Center for
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Safe Babies Court Team: A Benefit-Cost Analysis

Fred Wulczyn, Scott Huhr, Molly Van Drunen, and Julie McCrae

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Executive Summary

Overview

In this paper, we describe the results of a benefit-cost analysis (BCA) of the Safe Babies approach. Developed by ZERO TO THREE, the Safe Babies approach is a service philosophy that combines knowledge of child development with operational changes designed to improve the services infants and toddlers (0 to 3-year-olds) receive from the child protection system.

This BCA comprises two components: (1) a retrospective study to capture the historical site-level cost structure and cost per child historically, and (2) a prospective BCA that supports future systems-level decision-making. The retrospective study uses an ingredient survey to capture the local cost of providing Safe Babies. Local costs are defined in personnel and non-personnel terms. The cost profiles were developed using surveys and interviews that followed survey responses. Sites were identified based on their experience working with Safe Babies. The cost of providing Safe Babies was converted into a cost per day by dividing the annual cost by the total care days provided during the year. The annualized length of stay was derived from ZERO TO THREE's client database. From three sites, we acquired five per diem cost estimates.

Second, the prospective BCA assesses whether Safe Babies program investments yield cost-effective outcomes. The monetized values are calculated by linking major parameters: Safe Babies per day costs, the average time spent in care, the average cost of foster care (the foster care per diem rate), and the expected Safe Babies impact on the length of stay. With these parameters, we estimate a business-as-usual baseline for foster care utilization and spending. The baseline is then compared with a calculation that incorporates a change in length of stay brought about by Safe Babies (the effect size). The contrast – foster care alone versus foster care plus Safe Babies – serves as the benefit-cost comparison. For context, we also evaluate the at-scale impact that follows from investments that aim to reduce the length of stay in the way that Safe Babies does. Starting with 1,000 eligible children (i.e., the size of a large county or a small state) and adding admissions each year, we measure the population-level use of foster care in each of five fiscal years under baseline assumptions (number of admissions and typical length of stay). To mimic Safe Babies' potential effect, we adjust the parameters that control time spent in care. The difference represents averted spending on foster care. The averted spending represents the potential return-on-investment pool at a population level.

The Safe Babies benefit-cost analysis has certain limitations, primarily due to challenges in capturing all the benefits from those investments. We did not estimate potential program effects outside of time spent in care such as reductions in maltreatment, changes in educational outcomes, or changes in health/behavioral health outcomes. Therefore, the analysis presented here is a basic assessment, focusing on the averted costs from reducing business-as-usual care days.

Results

At a population level, the results show that even small changes in the length of stay have large budget effects. After accounting for an estimated number of admissions, a typical length of stay, and 1,000 children ages 0-3 already in care when the fiscal estimates start, we estimate that a reduction in the length of stay (in line with prior research on the impact of Safe Babies) would lower cost by $19 million on total spending of $155 million, which show the overall market size and a potential return on investment. When the shorter length of stay is translated into children in care, there would be 146 fewer children in care, if admissions stay steady.

The at-scale results are paired with analysis at the site level. We see, first, that at-scale effects are possible. The local scale shows what has to happen at the local level to contribute to the at-scale effect. The local program benefits and costs are based on four parameters: the daily cost of foster care, the daily cost of Safe Babies (as derived from the ingredients survey), the length of stay, and the effect size.

The actual benefit-cost analysis is constructed around costs going forward using different parameter combinations. The ingredient cost survey generated daily Safe Babies rates between $20 and $53 with an average of just under $34. To initialize the calculations we started with $28 per day, which is close to the modal per diem estimate for Safe Babies. Our first set of analyses uses the variation around $28 to illustrate how the BCA depends on the daily cost of Safe Babies. At $28 per day in a locality with an average length of stay of 683 days, an $85 foster care per diem, and a 28 percent reduction in length of stay, the net cost difference on a per child basis is $2,486. If the Safe Babies cost drops by 20 percent the per-child cost difference becomes $5,240. If the Safe Babies cost reaches $34 then the net difference is nearly cost-neutral (-$268). The second BCA test lowers the average length of stay to 500 days to reflect what would happen in a locality with a shorter baseline length of stay. With other parameters in the model left unchanged, the net difference per child shrinks but remains positive at lower Safe Babies cost points.

The BCA is also sensitive to variations in the foster care per diem rate, which includes administrative costs. Two per diem rates ($75 and $95) were used in a projection that uses 500 days as the average length of stay. At $75 per day, Safe Babies is cost-favorable when the cost of Safe Babies stands at $28 per day or lower. At $34 per day, combined with a $75 foster care per diem, the net difference falls below zero. When the foster care per diem stands at $95, Safe Babies is cost-favorable even at $34 per day across all scenarios.

The last sensitivity test uses the expected Safe Babies effect on the length of stay in care. The baseline scenario uses a 28 percent reduction in length of stay, which is based on Safe Babies evaluation results. For the contrast, we adjusted the expected effect size by 90% and 110%. As expected, smaller effect sizes reduce the net per child difference; larger effect sizes produce larger net differences.

With each parameter combination, we found that Safe Babies demonstrates a positive benefit-cost profile, with benefits exceeding costs. However, the magnitude and direction of the BCA are sensitive to the local length of stay, the local unit cost of foster care, the local cost of implementing Safe Babies to the local service milieu, and the expected impact.

Summary

Infants and toddlers are the largest group of children entering foster care. Once in care, they stay longer than any other group of children. The cost of providing alternative care to babies is substantial. Given their unique developmental vulnerabilities, it makes sense to organize our child welfare services accordingly. Safe Babies is ZERO TO THREE's contribution to the work of making the child welfare system more responsive to the urgent needs of such young children.

From the ZERO TO THREE perspective, the cost of Safe Babies is defined by both the operational details and the local choices that fit Safe Babies into the local service milieu. The ingredients survey makes that clear. When aligning the program to local conditions, implementation sites make different choices. That adaptability is a hallmark of Safe Babies. The most important choice concerns personnel. Operationally, given what is needed in a given site to alter time spent in care, what is the personnel configuration that best aligns with the program goal? These are decisions that rely on a strong theory of change that connects the effort expended to the effect size needed to operate cost-beneficially inside a given service context. The analysis here shows how the investment decisions are supported by evidence.

Instead of relying on a single BCA estimate, it is more realistic to expect multiple estimates that differ depending on the implementation site. The prospective benefit-cost model offers a framework for identifying localities that present ripe opportunities for implementing Safe Babies. Our analysis shows that the benefit-cost assessment for Safe Babies is favorable but sensitive to local conditions. Even small reductions in length of stay produce financial results that favor increasing costs with Safe Babies on the one hand while lowering the cost of foster care on the other.

