# **Cost Efficiency Analysis**

# **Child Protection Case Management**





In emergency situations, case management plays a vital role in connecting the most vulnerable members of a population with the services that they need to survive and thrive. The International Rescue Committee (IRC) addresses child protection concerns through case management services in both refugee/internally displaced person (IDP) camps and urban settings.

IRC case management services identify and assess the needs of children with particular vulnerabilities, such as unaccompanied and separated children, connect them with critical services needed through an established referral network, and ensure that children remain safe and secure. Typically, the IRC's child case management services last between six and 18 months, depending on the child's individual needs. This analysis covers six IRC case management programs in five countries and includes programs providing services within refugee/IDP camps and in urban settings.

- "Case management" includes both the assessment and management of a child's needs, as well as the various services to which that child is referred to meet those needs. Case worker responsibilities include conducting needs assessments, providing material support and accommodation, and referring children to medical and psychosocial support services. The value of material support, accommodation, or referral services can have a significant impact on cost levels. This analysis considers only the specific costs of providing case management to the IRC, not the cost of in-kind donations or services referred.
- The IRC's case management services cost an average of \$764 per child over the course of one year in urban settings in the Middle East, \$187 in refugee/IDP camps in eastern Africa, and \$874 in rural Sahel areas. Personnel are the largest expense—approximately 64 percent of total cost—for case management programs for at-risk children. For the programs included in this analysis, the dollar value spent on national staff was significantly higher than international staff, with approximately \$3 spent on national staff to every \$1 spent on international staff. For case management programs, where costs are heavily allocated towards personnel, it is especially important to establish a robust staffing plan at the onset of a program to ensure that staff resources are matched to needs.
- The scale at which programs operate has major impact on the cost per child served. However, scale in terms of the number of children served is not the only way to improve efficiency. Sharing fixed costs with other programs operated by the organization reduces the percent of a budget dedicated to support functions such as payroll or procurement. Programs that are part of multi-sector camp operations are, on average, more cost efficient than urban programs only conducting case management services, due to the volume of other activities that share fixed costs. Eastern Africa grants had two-to-four times the volume of other activities sharing the same fixed costs, as compared to programs in the Middle East.
- Cost analyses of programs that provide sustained services are likely to underestimate the actual resource costs of case management programs, if they consider only one grant's worth of funding. Multiple donors contributing to different aspects of the same service often support case management in a particular setting. Programs in this analysis received funding from up to four separate donors. Generating cost estimates from an office's operating budgets and expenses, rather than individual donor reports, can better capture the true resource cost.
- One case management program in Lebanon also offered supplemental training for caseworkers at a cost of approximately \$8 per child ultimately served by the trained caseworkers. Although the costs of supplemental training per caseworker were substantial overall, when those cost were calculated per child served in the program the cost of training caseworkers was quite low. This finding invites additional research about the cost effectiveness of case management with or without these trainings; if the marginal investment in staff capacity improved outcomes for children by even a relatively small amount, then the investment is worthwhile.

### **Programs Included in this Analysis**

Country	Year of Program	Seting	# of Grants Encompassed	# of Children Served	# of Case Workers
Jordan	2014	Urban	2	1,706	37
Lebanon	2014	Urban	2	1,563	31
Burundi	2013	Camp	4	988	9
Tanzania	2013	Camp	2	977	20
Mali	2013-2014	Rural	1	230	6
Mali	2014-2015	Rural	1	484	6

#### Case Management Services at the IRC

In emergency settings, vulnerable children are identified and their needs assessed through case management services. Caseworkers facilitate the reunification of children with their families, organize the return of a child to their home community, and ensure children can access services needed for positive learning and development. The caseworker role in this process is multifaceted. For children reunified with their families or reintegrated into communities, IRC caseworkers conduct assessments to identify the reasons children were separated and support children's long-term safety once they return home. Caseworkers are also responsible for identifying alternative care options and working with caretakers that provide shelter for separated and unaccompanied children. Caseworkers also conduct monitoring visits and host support meetings prior to, during, and after a child's reintegration into their family.

To explore the variety of cost across context, and how programs operate in urban, rural, and camp settings, this analysis covers six country-year combinations across Africa and the Middle East.

