



Dioptra tool case study

Jordan

Systematic Cost Analysis Consortium
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Summary

This case study summarizes an analysis conducted by CARE using the Dioptra tool to generate cost-efficiency estimates for key protection services in Jordan, understand what may drive their efficiencies, and explore potential strategies for improvement. The analysis revealed that:

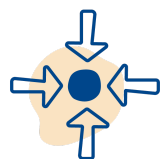
- Protection Case Management cost \$89 per case managed, with case manager staff time being the main contributor of overall costs. Small investments in improving referral pathways and supervision has the potential to improve the efficiency of case support.
- Conditional Cash for Education has the potential to increase efficiency and address high unmet needs if it can be scaled up to serve more households and transfer more cash.
- The cost-efficiency of Emergency Cash Assistance depends on the number of clients referred from Protection Case Management, but it can be improved by reallocating any project savings to cash transfers where possible.

It should be noted that the cost-efficiency estimates in this case study are cited for project learning purposes only, and should not be used as the sole basis for future budgeting or benchmarking.

Country	Jordan
Sector	Protection
Donors	U.S. Bureau of Population, Refugees, and Migration (PRM) European Civil Protection and Humanitarian Aid Operations (ECHO)
Analysis Goals	Performance Management, Evidence Generation

Context

The Syrian crisis that began in 2011 has caused mass internal and external displacement—about 1.3 million Syrians have migrated to Jordan, mostly living in urban areas outside refugee camps (estimated 81%). An assessment by CARE in 2018 found high unmet needs in food security, shelter, protection, education, and livelihoods among Syrian refugees and Jordanian host community members. Many refugee children have missed the crucial years of early education: about 40% of registered school-age Syrian children are out of



school and at risk of child labor and early marriage.¹²³

To address these needs, CARE provides comprehensive protection services to vulnerable refugees and Jordanians in Amman, Irbid, Mafraq, Zarqa, and Karak. These services include, but are not limited to, Protection Case Management, Conditional Cash for Education, and Emergency Cash Assistance (Table 1).

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<https://www.acaps.org/country/jordan/crisis/syrian-refugees>

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https://www.care-international.org/files/files/publications/reports-issue-briefs/2018_CARE_Needs_Assessment_Summary_web_final.pdf

³ <https://plan-international.org/jordan/education-jordan>

Service	Description
Protection Case Management	CARE operates four urban protection community centers that provide case management services to refugees and Jordanians. Clients are assessed on their vulnerability and needs, referred to internal and external services as needed; the most vulnerable households are provided with a case management service plan and follow-up. Each household represents a discrete case managed.
Conditional Cash for Education	Cash assistance of \$100 per household per month for ten months (one school year) through ATM payments for households of refugee children at risk of child labor and early marriage, as identified through the case management referral mechanism, conditional on the child's regular school attendance. Parents may also be referred to awareness sessions about child labor and early marriage, and Child Protection Officers would follow up through in-person visits or phone calls to monitor the child's attendance and performance.
Emergency Cash Assistance	Unconditional cash assistance of \$180 per household per month for one month through ATM payments for refugees and Jordanians identified through the case management referral mechanism to meet urgent needs.

Table 1: Key protection services provided by CARE in Jordan.



Questions to be Addressed

The program team was interested in understanding the cost-efficiency to deliver key protection services and what may drive their efficiencies, as well as exploring potential strategies to improve efficiency for these services in future.

- How much did Protection Case Management cost per case managed? What was the main contributor of the costs?
- How much did Conditional Cash for Education cost per dollar transferred? How did it compare between 2019 and 2020, and what may account for any differences?
- How much did Emergency Cash Assistance cost per dollar transferred?

Experience

Between September and October 2020, CARE conducted cost-efficiency analyses of three key protection services in Jordan using the Dioptra tool over the course of five two-hour online virtual sessions.