Introduction

In this report, we describe the results of a benefit-cost analysis (BCA) of the Safe Babies approach. Developed by ZERO TO THREE, the Safe Babies approach is a service philosophy that combines knowledge of child development with operational changes designed to improve the services 0 to 3-year-olds receive from the child protection system. At the child and family level, the Safe Babies approach brings best practices to the family court and the child welfare case planning process. At the community level, the Safe Babies team systematizes best practices locally and engages others with an interest in systems that serve very young children and their families. Although the specific service population differs from one Safe Babies site to the next (e.g., children at risk of placement as well as children placed in foster care), infants and toddlers placed in foster care are a core target group. In the United States, infants and toddlers are the children with the highest incidence of foster care placement. Additionally, the children admitted as babies spend more time in foster care than any other group of children (Wulczyn, 2020). Though statewide estimates are hard to locate, the county cost of placing infants in foster care runs between $1.3 million and $3 million per capita. Toddlers cost nearly as much.

With so much already invested, it is good policy to ask whether there are cost-beneficial ways to serve infants and toddlers who are in foster care. To that end, the Safe Baby approach responds to the particular developmental nuances that shape what it means to improve outcomes for children in this age group. The Safe Babies approach requires (1) a working knowledge of the development of infants, toddlers, and their family life, (2) access to the right mix of services through community collaboration, and (3) the specific attention of the court and judicial system. Initial findings suggest that families who get a package of services organized around the Safe Babies philosophy and service quality changes spend less time in foster care when compared with the business-as-usual (BAU) service model (Casanueva et al., 2019, 2022, 2024). Safe Babies has other benefits worth considering, including reduced maltreatment recurrence, greater placement stability, and physical and emotional health promotion (Casanueva et al., 2019, 2022, 2024).

As often happens, the program developers (ZERO TO THREE) would like to understand better the benefit-cost calculus associated with the Safe Babies approach. In brief, Safe Babies improves the quality of care and practice and expects infants and toddlers to spend less time in foster care as a result. The BCA answers an important question facing decision-makers: If the quality of care goes up and the time spent in out-of-home care goes down, do the financial tradeoffs work out favorably? From its launch in 2006, the Safe Babies footprint has grown to 142 sites in 30 states on the strength of its programmatic vision: the youngest children in foster care need special care and attention. Ever wider dissemination probably depends on convincing states that investing in Safe Babies is in the interest of the families they serve and the taxpayer.

The study comprises two components: (1) a retrospective study to understand the site-level cost structure and cost per child in contemporary terms and (2) a prospective BCA that supports future systems-level decision-making. A traditional retrospective BCA documents the cost of operating Safe Babies in a given site and then compares the cost of the BAU approach with the added cost of Safe Babies. The answer provides an estimate of whether Safe Babies was cost-beneficial but does so by looking back in time using a set of data taken from some historical period. What *were* the benefits and what *were* the costs? It is an important question and a useful approach, but we think it is helpful to ask what the benefit-cost tradeoffs *will be* going forward. To the traditional BCA, we add a prospective BCA. Even if the retrospective BCA shows that the Safe Babies approach is cost-beneficial, state leaders would still be left to ask, "That might be what happened in state X but what about my state?" The prospective BCA asks what might happen given an investment in Safe Babies that generates a change in outcomes in the future. This view offers child welfare leaders more actionable insights: if I invest in a Safe Babies program with the capacity to serve X children and the program generates an effect of Y size, will the averted costs (e.g., change in length of stay) pay for the cost of starting and sustaining Safe Babies? The prospective model uses realistic parameters to answer the investment decisions leadership faces. Thus, a prospective BCA is a simulation that answers what-if questions.

Among the advantages, the prospective BCA is not limited to a particular location or implementation. Any estimate of benefits and costs depends on local variation in the outcomes of interest, the baseline length of stay (LOS), the foster care per diem rate, local program implementation, and the cost of operating Safe Babies. Take the case of averted placement days that Safe Babies generates. The monetized value (relative to the cost of Safe Babies) changes depending on the baseline LOS in a given jurisdiction. In some counties (or states), a 10% reduction in LOS means 3 weeks but, in another jurisdiction, the 10% reduction translates into 14 weeks. Benefit-cost comparisons are affected by these baseline differences and so are the investment questions state leaders need to answer. We think a prospective view of investment better serves a state agency director who is deciding whether the Safe Babies "juice is worth the squeeze."

Literature Review

Evidence that Safe Babies Affects Length of Stay

We reviewed three evaluations with findings relevant to Safe Babies' BCA. McCombs-Thornton and Foster (2012) found positive effects using a propensity score to isolate a suitable counterfactual. Though a useful approach, the counterfactual was constructed from a national probability sample of children rather than a sample of children with experiences in the locations testing the Safe Babies approach. That said, the McCombs-Thornton and Foster study (2012) shows the integrity of the Safe Babies approach as a way to better serve infants, toddlers, and their families.

Methodologically, the recent evaluation by the American Institutes of Research (Faria et al., 2020) is a stronger design because it uses a natural experiment by randomly assigning cases to judges in combination with a quasi-experimental method. In that study, the effect size is relative to another group of children served in a more comparable business-as-usual (BAU) scenario. The study found that the treatment group spent 614 days in foster care at the median as compared to 749 days for the control group. An effect size derived from a comparable group stabilizes the effect size estimate considerably, which makes for a more reliable BCA.

A national program evaluation conducted by Casanueva and colleagues (Casanueva et al., 2019, 2022, 2024) reinforces the general conclusions gleaned from the other studies. The evidence supports the observation that adherence to Safe Babies' programmatic goals is both possible and positive. The Casanueva studies also highlight the type of multisite data available from ZERO TO THREE sites, data that provide a basis for estimating program effects on LOS. The most recent evaluation study by Casanueva and colleagues (2024) is a quasi-experimental study using a propensity score-matched comparison group from the National Survey of Child and Adolescent Well-Being (NSCAW II). The study found that the mean duration in care for reunification for the Safe Babies group is 310 days, compared to 476 for the NSCAW II group; 571 days for adoption, compared to 638 for the NSCAW II group; and 488 days for exits to relative/guardians, compared to 550 for the NSCAW II group. For any exit, the mean duration in care for the Safe Babies group was 442 days, compared to 573 for the NSCAW II group. In sum, given the relative strength of the Casanueva et al. (2024) study, our estimate of the potential Safe Babies effect on permanency uses the 28 percent reduction in the average time to permanency.

Benefit-Cost Analysis in Child Welfare

There is a long history of estimating benefits relative to program expenditures in child welfare. However, the majority of this literature has focused on the benefit-cost ratio related to preventing maltreatment, with benefits measured as short-term costs (e.g., 3 to 5 years), or lifetime estimated "savings" or avoided societal costs, attributed to preventing child maltreatment (Noor et al., 2003; Reynolds et al., 2011). For example, Noor and colleagues (2003) demonstrated in two studies in 1992 and 2002 that preventing child maltreatment reduces lifetime societal costs in such areas as special education, psychological and other healthcare use, and justice system involvement. Other BCA researchers have examined specific programs, such as Nurse-Family Partnership and the Chicago Parent Child Center, generating similar results, but with the caveat that a sufficient “return on investment” depends on baseline rates of maltreatment and the fundamental ability of programs to generate the intended benefit (Lee & Aos, 2011; Peterson et al., 2018; Reynolds et al., 2011).

