MiracleFeet Evaluation Grant

Proposal for GiveWell

Overview

MiracleFeet requests funds to evaluate results in the three countries to benefit from an upcoming GiveWell programmatic grant: Chad, Côte d'Ivoire, and the Philippines. **We are most interested in evaluating clubfoot treatment rates at baseline and endline (with a priority on geographic areas to be supported by MiracleFeet during the period of GiveWell's program grant) to understand MiracleFeet's overall impact and develop an understanding of the rates of counterfactual (non-MiracleFeet) treatment.** To the extent possible, the evaluation will also yield insights into comparisons of severity of cases, types and/or stages of treatment provided, and other issues relevant to establish cost-effectiveness within the GiveWell framework, as defined by lives improved through dollars spent on MiracleFeet programs.

Evaluating the change in clubfoot treatment rates over time in these countries will generate credible evidence of the difference made by MiracleFeet's intervention in the provision of effective, high-quality treatment for children born with clubfoot. The evaluation will analyze the change in numbers of children reached in these three countries with best-practice clubfoot treatment before and after MiracleFeet program activities are implemented through the program grant. Country program evaluations will include baseline and endline studies in each country, conducted by external consultants. Along with number of children reached, endline studies will audit clinic-level treatment data for quality and utility and, as relevant, will assess any national or regional trends that could have affected treatment rates. GiveWell will use its own process to draw learnings across the three cases to assess results and cost-effectiveness.

We define children reached or treated as children born with clubfoot who have been or are being treated according to best practice and protocols for effective permanent correction of clubfoot. The global standard of care for treating clubfoot with best clinical and quality of life outcomes is reaching children before their first birthday to begin noninvasive and low-cost treatment in three phases: correction, tenotomy (in most cases), and maintenance.[1] Unfortunately, most children born with clubfoot in low- and middle-income countries (LMICs) are not reached at any age with effective treatment. Untreated and maltreated clubfoot typically results in lifetime consequences of restricted mobility, pain, limited functionality, and diminished quality of life. Poverty and sociocultural pressures in many LMICs can exacerbate the physical consequences of clubfoot through stigma and exclusion from community, educational, and employment opportunities.

MiracleFeet promotes quality in clubfoot treatment using the Ponseti method—the gold standard, most widely used, noninvasive, and low-cost treatment—which does not yet reach

[1] See, e.g., https://publications.aap.org/pediatrics/article/149/2/e2021055555/184569/Diagnosis-and-Treatment-of-Idiopathic-Congenital (Cady, Hennessey, and Schwend, 2022).

many children born with clubfoot in LMICs. MiracleFeet programs expand supply, demand, and access to trained Ponseti providers working in clinics. Activities include ensuring supplies of treatment materials and supportive clinical and information technology that helps clinicians manage the quality of each patient's treatment, at no cost to the patient's family. Through local partners and in collaboration with public sector stakeholders, MiracleFeet concentrates on reaching the greatest number of children possible in LMICs—both today and years down the line—by enabling quality treatment now while working toward incorporating this standard of care in each country's national public health system.

Support from GiveWell for this evaluation will be used to triangulate evidence from all available sources in each country (e.g., health sector statistics, key informant interviews, and treatment records or other available data from all identified, or a representative sample of, clinics treating clubfoot) to answer our key evaluation question: **how many more children are being treated for clubfoot because of MiracleFeet's support?** The evaluation will compare children being treated without MiracleFeet intervention in targeted areas prior to program initiation (Chad and Côte d'Ivoire) or expansion (Philippines) to the number being treated after no less than two years of activities funded by GiveWell, incorporating additional evidence as feasible and relevant to estimation of program cost-effectiveness.