## **Cost Efficiency Metrics for Case Management**

Costs: The process of assessing needs and developing a service plan are always tailored to the specific situation of the child in question. Children may be provided with food, shelter, medical attention, psychosocial support, legal services, and more, depending on their needs. Moreover, such services are often in-kind contributions or provided by organizations other than the IRC. Because the services given depend in part on what is available in a given setting, this analysis focuses on the costs to the IRC alone for providing case management services. Caseworker-provided support can still be complex, and several grants may fund the full program in a given setting. Costs are not restricted to a single grant in one country, but include all expenses related to providing a case management program in a given setting during a given time.

Outputs: The duration of case support also varies, lasting between a single day and more than a year. The confidentiality of the IRC's case tracking system does not make it possible to identify the length of time that individual children received case management services. Instead, this analysis estimates the number of children receiving case management services during the time that costs were assessed. The cost efficiency estimates thus reflect the cost per child given the average duration of case manager support in that context at that time.

# Measuring the Cost Efficiency of Case Management for Children

Cost Efficiency for Child Protection Case Management Total cost of case management in that area & year Number of children served in that area & year

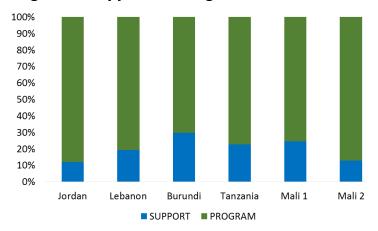
#### Among programs in this analysis, support costs were between 11 and 30 percent of total costs.

Since effective programming relies on country management and office resources such as payroll staff or office rent, support costs should be included in an analysis of the resources necessary to deliver humanitarian programs. Between 11 and 30 percent of total costs were support costs, in line with findings in other cost efficiency analyses conducted by the IRC of its interventions.

Staff time is the major cost driver in case management, as the number of personnel must increase in proportion to the number of children served to align with child protection minimum standards. Programs in the Middle East and Tanzania had a relatively high proportion of national staff costs compared to international staff costs. As national staff are generally less expensive that international staff, a shift towards national staff—where possible and without compromising program quality—can reduce overall costs.

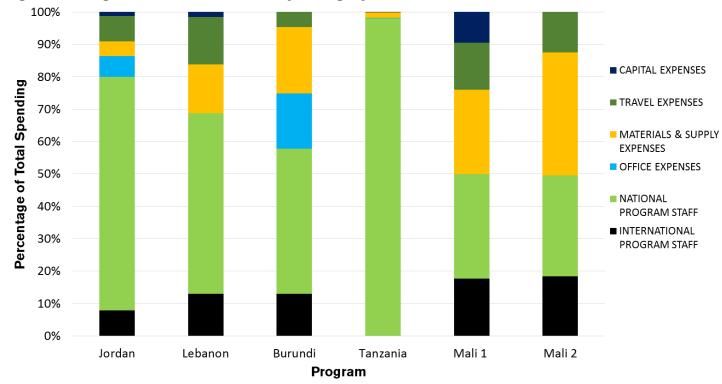
Notably, high proportions of costs dedicated to national staff in the Middle East is partly driven by the higher local wages in these middle-income countries as

Figure 1. Support vs. Program Costs



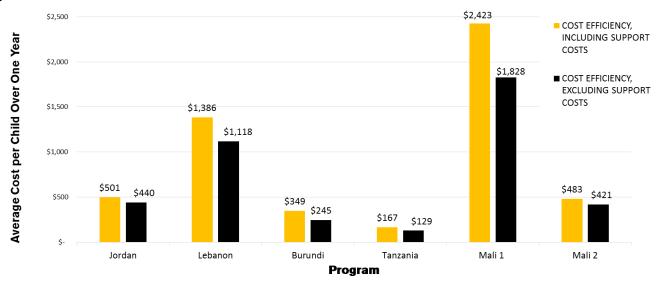
compared to Burundi or Mali. In such situations, the dollar value of national staff time may be a greater proportion of total spending, even if the number of national staff in two regions under comparison is the same. Thus, if the goal is to track efficiency gains through employing national staff, and to compare across programs in different contexts, the percentage of positions held by national staff (rather than percent of costs going to national staff) provides a better metric.