The Washington State Institute for Public Policy (WSIPP) is known for its benefit-cost analyses of child welfare programs, including those that have an impact on reducing LOS in foster care. Lee, Aos, and Miller (2008) did a systematic review of 74 evaluations of United States programs and policies as part of their BCA of programs that target child abuse and neglect (CAN), out-of-home placement, permanency, and stability in care (placement moves). Their review found very few rigorous studies that included out-of-home placement in their outcome assessment and mixed results when this outcome was included. The study found that taking into account reductions in CAN, out-of-home placement, and other positive program impacts resulted in a $3.02 benefit per dollar invested (Lee et al., 2008). A study by Chor and colleagues (Chor et al., 2023), drawing on the WSIPP methodology, found that youth who received Therapeutic Foster Care (TFC) spent significantly less time in residential care than comparison youth (treatment as usual) over two years, resulting in a $100 per day difference in cost per youth between the groups and cost savings of $51,058 attributable to TFC over the 2 years. The lifetime net benefit was $94,294 per youth in this study. This study used only LOS in their BCA calculation.

A study using elements of the cost-ingredients approach in two Wisconsin counties assessed the cost-benefits of Child Advocacy Centers using child abuse investigations and prosecutions as outcomes. Again, the focus is the prevention of entry into child welfare, rather than the financial impact of reducing LOS (Shadoin et al., n.d.).

Finally, in one of the few studies of a program that targets LOS, Johnson-Motoyama and colleagues (Johnson-Motoyama et al., 2013) considered the benefits and costs of the Strengthening Families Program (SFP). Using the foster care per diem and the program cost as the basis for the BCA, they found that SFP reduces costs but that the level of savings was dependent on the daily cost of foster care and the cost of the program, as would be expected.

Methods

A rigorous assessment of the benefits and costs associated with the Safe Babies approach starts with data collected for two purposes. The first purpose serves the cost question. At a minimum, a service delivered consists of personnel and non-personnel costs. The study has to enumerate costs with as much detail as practical bearing in mind fixed/variable costs and variations in costs based on the implementation site (e.g., program design, labor, and the local cost of living).

The second purpose involves the benefits question. For this study, we used foster care averted as the best, least ambiguous measure of benefit. Safe Babies has other benefits worth considering, including reduced maltreatment recurrence), greater placement stability, and physical and emotional health promotion (Casanueva et al., 2019, 2022, 2024). However, in their totality, for children placed in foster care, the Safe Babies benefits are tied to how long children stay in foster care because the assessed value of any other benefits hinges on what happens to time spent in care. Therefore, we took a conservative approach, focusing on reduced time in foster care as an easily measured benefit.

The Ingredients Cost Study

The cost study uses the ingredients method (Levin et al., 2018). We also requested site-specific administrative data from ZERO TO THREE. In general, for the ingredients survey, we organized our questions around two cost centers: personnel and non-personnel costs.

Personnel costs. Site-specific personnel costs may include direct service, indirect service, administration, volunteer/in-kind, and consultant personnel. We asked local program leaders to include Community Coordinators, data entry staff, consultants, and contractors. Among staff, a Community Coordinator is a key member of the Site Implementation Team, providing the necessary leadership and oversight for effective implementation and sustainability of the Safe Babies approach. They also support Family Team Meetings and the Active Community Team. Administrative personnel costs include supervisors and support personnel (e.g., human resources, finance) associated with Safe Babies implementation.

Non-personnel costs. We assigned non-personnel costs during ongoing implementation including facilities (e.g., meeting, visitation space), technology (e.g., computers, printers, internet), travel, and other items (e.g., food). We obtained a direct account of the actual resources used in program implementation and collected cost data for all resources.

Although there are some start-up costs (i.e., non-recurring costs) when Safe Babies is in the initial implementation phase, we treat the costs presented here as annual or recurring costs.

Site Selection

Working with ZERO TO THREE, we selected three current Safe Babies sites. Each participating site was offered a small stipend for their participation. We selected a sample of sites that are representative of other sites in the Safe Babies network. By selecting diverse sites, we wanted to show, prospectively, how estimates of costs and benefits are affected by location and other factors affecting costs.

Number of children served. We selected programs ranging in the annual number of children served, from 22 to 65 children. Safe Babies caseloads are recommended at 20 per Community Coordinator at any given time, but some programs serve families and children at smaller or greater Coordinator-to-child ratios.

Program maturity. Another consideration for study participation was the maturity of each site's program. Before selection, the sites were recognized as "Active" (actively implementing Safe Babies), "Installing" (working toward full implementation), and "Exploring" (considering the installation of Safe Babies). All selected sites were active at the time of the study.

Geographic diversity. Programs have different costs related to variability in labor markets and local economies. We considered where in the United States each site was situated (e.g., West Coast, East Coast, Midwest, South). The selection goal was to include sites with a diversity of geographic representation.

Data Collection

We used surveys and interviews to collect local personnel and non-personnel cost data. Using the list of cost ingredients, we designed a survey for participating sites with the primary purpose of gathering locale-specific cost ingredients data; the interviews were used to learn about the local context and its effect on service costs. Following an introductory conversation, surveys were administered to Safe Babies leads from each of the three sites. The leads collaborated with their organization's financial services department to obtain relevant information, collated collected data, and responded to the survey. The survey data were used to populate each site's cost template.

To further understand costs and benefits, we also conducted interviews with knowledgeable staff at each Safe Babies site. After each site submitted its survey responses, we scheduled a supplemental conversation with the site lead and other survey contributors. Those conversations allowed us to ask follow-up questions about the survey responses, clear up any remaining ambiguity about the site's list of ingredients and associated costs, and for the local informants to describe the local qualities that define their version of Safe Babies (e.g., local process, quality, and capacity differences). Throughout, we worked with ZERO TO THREE to understand the program nuances from their perspective as program developers.

Data Structure

From an operational perspective, our data collection strategy was used to populate a database that answers the cost question. Ingredients refer to all the resources used to implement a program: equipment and materials, overhead, staff, facilities, and other program inputs as described to us during conversations with local representatives. Each ingredient is then quantified and attached to an estimated unit price giving us the total cost per ingredient by multiplying the number of units by price. Then the average cost per child (*AC*) is derived by dividing the total program cost (C_i) by the number of children served (*N*):

$$AC \ = \sum_i^n \ C_i/N = \sum_i^n \ P_i * Q_i/N,$$

where C_i represents the total cost of all ingredients in the aggregate. The total cost of a given program component is equal to the price of that component (P_i) times the number of units or quantity (Q_i) provided in a given unit of time. The price-quantity formula provides the basic framework for calculating what are, ultimately, site-specific costs.

Each site has different costs because of different labor markets and local economies. Size and geographic location were considered due to their cost (i.e., scale) implications. The ratios of the number of children served divided by the number of Community Coordinators differ depending on the sites. This different ratio is a significant source of varying costs of local sites.

The Benefits – Foster Care Length of Stay

When the Safe Babies approach has its intended impact on the LOS, fewer days of foster care will be used relative to BAU. The cost of foster care averted is the measure of program benefit with the clearest meaning in the benefit-cost calculus. We measure the cost of foster care as a per diem rate that includes the stipend foster parents (either relatives or non-relative foster carers) receive plus any of the state's administrative costs that reflect the cost of providing foster care. States may also include special allowances (e.g., diapers) that affect the cost per day. This is the all-in per diem rate for foster care.