The Dioptra Tool

Between late 2018 and 2019, a consortium of NGOs including IRC, Mercy Corps, Save the Children, and CARE developed the Dioptra tool that allows staff in country offices, who have minimal training in economic evaluation methods, to conduct cost-efficiency analyses themselves using data directly sourced from each organization's finance system. The advantage of using a web-based tool, rather than relying on training or spreadsheet templates, is threefold:

1. An online tool can directly access the NGO's finance database, greatly reducing the time spent to collate the necessary financial data;
2. An online tool can guide users through a standardized costing methodology, facilitating methodologically consistent analyses even by

non-experts. Using a structured and standardized methodology also allows programmatic staff to focus more attention on the data they enter into the system: crucial estimates of how different resources were used across interventions within a program, which are not captured in any current data system;

3. An online tool can calculate the proportional allocation for Direct Shared and Indirect Costs based on the user's estimates of how Direct Project Costs were used for the intervention being analyzed. Critically, the calculation formula is the same for every user, in every instance of the Dioptra tool, ensuring consistency in this challenging methodological step.

Data

The cost-efficiency analyses were conducted using the actual costs incurred and outputs achieved in one project that ran from October 2018 to October 2019, and in another comparison project that ran from June 2019 to June 2020 (see Table 2, which includes the cost-efficiency results for each analysis).

Intervention	Timeframe	Outputs achieved	Cost-efficiency result
Protection Case Management	October 2018 - October 2019	3,650 cases managed	\$89 per case managed
Conditional Cash for Education	October 2018 - October 2019	251 households served (\$247,843 transferred)	\$1.07 per dollar transferred
Conditional Cash for Education	June 2019 - June 2020	700 households served (\$691,848 transferred)	\$0.64 per dollar transferred
Emergency Cash Assistance	October 2018 - October 2019	2,994 households served (\$548,604 transferred)	\$0.84 per dollar transferred

Table 2: Cost-efficiency analyses conducted and their results.

Results

Protection Case Management cost \$89 per case managed, with case manager staff time being the main contributor of overall costs. Small investments in improving referral pathways and supervision has the potential to improve the efficiency of case support.



Protection Case Management cost \$89 per case managed when all Direct Project Costs, Direct Shared Costs, and Indirect Costs were included (\$46 per case managed for Direct Project Costs only). Given that cases may vary in terms of duration and frequency of support based on the specific vulnerability and needs of each client, this is the average cost for a case that has an average duration and frequency of support.

Since case management is a human-resource-intensive intervention, it was not surprising that the largest cost category was National Staff (Protection) (Figure 1). The lion's share of this cost category was the staff time of case managers to assess needs, develop service plans, facilitate referrals, and follow up on case resolution.

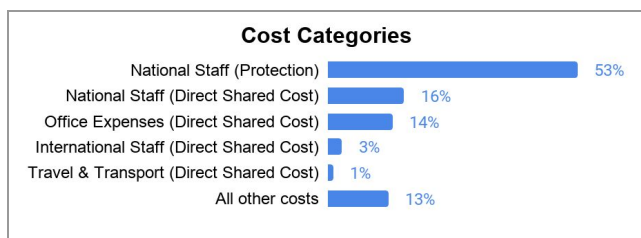


Figure 1: Cost category breakdown of Protection Case Management.

With 6 case managers working on this project, each case manager managed 608 cases per year, or 51 cases per month. The program team noted that this caseload is reasonable according to the minimum standards of service quality while enabling them to reach a large implementation scale at 3,650 cases managed. In the event of an unexpected surge in caseload, other case

managers assigned to other projects can temporarily provide backup support to maintain service quality.

Since case manager staff time is the largest contributor of overall costs, small investments in improving referral pathways and supervision has the potential to speed up the time to resolve cases and get clients the services they need, thus supporting more clients per case manager per month and improving the efficiency of case support to an extent.

At only \$920, the bulk SMS messages could be a cost-effective strategy to increase awareness among registered clients to seek services at the urban protection community centers. For clients who are unable to access those centers due to distance, age, disability, or childcare needs, the Case Management Mobile Units will travel once a week to reach them, representing an equitable strategy to serve more vulnerable households.

Conditional Cash for Education has the potential to increase efficiency and address high unmet needs if it can be scaled up to serve more households and transfer more cash.