Figure 2. Program Cost Breakdown by Category



<sup>&</sup>lt;sup>1</sup> See the IRC's Cost Efficiency Analysis: NFIs vs. Cash Transfers and Cost Efficiency Analysis: Teacher Training Programs

Figure 3. Cost Per Child Served



## Case management services cost \$764 on average per child in urban settings in the Middle East, \$187 in refugee/IDP camps in East Africa, and \$874 in rural parts of Africa's Sahel region.

Cost per child is driven, in part, by local price levels-programs in middle-income countries like Jordan and Lebanon must pay higher prices for the same goods, driving up the cost per child. At the same time, variations in cost and efficiency also occur within regions: Tanzania costs less per child than Burundi, and Jordan costs less per child than Lebanon. While local price levels do drive the cost efficiency of programs, there is still potential for improvement in high- and low-cost contexts alike.

Programs in this analysis operated at a large scale. With the exception of rural Mali, more than 900 children were provided case management services in the Middle East and eastern Africa. Scale can refer both to the number of people served by the output of a particular activity, as well as the size of the overall package of activities that includes the activity.

Spreading grant management costs across many sectors of an activity leads to lower support costs per sector of programming. Jordan and Lebanon case management programs were funded by grants for protection programming in urban settings, while the Burundi and Tanzania grants funded a variety of different services within refugee/IDP camps. The more that fixed costs were spread among activities in terms of space, capital expenses, and management time, the more cost efficient case management programs become.

## **Sensitivity Analysis:** How does total cost vary with caseload?

In emergency settings, the number of children requiring services often exceeds the number of available caseworkers. The size of a caseworker's caseload can vary dramatically unless staff increase proportional to the number of children in need. Country programs should consider the cost of additional caseworkers relative to total program costs when planning for extra staff in the event of excess demand. Sensitivity analysis shows that, while the total cost of programming increases as the numbers of caseworkers grows, the incremental investment is relatively small.

For example, the IRC had approximately six caseworkers in Mali during each year studied. In the second year of programming, the number of children needing services more than doubled, thus doubling the caseworkers' loads and resulting in less staff time to equitably address each child's needs. If the IRC were to increase caseworker staff by 50 percent—adding three caseworkers—and assuming that caseworkers earn \$900 per month, this would have resulted in an additional \$32,400 in annual salary costs. When total annual funding for the program in Mali was approximately \$230,000 at the status quo, resources would need to increase by 14 percent only to reduce the caseload per caseworker by one-third. The incremental cost of a few additional staff is small relative to total spending, and could have a positive impact on the quality of services provided.

## Cost analysis is a valuable tool when considering investments in service improvement at the margin—in the Lebanon program, it cost \$8 per child reached with improved services as a result of a caseworker training program.

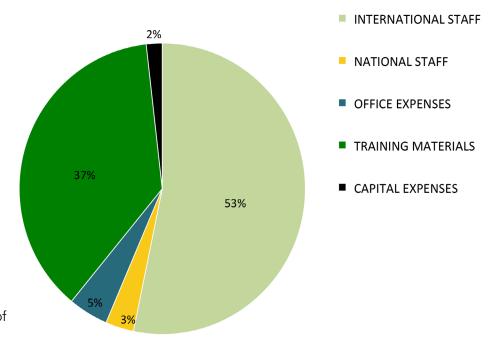
The influx of Syrian refugees to Lebanon caused the demand for case management services to significantly increase. Beyond the funding for case management services detailed above, in 2014 the IRC provided supplemental training to its nearly 500 frontline case workers to ensure they understood and were equipped to handle child protection issues. The training included IRC caseworkers and staff from other protection programs within and outside of the IRC.

The cost per caseworker can be divided by the average number of children each caseworker supported during a year to provide insight into how much the IRC invested per child and whether the improvement in services was likely worth that cost. When considering a that cost hundreds of dollars per beneficiary, the value-add of improved case management can be thought of relative to the incremental cost per child. In this case, spending the \$8 per child is likely to be an efficient use of resources.

## Supplemental training is likely to provide the best value for money in situations where many staff can be trained at once, and where staff turnover is low.