The business-as-usual baseline

To generate baseline estimates for foster care utilization, we used the OSPEDALE simulation software. OSPEDALE is a suite of simulation tools that rely on both stock and flow and agent-based simulation methods and technology (Wulczyn et al., 2020; Wulczyn, Kaligotla, et al., 2024; Wulczyn & Sheu, 1998) for decision support. Simulation models are an underused source of research evidence (Lery et al., 2016; Wulczyn, Alpert, et al., 2024; Wulczyn & Alpert, 2016).

For the Safe Babies benefit-cost study, we used OSPEDALE's 5-year forecast. The 5-year forecast is a stock and flow model that needs four parameters to operate properly: (1) the stock of children in care at the start of the fiscal year of implementation; (2) the flow of children into care each year over the five years; (3) an estimate of how long children stay in care based on actuarily relevant strata, and (4) the unit cost of care adjusted for the same strata when warranted. Elsewhere, we have documented how 5-year forecasts are generated (Wulczyn, Kaligotla, et al., 2024; Wulczyn & Sheu, 1998). The parameters were estimated from published sources and our experience working with financial data. Administrative data supplied the parameter estimates for the discharge constants, the measure used to adjust the LOS. Here, we illustrate how the forecasts were generated by starting with the results.

Children in care, admission, and care days

OSPEDALE's 5-year forecast starts with an observed stock of age-eligible children already in care. Age eligibility refers to children between the ages of birth and three years who were in foster care as of a given date. By virtue of their age, children in this group are potential Safe Babies service recipients. The observed stock is derived from a count of children in foster care as of a certain date. The children in care were admitted in some prior year. Though the date certain can be any day of the year, for convenience, we use the first day of the fiscal year. We used OSPEDALE to create the equivalent of a state-level placement forecast. Table 1 shows an example of the forecast data for children ages 0 to 3 regardless of Safe Babies participation. In Table 1, the children in care on the first day of the 5-year window can be found in row 1, column 1 (N = 1,019). In each subsequent year, the number of children from the original in-care group still in care is displayed. The number declines each year because children exit care. At the start of the 6th year, 68 children are still in care. The first row of the right panel shows how many care days the in-care population used each year. As children leave care, the number of days used declines, from 273,667 in year 1 to 25,490 in year 5. By definition, children still in care at the start of year 6 were in foster care continuously.

Table 1: Five-Year OSPEDALE Simulation

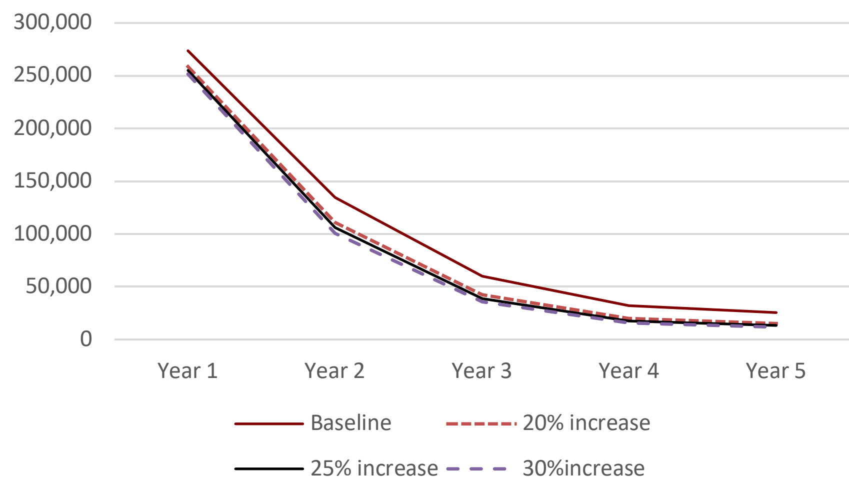
	Children in Care at the Start of the Year						Care Days Use During the Year				
Population	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 1	Year 2	Year 3	Year 4	Year 5
In-care	1,019	535	243	107	73	68	273,667	134,843	60,263	32,221	25,490
Year 1		457	294	144	62	24	90,378	135,000	76,818	35,624	14,643
Year 2			457	294	144	62		90,378	135,000	76,818	35,624
Year 3				457	294	144			90,378	135,000	76,818
Year 4					457	294				90,378	135,000
Year 5						457					90,378
All	1,019	992	994	1,003	1,031	1,050	364,045	360,221	362,458	370,040	377,952

Source: Analysis of Simulated State Data

In the OSPEDALE simulation, age-eligible children enter care each year. The admission years are labeled as Years 1 through 5 (rows of Table 1). Looking forward in time, the number of admissions is unknown. To derive a count of admissions each year, we use the recent history as a proxy. For simplicity, we used the number of fiscal year admissions from the most recent year before the start of the 5-year simulation window. The number of admissions is repeated for each of the five years. Because there are no admissions in care at the start of the first day of the year, we do not show the number of admissions to avoid confusion. In each subsequent year after the year of admission, we show the number of children who start the next year still in care. The Year 2 count (457) is based on the number of admissions from the prior year minus the number of children who were discharged in the year of their admission. We show a constant number of children in care at the start of Year 2 because the number of admissions is held constant as is the probability of discharge in the year of admission. In the columns showing the care days used each year, the number of days used by the children admitted in the year of their admission is provided.

From one year to the next, the number of children remaining in care is a function of a discharge constant (Wulczyn & Sheu, 1998). The discharge constant captures how quickly the population declines between two points in time. The discharge constant translates into a conditional probability: of children in care at the start of a year, what is the likelihood of discharge during the year? We use population and year-specific discharge constants to estimate the Safe Babies effect on LOS. When the discharge constant is increased, the conditional probability of discharge goes up and the number of care days goes down. To estimate the discharge constant in the future, we use the average discharge constant from the 6 most recent years. Figure 1 illustrates the basic idea.

Figure 1: Change in Care Days Used by the In-Care Population with a Discharge Constant Increase of 20%, 25%, and 30%



Source: Table 1

The care days for the in-care group at the start of the 5-year window are presented along with the care days used in each of the subsequent years. As shown in Table 1, the number of care days declines each year because children leave care. The curvilinear shape, representing the number of days used each year, represents the fact that the discharge rate changes with each year. The decline is sharpest in the first year and flattens in each subsequent year. This is equivalent to a change in the probability of discharge from care as time passes.

In addition to the baseline care days, we also show what would happen to the annual number of care days if the discharge rate is increased by 20, 25, and 30%. We measure the pace at which children leave the population as a discharge constant (Wulczyn & Sheu, 1998). As expected the number of care days falls each year and overall. For the BCA that follows, the change in discharge constants is calibrated to reflect the Safe Babies effect on the LOS. We adopt the discharge constant because we want to show how care day changes fall relative to a fiscal year. Presented this way, it shows that it is possible to generate savings in the 1st year provided the children in care at the start of the fiscal year are included in the target population.