Methodology – Treatment Estimates

MiracleFeet will manage evaluation consultants to evaluate change over time in effective quality treatment of clubfoot in Chad, Côte d'Ivoire, and the Philippines. These countries currently lack national or centralized data on clubfoot incidence and treatment.[2] Evaluators will gather primary and secondary data to estimate numbers of children receiving treatment, analyzed in context of additional information about these cases and treatments, before and after program activities (under the larger program grant) take place in each country.[3]

The strategy will be the same in all three countries. Evaluation components for each country consist of baseline studies focused primarily on number of children being treated, and more complex endline studies including numbers treated, data audits, and consideration of the larger context that may have affected treatment rates over the period of program performance. Cases of clubfoot being treated in each country will be assessed at **baseline** (prior to program start in Chad and Côte d'Ivoire, and prior to program expansion in the Philippines) and **endline** (after no less than two years of GiveWell-funded program activities). Endline studies will include data audits to assess quality and completeness of data used to count (MiracleFeet) or estimate (non-MiracleFeet) case numbers and treatment quality. Each endline will incorporate both baseline findings and context over time (conditions, trends, or events) to evaluate the effect of MiracleFeet's program on the change in treatment rates over time.

[2] Estimates of clubfoot birth incidence influence MiracleFeet program strategy to reach areas of greatest unmet need. Evidence-based estimates for unmet need in these countries do not exist, however, and establishing those estimates is not part of this evaluation scopes of work.

[3] Data on patients and treatment at MiracleFeet clinics will be available from MiracleFeet systems if or as needed for evaluation consultants at baseline (the Philippines case only) and endline, and for data audits.

The critical evaluation question in each country is:

- How many more children are being treated for clubfoot because of MiracleFeet's support?

This critical question includes the issue of the value or benefit of the treatment that children receive. Highest value and benefits are obtained through best-practice treatment for clubfoot, which is the Ponseti method, having the strongest evidence of effective, permanent correction.

Evaluation sub-questions related to the main question (if or as data are available) may include:

- What treatments are available, where and to whom, at what cost?
- How is clubfoot treatment managed and funded within the national healthcare sector?
- What factors affect opportunities to expand access to quality clubfoot treatment in this context?

Evaluation Baseline Studies

The central question for baseline evaluations is **how many cases of clubfoot are being treated right now in the geographic area which will eventually be supported by MiracleFeet.** The answer will include, to the extent data are available, case information by type and/or stage of treatment (e.g., number of children in casts, receiving tenotomies, or using braces). Toward that answer at baseline, evaluators will systematically assess information on children being treated for clubfoot by providers or in clinics/facilities not supported by MiracleFeet, building a reliable estimate of the total number of children being reached prior to intervention. (In the singular case of the existing MiracleFeet program in the Philippines, treatment data from MiracleFeet clinics in expansion areas may also inform the baseline estimate.) MiracleFeet and partners will support and closely collaborate with evaluators to provide contextual knowledge and suggest key stakeholders. Evaluators will transparently discuss and document their planned selection or sampling method, challenges and adjustments to the pre-study plan during field data collection, and the model used to estimate totals in the baseline study report.

In areas targeted for MiracleFeet expansion, evaluators will gather clubfoot treatment data from all identified, or a representative sample of, non-MiracleFeet clubfoot clinics. Clubfoot clinics may be located in diverse types of healthcare facilities, according to the country's health sector structures and management.[4] Facilities housing clubfoot clinics could include major or smaller facilities (i.e., primary, secondary, and tertiary facilities), rehabilitation centers, healthcare NGOs, and public and private clinics, thus a representative sample will reflect facility types in proportion to information on identified clinics. For instance, if 30 non-MiracleFeet clinics are identified in targeted regions, half in public district hospitals and half in NGO/charity specialty facilities, the baseline sample for data collection will consist of approximately 50% each in the two facility types. Stratification may take other characteristics of identified clinics

[4] Clubfoot treatment services (clinics) are typically provided on one regular day per week in a section of a larger facility. Evaluators will seek also to identify alternative clinic types if/when research and/or key informants suggest alternative service delivery models may be operating in that country context.

into account to assure a representative sample, when those aspects are determined relevant to treatment rates in that context. Such characteristics might include rural versus urban settings, for example, or providing free treatment versus paid services.