The cost-efficiency of Conditional Cash for Education improved from \$1.07 per dollar transferred (Direct Project Costs, Direct Shared Costs, and Indirect Costs included) when 251 households were served in 2019 to \$0.64 per dollar transferred when 700 households were served in 2020 (Figure 2). This corroborates the evidence to-date suggesting that efficiency is positively correlated with the amount of cash transferred⁴, by spreading fixed costs like program support over more transfers thus increasing 'economies of scale'. With more than 1,000 households still on the waitlist, this intervention has the potential to be even more efficient and address high unmet needs among

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https://www.calpnetwork.org/wp-content/uploads/2020/03/1565358363.458_Cost_Effectiveness_Humanitarian_Cash_Programming-1.pdf

target communities if it can be scaled up to serve more households and transfer more cash.

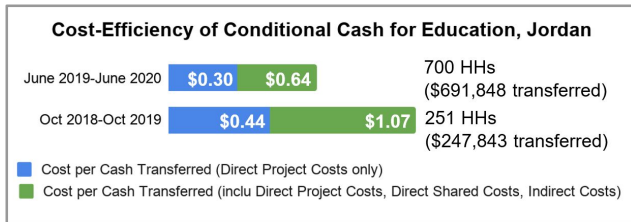


Figure 2: Cost-efficiency of Conditional Cash for Education.

As part of this intervention, Child Protection Officers would follow up with each child through in-person visits or phone calls—this is a necessary investment to continue engaging with parents, monitor their children’s school attendance, and ensure the effectiveness of keeping children in school. It is reinforced with awareness sessions for parents about the negative effects of child labor and early marriage. Other strategies to improve efficiency or effectiveness could include adding information on returns to education in the awareness sessions for parents; reducing attendance monitoring while continuing to label and link the intervention to education in parents’ minds; providing smaller transfers; providing small non-cash incentives tied to schooling such as free school uniforms and meals; and timing cash transfers to coincide with school fee deadlines.⁵

The cost-efficiency of Emergency Cash Assistance depends on the number of clients referred from Protection Case Management, but it can be improved by reallocating any project savings to cash transfers where possible.

Emergency Cash Assistance cost \$0.84 per dollar of cash transferred when all Direct Project Costs, Direct Shared Costs, and Indirect Costs were included (Figure 3). Given that clients were identified through the Protection Case Management referral mechanism, this should be interpreted as the cost per dollar of unconditional cash transferred that leveraged on case management referral targeting. Although the efficiency of unconditional cash transfers is positively correlated with the number of households served, the scale of households that could be reached by the program team was constrained by the number of referrals received through case management. As such, a condition of efficiency for Emergency Cash Assistance as part of an integrated package of services is having a large pipeline of clients referred from Protection Case Management.

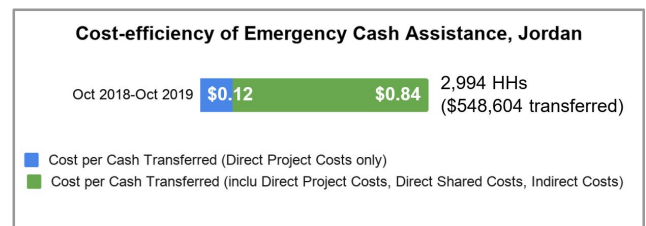


Figure 3: Cost-efficiency of Emergency Cash Assistance.

Project savings of about \$114,000 were generated from an underspend in staff fringe benefits and reallocated to the cash transferred to clients, allowing the project team to reach more households within a fixed budget. By reallocating the savings to clients as opposed to other areas like salaries or shared program costs, this intervention managed to benefit more clients in need and increase efficiency.

⁵ <https://www.povertyactionlab.org/sites/default/files/publication/roll-call-getting-children-into-school.pdf>



Dioptra is a web-based cost analysis software that enables staff at humanitarian and development organizations to rapidly estimate the cost-efficiency of their programs, using existing accounting and monitoring data. Having cost-efficiency data and comparative efficiency data from similar projects can help staff identify opportunities to reach more people and have greater impact with limited resources. Dioptra is distributed and managed by the Systematic Cost Analysis Consortium, which includes Accion Contra el Hambre, CARE, the International Rescue Committee, Mercy Corps, and Save the Children.

www.dioptatool.org