Unit cost of foster care

The unit cost of foster care is the all-in cost of 1 day of foster care otherwise known as the per diem rate. In the case of infants and toddlers, the unit cost is the daily cost of foster family care. Children in this age group rarely spend time in non-family care (e.g., group care) so the cost of non-family care is not included in the per diem estimate. The all-in cost includes the foster parent stipend, the administrative cost of operating a foster care program, and any private agency costs associated with operating a foster boarding home program (i.e., property costs, non-clinical staff costs, and program staff costs). Therefore this all-in daily cost is much higher than the board and care stipend paid to foster parents. In OSPEDALE, the cost each year is simply the number of care days times the per diem rate. If the per diem rate changes (e.g., a cost-of-living increase), the aggregate cost increase follows even if everything else stays the same. For the simulations, we adopted a per diem rate of $85 based on information received from states and our own experience analyzing state cost data. An $85 per diem rate is similar to the rate reported elsewhere (Johnson-Motoyama et al., 2013).

The Cost Differential

To measure the impact of the reduced LOS on public spending, we change how quickly children move through the placement using a discharge constant as the measure of velocity through the foster care system (Wulczyn & Sheu, 1998). We do not adjust the number of admissions coming into care each year. There are six groups of children being followed: one already in care at the start of the year and five new (annual) admission cohorts.

Among the three simulations shown in Figure 1, we present in Table 4 the difference between the baseline cost and the change in cost based on a 30% increase in the discharge constant. Raising the discharge constant reduces the care days utilized. The BAU care day total minus the prospective estimate (i.e., adjusted care day total) is the count of care days averted because of Safe Babies.

The monetized difference represents the cost differential, which reflects the financial benefit of the change in LOS. When the cost differential is compared with the cost of operating a Safe Babies program at a given size, we can answer the core benefit-cost question: does foster care with Safe Babies cost less than, more than, or about the same as foster care alone?

Results

Ingredients, Site Variation, and Cost per Day

Table 2 summarizes total costs into four categories: (1) Personal Costs, (2) HR/Finance/IT/Facilities, (3) Office/Travel/Other, and (4) Family Team Meeting/Wraparound. The HR/Finance/IT/Facilities category includes human resources, IT infrastructure and operations, and facilities expenses. The Office/Travel/Other category includes office supplies, travel and transportation, and other minor expenses. The Family Team Meeting/Wraparound category refers to other system costs (i.e., hearings, family team meetings, other meetings, and wraparound services).

Across sites, personnel costs comprise the majority of expenditures, ranging from 83% to 91% as shown in Table 2. Site A has a full-time manager and a full-time director who work on Safe Babies 100% of their time, in addition to three Community Coordinators. In contrast, Site B and Site C do not have full-time supervisors or directors dedicated solely to Safe Babies (in Site B, a director provides 20% of their time for Safe Babies). The next highest spending category is HR/Finance/IT/Facilities, ranging from 2% to 15%. Site C relies heavily on wraparound services beyond BAU, compared to other Sites.

Overall, Site A's expenditure structure differs from the other sites. While this may represent an exceptional case, it helps us understand the overall landscape with a small number of samples. The primary purpose of this cost-benefit analysis is to conduct a prospective BCA. Thus, we are interested in the range of programmatic approaches. Site A represents a particular management structure.

Table 2: Safe Babies Ingredients, Cost per Day, and Site Variation

	Site A				Site B[1]		Site C			
Cost Center	2022		2023		2023		2022		2023	
Personnel Costs	$686,758	89%	$703,727	88%	$140,930	83%	$155,156	94%	$212,880	91%
Coordinator	4		4		1		1		1	
Directors/Managers	2		2							
Other Program Staff	1		1		1		1		2	
HR/Finance/IT/Facilities	$86,790	11%	$93,096	12%	$25,394	15%	$431	0%	$4,739	2%
Office/Travel/Other	$790	0%	$6,540	1%	$2,235	1%	$2,685	2%	$5,144	2%
Meetings, program activities	$0	0%	$0	0%	$1,063	1%	$7,050	4%	$10,650	5%
Total	$803,363	100%	$803,363	100%	$169,622	100%	$233,412	100%	$233,412	100%
Daily Cost	$45		$53		$28		$20		$28	

Source: Ingredients Survey

Daily cost is calculated by dividing the total Safe Babies costs by the days of foster care used in the year for which costs were determined (see Table 3). Despite differences in the number of children served and total spending, Site B and Site C have almost identical daily costs ($28) in 2023. The daily cost at Site A is much higher ($45 in 2022 and $53 in 2023) because of the unique staffing pattern and changes in the number of children served. Overall, based on the cost data, Safe Babies' daily cost ranges from $20 to $53 per day with an average of around $34. This presents a range, but not necessarily the low, middle, and high range of Safe Babies. The costs vary primarily depending on how the program is structured in terms of personnel.

Children Served

As shown in Table 3, Site A has served more children and families than the other two sites. The average-days column represents the average number of days that children received Safe Babies services in 2022 and 2023. Site A has longer mean days (265 days in 2022 and 317 days in 2023) than the other two sites. Total days refers to the total number of days that children aged 0 to 3 were in service throughout the year, aggregating service days of all children.

Table 3: Number of Children Served, Average Days per Fiscal Year, and Total Days

	2022			2023		
Site	Children	Avg. Days	Total Days	Children	Avg. Days	Total Days
Site A	65	265	17,231	48	317	15,199
Site B				22	275	6,050
Site C	38	237	8,996	31	267	8,286

Source: Ingredients Survey and ZERO TO THREE Database

[1] Site B was only partially operational in 2022 due to staff turnover, so only 2023 data are included.

The Safe Babies Impact – Population Level Simulation

The Safe Babies approach introduces several changes to the process of care, the quality of care, and the capacity to deliver care. Although each site differs, the process, quality, and capacity changes the Safe Babies approach introduces are organized around working knowledge centered around the development of infants, toddlers, and their family life, access to the right mix of resources through community collaboration, and the specific attention of the judicial system. Through these operational improvements, the organizations implementing Safe Babies intend to reduce the LOS along with other goals that are a function of who is being served as determined by local partners. The prospective BCA estimates the change in foster care costs resulting from how long children spend in foster care induced by Safe Babies. Of course, there are other potential benefits including positive effects on the well-being of children. Our focus is on the most easily measured potential benefit – lower LOS.

The top panel of Table 4 shows the cost of providing foster care to the infants and toddlers portrayed in Table 1. This is the baseline cost that takes into account what is likely to happen over 5 years as it concerns the utilization of foster care – i.e., the underlying admission and discharge constant parameters remain unchanged. Each row-column intersection (year and cohort) is governed by a unique discharge constant. Each row is a new admission year; each column is a calendar year. Reading down the column shows the fiscal impact of all prior cohorts on the listed fiscal year. Across the rows is the annual cost of each cohort.

Table 4 also displays how the spending changes if the discharge constant is raised by 30%. Regarding the in-care population, this is the change that was depicted in Figure 1. At the bottom of Table 4, the cost difference between the baseline (or BAU) scenario and the cost associated with a change in the discharge rate is presented.