To the extent available, MiracleFeet and existing or future partners will provide evaluators details of all known non-MiracleFeet clubfoot clinics, including characteristics of the facilities housing these clinics (e.g., district hospitals with orthopedic specializations) and other relevant characteristics if known. Evaluators will add to this list in the initial phase of the baseline study (finalizing the field data collection plan and schedule) using multiple strategies, the details of which will depend on structures and data resources within each country's health sector. Each baseline study team will, at a minimum:

- Research public and official documentation of the health sector to identify any records identifying facilities providing clubfoot treatment;
- Contact official sources to inquire directly about any facilities known to treat clubfoot;
- Map facilities by type in the geographic areas targeted for MiracleFeet support; and
- Ask key informants and facility respondents during field data collection to identify other sites they may know that are, or could be, treating children with clubfoot.

Each country's study design will seek and consider any available population, health, or statistical information related to birth defects, clubfoot treatment and quality specifically, and other data on disability, child health, and related topics toward the goal of identifying as many clinics as possible treating children at baseline. The field data collection plan and schedule will have enough flexibility to add site visits if or when information about additional facilities with clubfoot clinics emerges during field data collection, as noted in the fourth bullet point above.

In cases with limited total numbers (<20) of identified non-MiracleFeet clubfoot clinics in areas targeted for new or expanded MiracleFeet programs, the baseline study team will endeavor to conduct site visits for data collection on the numbers of children being treated at all sites. (Not all sites may agree to participate.) In cases with higher numbers of non-MiracleFeet clubfoot clinics, evaluators will stratify facilities housing those clinics by type and level, according to the country's health system and as contextualized during development of the field workplan and schedule (first phase of the baseline evaluation study) and/or key informant knowledge.

Details on the sampling frame (known universe) and selection or sampling strategy will be included in the evaluation team's first deliverable during execution of the baseline study scope of work, the detailed field plan and schedule. As noted above, the primary focus is geographical areas targeted by MiracleFeet for new program launch (Chad, Côte d'Ivoire) or existing program expansion (Philippines), which will coincide with the areas MiracleFeet anticipates having the highest numbers of babies born with clubfoot. MiracleFeet will share and discuss each team's strategy and planned approach with GiveWell to ensure clarity and alignment to evaluation goals and evidence needs.

Evaluators will analyze their data and findings to extrapolate from data collected for an estimate of the total number of children in MiracleFeet-targeted areas, who are being treated prior to program launch or expansion. Estimations will include, as feasible, the quality or benefit of treatment they are receiving, specifically different types of treatment (e.g., surgical, Ponseti, other medical or traditional methods) and stage of treatment (e.g., correction, tenotomy, or maintenance for the Ponseti method), taking into account other qualitative and quantitative data as available. Relevant information might include details related to treatment quality or outcomes; costs of care at different types of facilities or in different parts of the country; or other factors affecting supply, demand, or access to quality treatment of clubfoot in the national healthcare system. Evaluators will assess quality (completeness, reliability, timeliness) of official statistics and other secondary data, if available, triangulating across data sources to determine whether and how to use these data in analysis or estimations at baseline.

Baseline reports will explain planned data collection, analysis, and estimation methods, and will explain adjustments made according to conditions encountered while conducting the study. For instance, selected informants may not be available, or initial in-depth interviews may suggest new sources expected to have valuable insight or information to incorporate into analysis. **The report, in other words, will not only provide a comprehensive estimate of the number of children being treated but will also offer transparency regarding the process and production of the estimate.**

Philippines

The evaluation consultant for the Philippines baseline study, Curiosity, was selected through an open competitive process, including expressions of interest, technical and cost proposals, and best and final revisions through multiple stages. MiracleFeet has no prior connection with Curiosity or individuals on the team. The contractual scope of work and budget are in the final stages, and the pre-evaluation plan for the Philippines baseline study is summarized below.

