services and a per-participant cost.

Limitations

- The data collection time frames for the cost workbook and staff survey/time log did not always align, so the team could not draw conclusions across instruments.
- The study relied on self-reported data, particularly for the staff survey and time log, which could be inaccurate.
- The sample size for this study was small (N = 4) and cannot be generalized to other programs outside of the study.

Conclusion

This cost study enabled the cost study team to build on previous work and use previously developed processes to analyze the costs associated with implementing selected EBPs. This exercise enabled the team to (1) further test the data collection instruments developed under previous projects, (2) inform future improvements by identifying components of the data collection instruments that might have been unclear, and (3) consider the analysis decisions to complete a comprehensive review of EBP costs and offer accurate cost benchmarks for EBPs. Other programs can learn from the cost study team's experiences to help inform their own cost study design and evaluation.

References

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