Table 4 also shows a stratified view of public spending in each of the 5 years. First, the total projected costs over the 5-year projection, given the baseline admission counts and discharge assumptions and a daily rate of $85, is $156 million. Given the model assumptions, the largest expenditure in any given year is linked to the children admitted in the immediately preceding year (~$11.475 million). The results also show that in year 5, the original in-care population continues to cost the state a significant sum (~$2.167 million). This speaks to one reason a program, such as Safe Babies, that targets LOS is potentially important. Table 1 projects that 73 children from the original in-care population will still be in care at the beginning of year 5, costing about $2.167 million or $29,680 (=$2.167 M/ 73) per child. The middle panel of Table 4, which uses an effect size commensurate with the published effect size, shows the potential impact associated with a 30% increase in the discharge constant. The bottom panel shows the quantifies the at-scale benefit of programs, such as Safe Babies, that target how long infants and toddlers stay in care. Foster care spending goes down by $19 million. Understandably, the savings are lowest in the 1st year when only the in-care population generates savings ($1.881 million). Savings grow in each subsequent year as the admissions from the prior years are included in the benefit calculation.

Finally, Table 4 shows what happens to the number of children in care at the start of each year when the discharge constant is increased by 30%. By definition, there is no change in the number of children in care at the start of the 5-year window. Thereafter, as Safe Babies works to reduce time in care, the number of children in care remaining at the start of the next year falls. By the start of year five, the baseline projected number of children in care stands at 1,031. With an increase in the discharge constant, the projected year 5 count of infants and toddlers would be 885, a difference of 146 infants and toddlers. This population analysis highlights the potential impact of Safe Babies. Though it does not assess whether the Safe Babies approach is cost-beneficial, the results in Table 4 establish the overall market size, focusing on state-level expenditures and the number of children affected.

Table 4: Five-Year Baseline Cost with Cost Differential

Population	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Baseline Scenario						
In-care	$23,261,658	$11,461,687	$5,122,353	$2,738,771	$2,166,637	$44,751,106
Year 1	$7,682,130	$11,474,960	$6,529,502	$3,028,055	$1,244,671	$29,959,317
Year 2		$7,682,130	$11,474,960	$6,529,502	$3,028,055	$28,714,647
Year 3			$7,682,130	$11,474,960	$6,529,502	$25,686,592
Year 4				$7,682,130	$11,474,960	$19,157,090
Year 5					$7,682,130	$7,682,130
Total	$30,943,788	$30,618,777	$30,808,945	$31,453,418	$32,125,955	$155,950,883
Children	1,019	992	994	1,003	1,031	
30% Discharge constant Increase						
In-care	$21,380,540	$8,573,329	$3,015,161	$1,333,564	$994,968	$35,297,561
Year 1	$7,682,130	$10,801,779	$5,216,566	$1,926,942	$608,595	$26,236,012
Year 2		$7,682,130	$10,801,779	$5,216,566	$1,926,942	$25,627,417
Year 3			$7,682,130	$10,801,779	$5,216,566	$23,700,476
Year 4				$7,682,130	$10,801,779	$18,483,909
Year 5					$7,682,130	$7,682,130
Total	$29,062,670	$27,057,238	$26,715,636	$26,960,981	$27,230,980	$137,027,505
Children	1,019	900	874	872	885	
Cost Differential						
In-care	$1,881,118	$2,888,358	$2,107,193	$1,405,207	$1,171,669	$9,453,546
Year 1	$0	$673,181	$1,312,935	$1,101,113	$636,076	$3,723,305
Year 2		$0	$673,181	$1,312,935	$1,101,113	$3,087,229
Year 3			$0	$673,181	$1,312,935	$1,986,116
Year 4				$0	$673,181	$673,181
Year 5					$0	$0
Total	$1,881,118	$3,561,539	$4,093,309	$4,492,436	$4,894,975	$18,923,378
Children	0	-92	-120	-131	-146	

Source: Analysis of Simulated State Data

The Safe Babies Impact – Program Level

Table 4 monetizes the impact of the reduced LOS at the population level. This change is based on a state-wide intervention, and the results show how changes in the LOS play out over five fiscal years. The outcomes indicate that any changes in LOS produced by Safe Babies would result in substantial reductions in foster care costs. Specifically, a 30% increase in the discharge constant results in aggregate foster care savings of more than $19 million.

Next, we add the cost of providing Safe Babies to infants and toddlers in foster care. To do this, we shift from the population level to the site level where the cost of providing Safe Babies services is more easily identified. In essence, the question comes down to this: if the daily cost of providing Safe Babies is added to the daily cost of foster care for a group of infants and toddlers in foster care, is the change in the LOS large enough to generate a favorable benefit (reduced LOS) when compared to the cost of foster care plus Safe Babies.

To do this analysis, we acknowledge that the BCA is sensitive to four model parameters: the Safe Babies unit cost (e.g., see Table 2), a local average LOS, the local foster care cost, and the Safe Babies effect size (i.e., how large is the LOS change). Using various parameter combinations, we compare the baseline cost of foster care with the cost of foster care plus the cost of Safe Babies. As this is a prospective BCA that considers the costs and the benefits of what would happen given a set of assumptions, we use sensitivity analysis to illustrate how the BCA ultimately depends on the local circumstances: the cost of foster care, the cost of providing Safe Babies, the average LOS, and the Safe Babies effect size.

Safe Babies cost per child

Our first example examines the benefit-cost sensitivity as a function of the daily Safe Babies cost. The Safe Babies costs are taken from Table 2. We test the benefit-cost calculation using three daily rates: $28 per day, 80% of $28 per day, and the all-site average of $34 per day. We also assume a program size (100 children) that is slightly larger than the programs we observed. The average LOS used for all three scenarios is 683, which is in line with how long infants and toddlers spend in foster care in a typical state. In this context, the size of the program does not affect the results in part because we do not assume economies of scale. Assuming economies of scale when serving more children efficiently, the cost per day would change. However, this cost advantage is not considered in the current calculation. We use a foster care per diem of $85. The final row in Table 5 shows the difference between the cost of foster care under a business-as-usual condition (the baseline in Table 5) and a scenario that incorporates the Safe Babies effect. The Safe Babies effect is 28%, which is the effect size shown in Casanueva et al. (2024).

Table 5 compares the cost of foster care (**Baseline**) and the cost of foster care plus Safe Babies (**Safe Babies Effect**) using the baseline per diem rates, caseload size, and LOS set as in the top panel. As a baseline, the cost of foster care is $58,055 per child across the three scenarios. For the Safe Babies effect, the LOS is lowered and the daily cost of providing Safe Babies is added to the per-child foster care cost. After considering those changes, foster care cost per child drops from $58,055 to $41,800 but the cost of Safe Babies has to be added.