The strategy for this study proceeds according to the description explained above. In context of the Philippines, the baseline plan also leverages MiracleFeet's existing program experience:

- The MiracleFeet Regional Program Manager (RPM, based in Manila) and Philippines partner (PNGOC) will provide the consultant with detailed information on their understanding of the landscape of clubfoot treatment in the Philippines, with a focus on expansion areas. This landscape background is a framework to jumpstart Curiosity's work and will not confine or constrain the work in any way. Curiosity is expected to update, correct, supplement, expand, deepen, and/or confirm existing information to ensure the baseline report presents the evaluators' objective and data-based understanding of the baseline situation.
- The landscape includes identification of at least five non-MiracleFeet clubfoot clinics and four areas targeted for MiracleFeet expansion in the coming years. Expansion areas are National Capital Region (NCR), which includes metropolitan Manila; Calabarzon; Central Visayas; and Northern Mindanao-Davao. Landscape information also includes stakeholders or key informants known to MiracleFeet/PNGOC with expertise and experience relevant to clubfoot treatment in the Philippines.

- Within the selected geographical frame, Curiosity will build from the list of identified non-MiracleFeet clinics through all strategies described above in the baseline study overview.
- Curiosity will begin interviews and site visits in the National Capital Region (NCR), Manila, including exposure to MiracleFeet-supported clinics.
- Curiosity will conduct in-depth interviews (IDIs) with key informants and other stakeholders to gather data directly from these sources on clubfoot treatment and reach, confirming or correcting the pre-evaluation landscape. As described in the baseline overview, Curiosity will seek to expand IDIs through snowball sampling so that the study draws on a broad spectrum of potential sources of relevant information and insights that may like beyond current MiracleFeet/PNGOC awareness. Persons of interest are:
    - individuals having experience in clubfoot treatment or advocacy;
    - national or regional officials in related capacities or with related responsibilities;
    - former MiracleFeet partners now independent or supported by another NGO; and
    - additional persons identified by key informants and stakeholders.
- Depending on the additional number of non-MiracleFeet sites identified, Curiosity may endeavor to visit all (<20) or may need to stratify clinics by type of facility, e.g., by sector (public, private, other), size (level and catchment area), or specialization (if any). If numbers and types of clinics require sampling and stratification, the approach will be discussed first with MiracleFeet and confirmed with GiveWell. Based on landscape information, site visits are likely to focus on tertiary hospitals with orthopedic specialists, most likely in this context to be able to staff and operate a clubfoot clinic. On-site questions about referral sources may identify clinics operating in smaller facilities.
- As needed or useful, Curiosity will request, and MiracleFeet will provide, data from MiracleFeet-supported clinics in the Philippines on patient numbers and treatment quality.
- Curiosity will triangulate qualitative and quantitative data to consolidate the best evidence on numbers and quality of clubfoot treatment in non-MiracleFeet-supported clinics in the targeted areas. Ability to develop reliable findings on quality at baseline outside MiracleFeet will depend on data found to be available in non-MiracleFeet clubfoot clinics.
    - For instance, the consultant may, or may not, be able to analyze clinic-level data (reported or observed) regarding patients attending visits regularly (e.g., logbooks or accessible files); treatment provided or stages of treatment; detailed visit records (e.g., Pirani scores at each clinic visit); and supplies or stock-outs (e.g., plaster of Paris, cotton padding, braces, etc.).
    - Clinic IDIs could yield information on quality and treatment, such as perceptions of data quality in patient records or the extent of clinicians' use of data to manage treatment.
    - Other information relevant to treatment quality and numbers reached might include data on clinics that do or do not have programs to train midwives, community health workers, or community members and families to recognize and refer clubfoot cases; clinic practices supporting effective case management, such as follow-up systems for missed appointments; or existence or absence of outreach and education to reduce stigma and inaccurate beliefs about clubfoot, or to encourage families to adhere to treatment protocols.

- Using triangulated evidence from all sources, Curiosity will develop a transparent model to estimate the total number of children being treated by non-MiracleFeet clinics in targeted areas. As appropriate, MiracleFeet clinic data may complement this modeled estimate for a complete baseline picture of children being reached at baseline in these targeted areas.
- To the extent possible, Curiosity will use preliminary findings also to extrapolate treatment quality dimensions for targeted areas.