The IRC's supplemental training component in Lebanon cost \$418 on average per individual trained. The ability to reach this cost per caseworker was based on covering a high number of individuals with a single training. In contexts where the volume of staff that work on protection needs

Figure 4. Cost of Lebannon Training Program



is low, such training programs may incur a relatively higher cost per trainee. The expected attrition of staff is another aspect to consider when deciding to invest in training. Investing in training is worthwhile when the knowledge gained by staff is expected to be put to use over a long period of time. A high degree of caseworker turnover challenges the value of investing in individual capacity.

While this analysis can demonstrate the average cost per child served, the Lebanon training component case study highlights the importance of measuring the impact of training. With limited funds, can organizations better improve outcomes for children by reducing caseloads among staff, or by providing caseworkers with supplemental training? These questions about how case management programs and trainings drive costs and impacts are best addressed in additional cost effectiveness studies.

# Calculating the Incremental Cost of Caseworker Training

Incremental Total Cost of Cost per Person Persons Average Case Cost per Child Training Program Trained Trained Load per Worker Served 50 children/ \$8 per child \$418 \$204,000 488 people caseworker served per person

## Cost Analysis at the IRC

The IRC is committed to maximizing the impact of each dollar spent to improve our clients' lives. As the IRC's CEO wrote in a 2015 article in Foreign Affairs, "Donors need to not just double the amount of aid directed to the places of greatest need but also undertake reforms that seek to double the productivity of aid spending." The Best Use of Resource initiative is focused on improving the reach and impact of the IRC by using internally available data to better understand the cost of delivering key IRC interventions. Generating evidence about cost efficiency and cost effectiveness will enable the IRC to cost and compare different approaches and their related impact, ultimately allowing decisions that achieve the best use of resources.

"Cost efficiency analysis" compares the costs of a program to the outputs it achieved (e.g. cost per latrine constructed, or cost per family provided with parental coaching), while "cost effectiveness analysis" compares the costs of a program to the outcomes it achieved (e.g. cost per diarrheal incident avoided, cost per reduction in intra-family violence). Conducting cost analysis of a program requires two types of information:

- 1) Data on what a program achieved, in terms of outputs or outcomes, and
- 2) Data on how much it cost to produce that output or outcome.

#### Asking Ourselves "What Did a Program Produce?"

Units across the IRC produce a wide range of outputs, from obvious items like nutrition treatment or shelter kits to more intangible things like protection monitoring or case management. Cost analysis requires us to focus in on one output (for cost efficiency) or outcome (for cost effectiveness), such as the number of items produced or the number of people provided with a service. Such outputs will not necessarily encompass all the work that a program has done. For example, a WASH program may build water pipelines, latrines, and solid waste disposal pits; each of which could be defined as a single output. The Best Use of Resources initiative focuses on analyzing the IRC's key outputs, such as access to sanitation in refugee camps, malnutrition treatment, and case management services. The focus is not to dismiss other dimensions of our program's work, but to concentrate on one output, allowing for comparison of cost efficiency across programs and contexts in ways not possible if budget data at the program level was the only factor considered. The Best Use of Resources initiative team works together with IRC's Program Quality Unit to identify the most important outputs and understand how to quantify these outputs to improve the accuracy and efficacy of the results of analyses and use these improved results in programming decisions.

#### Asking Ourselves "How Much Did It Cost?"

After defining the output of interest, staff builds out a list of inputs that are necessary for producing that particular output. If one thinks of a program as a recipe, the inputs are all of the 'ingredients' necessary to make that dish. Budgets contain a great deal of information about the ingredients used and in what quantities, but a single grant budget will frequently cover several types of outputs, or program activities across multiple sectors. Therefore, not all line items in a program budget will be relevant to a particular output; to get an accurate sense of the costs of producing a particular output, staff categorize costs by the output they contributed to and count only those that are relevant to that particular output. Many of the line items in grant budgets are shared costs, such as finance staff or office rent, which contribute to an entire program's outputs. When costs are shared across multiple outputs, it is necessary to further specify what

proportion of the input was used for the particular output. Specifying such costs in detail, while time-consuming, is important because it provides lessons about the structure of a program's inputs. We can divide costs into categories and determine whether resources are being allocated to the most important functions of program management, and enable us to model alternative program structures and quantify the cost implications of different decisions.

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