Table 5: Cost and Net Difference per Child

Scenario	$28 per day	80% of $28 per day	$34
Baseline			
N of Children Served	100	100	100
Average LOS	683	683	683
Total Days Used	68,300	68,300	68,300
Daily Rate for Foster Care	$85	$85	$85
Foster Care Spending	$5,805,500	$5,805,500	$5,805,500
Cost per Child - Foster Care	$58,055	$58,055	$58,055
Safe Babies Effect			
Total Days Used	49,176	49,176	49,176
Safe Babies Cost per Day	$28.00	$22.40	$33.60
Foster Care Spending	$4,179,960	$4,179,960	$4,179,960
Cost per Child - Foster Care	$41,800	$41,800	$41,800
Cost per Child - Safe Babies	$13,769	$11,015	$16,523
Cost per Child - Total	$55,569	$52,815	$58,323
Net Difference per Child	$2,486	$5,240	-$268

Source: Analysis of Simulated State Data and Ingredients Survey

At a Safe Babies cost of $28.00 per day (i.e., the Safe Babies daily cost is associated with each day in foster care), the cost of foster care plus Safe Babies per child costs $2,486 less than the cost of foster care per child alone ($55,569 vs. $58,055). Alternatively, with the other parameters in the model held constant, if the Safe Babies daily cost falls to $22.40 per day, then the cost differential rises to $5,240 per child in favor of foster care with Safe Babies, which is a substantial difference on a per child basis. However, if the cost of Safe Babies reaches $33.60 per day, then the cost of foster care plus Safe Babies is nearly cost-neutral (-$268).

Foster care length of stay

The average time in foster care affects the benefit-cost calculation as might be expected. However, because the costs are tied to the number of days of foster care the impact is proportional. Table 6 provides that evidence. Tables 5 and 6 are identical except for the average LOS. In Table 5, the average LOS is 683 days; in Table 6 the average LOS is set at 500 days to illustrate how a different average LOS affects the benefit-cost calculation. Although an increase in LOS is not separately analyzed, the potential effects of an increase are easily extrapolated. With everything else the same, the benefit-cost calculation shows that with an average Safe Babies cost of $28.00 per day, the net difference shrank to zero across the three different scenarios (from $2,486 to $1,820 for $28.00 daily rate; from $5,240 to $3,836 for $22.40 daily rate; from -$268 to -$196 for $33.60 daily rate). These findings reflect the simple mathematics that a shorter LOS reduces the cost difference regardless of whether the calculation is positive or negative. From this calculation, we can infer that the cost difference of an increase in LOS will be magnified in states with a longer LOS, whether the outcome is positive or negative.

Table 6: Cost and Net Difference per Child for Reduced LOS

Scenario	$28 per day	80% of $28 per day	$34
Baseline			
N of Children Served	100	100	100
Average LOS	500	500	500
Total Days Used	50,000	50,000	50,000
Daily Rate for Foster Care	$85	$85	$85
Foster Care Spending	$4,250,000	$4,250,000	$4,250,000
Cost per Child - Foster Care	$42,500	$42,500	$42,500
Safe Babies Effect			
Total Days Used	36,000	36,000	36,000
Safe Babies Cost per Day	$28.00	$22.40	$33.60
Foster Care Spending	$3,060,000	$3,060,000	$3,060,000
Cost per Child - Foster Care	$30,600	$30,600	$30,600
Cost per Child - Safe Babies	$10,080	$8,064	$12,096
Cost per Child - Total	$40,680	$38,664	$42,696
Net Difference per Child	$1,820	$3,836	-$196

Source: Analysis of Simulated State Data and Ingredients Survey

Foster care daily rate

Tables 7 and 8 replicate Table 6 with one exception. Instead of the $85 daily rate in Table 6, Table 7 uses a $75 daily rate and Table 8 uses a $95 daily rate to capture state per diem rate differences. As shown in Tables 7 and 8, as the daily cost of foster care goes down and up, the breakeven point shifts. At a Safe Babies cost of $28.00 per day in Table 7, Safe Babies still provides a per-child cost savings ($420). At higher daily Safe Babies costs of $33.60 per day, the differences are now negative (-$1,596). When foster care rates are low, the added cost of Safe Babies represents a larger proportion of the total cost. With a $95 daily rate in Table 8, cost savings increase significantly. At a Safe Babies cost of $33.60 per day in Table 8, Safe Babies provides a $1,204 per-child cost saving. When foster care rates are higher, the added cost of Safe Babies represents a smaller proportion of the total cost. The findings of Tables 7 and 8 indicate that the ratio of the two daily rates (foster care and Safe Babies) determines the direction and the amount of the net difference per child.

Table 7: Cost and Net Difference per Child for $75 Daily Rates

Scenario	$28 per day	80% of $28 per day	$34
Baseline			
N of Children Served	100	100	100
Average LOS	500	500	500
Total Days Used	50,000	50,000	50,000
Daily Rate for Foster Care	$75	$75	$75
Foster Care Spending	$3,750,000	$3,750,000	$3,750,000
Cost per Child - Foster Care	$37,500	$37,500	$37,500
Safe Babies Effect			
Total Days Used	36,000	36,000	36,000
Safe Babies Cost per Day	$28.00	$22.40	$33.60
Foster Care Spending	$2,700,000	$2,700,000	$2,700,000
Cost per Child - Foster Care	$27,000	$27,000	$27,000
Cost per Child - Safe Babies	$10,080	$8,064	$12,096
Cost per Child - Total	$37,080	$35,064	$39,096
Net Difference per Child	$420	$2,436	-$1,596

Source: Analysis of Simulated State Data and Ingredients Survey

Table 8: Cost and Net Difference per Child for $95 Daily Rates

Scenario	$28 per day	80% of $28 per day	$34
Baseline			
N of Children Served	100	100	100
Average LOS	500	500	500
Total Days Used	50,000	50,000	50,000
Daily Rate for Foster Care	$95	$95	$95
Foster Care Spending	$4,750,000	$4,750,000	$4,750,000
Cost per Child - Foster Care	$47,500	$47,500	$47,500
Safe Babies Effect			
Total Days Used	36,000	36,000	36,000
Safe Babies Cost per Day	$28.00	$22.40	$33.60
Foster Care Spending	$3,420,000	$3,420,000	$3,420,000
Cost per Child - Foster Care	$34,200	$34,200	$34,200
Cost per Child - Safe Babies	$10,080	$8,064	$12,096
Cost per Child - Total	$44,280	$42,264	$46,296
Net Difference per Child	$3,220	$5,236	$1,204

Source: Analysis of Simulated State Data and Ingredients Survey

Safe Babies effect size

The last benefit-cost calculation, presented in Table 9, varies the Safe Babies effect size. Table 9 uses the same program size, LOS, and foster care daily rate as Table 7. We adjust the size of the Safe Babies effect by +/- 10%. The baseline effect (28%) is the same as the effect used in each of the previous examples. The two right-most columns show the change in the Safe Babies effect.