Chad

The process is underway to select an evaluation consultant to conduct the Chad baseline study. MiracleFeet recently released a Request for Proposals to all applicants qualified through their expressions of interest, with responses due in May.

MiracleFeet has an identified program partner in Chad, has completed all due diligence steps, and is ready to start working as soon as possible. The partnership and MiracleFeet program activities, however, will start only after the consultant has completed baseline data collection in Chad. This study will follow the strategy described above, leveraging the high-level situation analysis conducted by MiracleFeet and the (future) partner's in-country knowledge, experience, and connections. During baseline field activities, the partner will help orient the study team to the landscape, including facilitation of access to key contacts and any identified non-MiracleFeet clubfoot clinics. As in all countries, evaluators will update, correct, supplement, expand, deepen, and/or confirm landscape information and independently estimate numbers of children being treated in context of available treatment quality information.

- The MiracleFeet Regional Senior Program Officer (SPFO; based in Tunis, available to travel to Chad) and Chad partner (MNDP) will support development of the detailed baseline study plan with information on the known landscape of clubfoot treatment in Chad. The landscape will help jumpstart the study without limiting the work in any way. Evaluators may confirm or correct the landscape, keeping the baseline delivery focused on comprehensive, in-depth, and data-based findings regarding pre-MiracleFeet clubfoot treatment rates and quality.
- The SPFO and MNDP will facilitate connections with identified key informants, stakeholders with expertise or experience in treatment of clubfoot or related roles or responsibilities. The consultant will conduct IDIs with key informants and other stakeholders to gather data from these sources on scope and nature of current clubfoot treatment and reach, and to identify further sources of information.
    - The consultant will conduct IDIs with identified individuals having experience in clubfoot treatment or advocacy and national or regional officials with similar capacities or holding related responsibilities.
    - The consultant will seek to expand IDI participants through snowball sampling to ensure the baseline draws on potential information sources and insights beyond SPFO/MNDP awareness.
    - The consultant will seek to identify existing clubfoot clinics through IDIs.
- MiracleFeet has not launched its program in Chad but has identified geographic focus areas for program kickoff and expansion in the coming years.

    - When visiting identified clubfoot clinics, the consultant will continue to seek further unknown clinics (for instance, inquiring if patients have been referred for treatment at this clinic after starting treatment elsewhere).
    - If no information on existing clubfoot clinics is available, the consultant will focus first on larger sites and those with specializations (maternity, rehabilitation, or other) assessed as most likely to be capable of staffing and operating a clubfoot clinic and will continue to seek information about other sites.
- The consultant will triangulate all qualitative and quantitative data to consolidate the best evidence on numbers and quality of clubfoot treatment at baseline in targeted areas of Chad. Ability to develop reliable findings on quality at baseline will depend on data found to be available in facilities treating clubfoot in Chad.
- Consultants will follow similar processes as noted for the Philippines, above, to model and estimate total children being treated for clubfoot at baseline and, as available, relevant quality aspects of their treatment.

Côte d'Ivoire

Selection of the evaluation consultant for the Cote d'Ivoire baseline study is underway. A Request for Proposals will soon be released to the qualified applicant pool.

The strategy for this baseline study aligns with the other two baseline studies, leveraging results of ongoing MiracleFeet and potential/future partner understanding of the clubfoot treatment and quality landscape in Côte d'Ivoire. The baseline study will independently estimate the number of children being treated and, as feasible and to the extent data are available, the quality of that treatment.

- The MiracleFeet Program Manager (PM, based in Cameroon, available to travel) and future partner will support the consultant's development of the detailed baseline study plan using available information on the landscape of clubfoot treatment as known at that time. As in all countries, the landscape will help jumpstart the consultant's work, and will not confine or constrain the work in any way. The consultant is expected to confirm or correct landscape information, keeping the focus on a comprehensive, in-depth, and data-based baseline of pre-MiracleFeet clubfoot treatment and quality in targeted areas.
- MiracleFeet and its future partner will facilitate, as needed, the consultant's understanding of the health sector in Côte d'Ivoire, including formal structure and institutions as well as functional aspects of sectoral management, funding, and decision-making.
- MiracleFeet and its future partner will facilitate consultant identification of key informants, including those with known expertise or experience in clubfoot treatment and government officials with any relevant roles or responsibilities. The consultant will conduct IDIs with key informants and other stakeholders to gather data on scope and nature of current clubfoot treatment and reach, and to identify further sources of information. The consultant will seek to identify existing clubfoot clinics and expand IDI participants through snowball sampling.
- The consultant will triangulate qualitative and quantitative data to consolidate the best evidence on numbers and quality of treatment at baseline in MiracleFeet-targeted areas of