Table 9: Cost and Net Difference per Child for Different Effect Sizes

Scenario	Baseline Effect	90% of Baseline Effect	110% of Baseline Effect
Baseline			
N of Children Served	100	100	100
Average LOS	500	500	500
Total Days Used	50,000	50,000	50,000
Daily Rate for Foster Care	$85	$85	$85
Foster Care Spending	$4,250,000	$4,250,000	$4,250,000
Cost per Child - Foster Care	$42,500	$42,500	$42,500
Safe Babies Effect			
Total Days Used	36,000	37,400	34,600
Safe Babies Cost per Day	$22.0	$22.0	$22.0
Foster Care Spending	$3,060,000	$3,179,000	$2,941,000
Cost per Child - Foster Care	$30,600	$31,790	$29,410
Cost per Child - Safe Babies	$10,080	$10,472	$9,688
Cost per Child - Total	$40,680	$42,262	$39,098
Net Difference per Child	$1,820	$238	$3,402

Source: Analysis of Simulated State Data and Ingredients Survey

Not surprisingly, the benefit-cost assessment is quite sensitive to the Safe Babies effect size. At baseline, the per-child net difference between foster care plus Safe Babies is $1,820. Assuming nothing else in the model changes, a drop in the effect size of 10% changes the BCA to almost zero (from $1,820 to $238. If the Safe Babies effect is larger than expected by 10%, then the benefit-cost comparison is substantially larger ($3,402) in favor of adding Safe Babies to the mix of services available to infants and toddlers when they are in foster care.

Conclusion

Is the Benefit-Cost Calculation Favorable?

Infants and toddlers are the largest group of children entering foster care. Once in care, they stay longer than any other group of children. The cost of providing care is substantial. Given their unique developmental vulnerabilities, it makes sense to organize our child welfare services accordingly. Safe Babies is ZERO TO THREE's contribution to the work of making the child welfare system more responsive to the urgent needs of such young children.

In this paper, we address how the cost of providing Safe Babies compares with the cost of business as usual. Business as usual is defined as the daily cost of foster care aggregated over some number of children and their average LOS. In effect, days in foster care are days away from the family. By making contributions to business as usual, Safe Babies hopes to lower the time needed to bring children together with families outside the system of formal care we have in this country. If care days go down, the fiscal tradeoff becomes an obvious policy question. If making the system work better has no added cost, the investment opportunities are more apparent.

To do the analysis, we brought five pieces of evidence together: the daily cost of Safe Babies, the all-inclusive daily cost of foster care, a count of children entering the system, a metric for capturing children as they move through the system, and an effect size attributable to programs like Safe Babies that target LOS. The cost of providing Safe Babies was captured using the ingredient method. The other parameters were estimated from published sources and our own experience working with financial data. Administrative data supplied the parameter estimates for the discharge constants, the measure used to adjust the LOS.

We looked at the results in two ways. At the population level, we monetized the overall cost of foster care using the per diem rate and the number of days. We adjusted the assumptions in the model to account for the impact of Safe Babies and then measured the care day differential. At the population level, we are quantifying the cost of providing a foster home to a group of children and then asking what would happen if the system worked more efficiently. What is the impact of acting with the focus Safe Babies brings to the work needed to move children to permanency?

To get at these specific questions, we asked about the size of the foster care population in 5 years given the assumptions built into a simulation model that uses the past to make credible assertions about the future. As a prospective model, the population level simulations provide the impact of the reduced LOS in public spending. We found that advancing the pace at which young people move through the system frees up public funds provided there is a plan for using them.

By our estimate, a 30% change in the discharge constant would put about $18.9 million over 5 years up for discussion (see Table 4). This indicates that a favorable benefit-cost assessment is achievable even at the population or public health level. In terms of children, a starting caseload of just over 1,000 children would mean 146 fewer children still in care at the start of the 5th year if the pace at which children leave the system increases by 30%. It is, in a real sense, what better looks like when discharge rates go up and spending on foster care goes down, all else being equal. This estimate projects future benefits without accounting for the operational costs of programs like Safe Babies. Therefore, it is essential to examine program-level costs and compare them with the associated benefits.

For the second view, we dropped to the program level and added the cost of providing Safe Babies services to the cost of foster care to investigate whether the cost of providing Safe Babies reduces the LOS large enough to generate a favorable benefit. For these simulations, we tested various parameter combinations: long lengths of stay paired with high and low foster care per diem rates; different Safe Babies unit costs, and different effect sizes. With each combination, we compared the baseline cost of foster care with the cost of foster care plus the cost of Safe Babies. We found that Safe Babies has a positive benefit-cost profile that is sensitive to the local LOS, the local unit cost of foster care, the local cost of adding Safe Babies to the local service milieu, and the expected impact. If, for example, the average LOS is long, the foster care per diem rate is high, and the average cost of Safe Babies falls in the midpoint (or lower) of the costs we observed, then the benefit-cost comparison shows a cost differential as large as $5,236 per child provided the Safe Babies effect on LOS approximates the effect size reported in the literature. Where the average LOS is comparatively short, the foster care per diem is low, and the cost of Safe Babies is high, then it is much harder to show a positive benefit-cost comparison, with some comparisons showing higher costs per child than business-as-usual (e.g., -$1,596 per child).

Limitations

By their nature, benefit-cost analyses are simplifications of a complex service reality. It is difficult to identify all the ways public and private agencies invest in children and from what funding sources; it is perhaps more difficult to identify all the ways a young person benefits from those investments. The Safe Babies benefit-cost analysis has these limitations. We did not estimate potential program effects outside of time spent in care such as reductions in maltreatment, changes in educational outcomes, or changes in health/behavioral health outcomes. That broad view is important but has to be considered in the light of public policy. Foster care is a temporary arrangement that comes about because what the child needs growing up and what the parents offer are not well-aligned. The cost of foster care is the cost of providing an alternative home for the child. If the time spent in foster care can be reduced and the services that address the other domains are held in place, then combining foster care with services that lift the quality of care infants and toddlers receive while in foster care is a net positive. The benefit-cost analysis presented here is a bare-bones assessment: if the LOS goes down, do the averted BAU care days underwrite the cost of the services used to connect children with a family that will take over the child-raising duties?

Investment Decisions

From the ZERO TO THREE perspective, the cost of Safe Babies is defined by both the operational details and the local choices that fit Safe Babies into the local service milieu. The ingredients survey makes that clear. When aligning the program to local conditions, implementation sites make different choices. That adaptability is a hallmark of Safe Babies. The most important choice concerns personnel. Operationally, given what is needed in a given site to alter time spent in care, what is the personnel configuration that best aligns with the program goal? These are decisions that rely on a strong theory of change that connects the effort expended to the effect size needed to operate cost-beneficially inside a given service context. The analysis here shows how the investment decisions are supported by evidence.

Instead of relying on a single BCA estimate, it is more realistic to expect multiple estimates that differ depending on the implementation site. The prospective model offers a framework for identifying localities that present ripe opportunities for implementing Safe Babies. In many cases, our analysis shows that the benefit-cost assessment for Safe Babies is favorable. We measured the Safe Babies cost as a daily rate tied to the expected LOS in foster care. In some cases, especially in localities where the LOS is long, the link to the days in care as the Safe Babies cost multiplier may be counterproductive because the cost driver is days rather than children. Specifically, if the cost of Safe Babies is based on children served in the Safe Babies program rather than the days of foster care provided, the benefit-cost breakeven point may be easier to reach without sacrificing the quality of the Safe Babies program. Again, the evidence presented here illuminates the choices. For state leaders, the prospective BCA shows what is possible given local conditions. Even small reductions in LOS produce large financial results that favor increasing costs with Safe Babies on the one hand while lowering the cost of foster care on the other.

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