Côte d'Ivoire. Ability to develop reliable findings on quality at baseline will depend on data found to be available in facilities treating clubfoot in Côte d'Ivoire.
- Processes similar to those noted for Chad and the Philippines will be followed in Côte d'Ivoire to model relevant estimates of total children being treated for clubfoot in targeted areas and, as available, relevant quality aspects of their treatment.

Data Audits - Overview

MiracleFeet programs include systems to collect, secure, manage, and use patient and clinic data to track treatment and assure quality of care for each patient and across clinics, partners, and countries. Data audits will assess the quality of MiracleFeet data in these systems, including their utility in assuring quality of care for clubfoot patients in these clinics.

Data on clubfoot treatment and quality in MiracleFeet-supported clinics in Chad, Côte d'Ivoire, and the Philippines will be used to calculate numbers of children treated and treatment quality indicators as part of this evaluation. Clinicians or others supporting clinic treatment routinely record detailed information on each clinic visit, including but not limited to:

- The age at which the child starts each phase of Ponseti treatment.
- Visit dates and treatment provided in each visit.
- Pirani scores recorded on each visit, assessing clubfoot status, correction, and maintenance.
- Additional notes and visit details, typically including photos of the affected foot or feet.

Clinicians treating clubfoot in a MiracleFeet clinic can reference the child's medical record in the system during the child's visit and can follow up with the caregiver through the system if or as needed (for instance, after a missed appointment). The clinic, partner, and MiracleFeet can view dashboards of treatment quality indicators, and certain clinical or evaluation staff analyze the data in more detail or complexity to assess performance and trends.

Since MiracleFeet will provide calculations from these data to inform the endline numbers of children being treated, the evaluation includes a data audit in the endline study. Exact details of the strategy to verify levels of data completeness and accuracy in the MiracleFeet system will be confirmed in later discussions with GiveWell. At this time, we propose two audit tracks or levels, both intended to assess system data quality and reliability transparently, toward gaining greater understanding of the utility or limits of MiracleFeet data for evaluation purposes.

The first level of data audit will be performed by MiracleFeet at a central level across the three case countries. This track will focus on assessment of data completeness and consistency in each program's patient database. MiracleFeet and GiveWell will reach consensus on central audit processes to use with each country dataset that will test for gaps, errors, duplicates, and inconsistencies in these records. Complete reports will be shared with GiveWell and provided to the endline evaluators for use in the final endline study.

The second level of data audit will be performed in each country by the external consultants as part of the endline study. The endline study strategy will include consultant visits to supported

clinics to assess on-site reliability and validity of data in the system. MiracleFeet will develop an initial protocol that the consultant will revise and adapt to the country context. For this track, we anticipate the endline study team will sample (random or stratified) up to five or 20% of MiracleFeet clinics in each country, whichever is greater. We will work with GiveWell to confirm the sampling and site visit strategy as part of the endline study strategy and fieldwork design.

As noted in the discussion of baseline study strategy and design, we are not aware of national data systems relevant to clubfoot incidence, severity, or treatment in these three countries. MiracleFeet does not expect new national systems to be developed in these countries during the evaluation period and will inform GiveWell if circumstances change.

Evaluation Endline Studies

Endline studies will follow a strategy strongly similar to the baseline study strategy, plus on-site data audits, and will also include final comprehensive or retrospective analysis of the change over time from baseline to endline in clubfoot treatment numbers and (to the extent feasible) treatment quality in MiracleFeet-targeted areas of each country. The consultant at endline will also investigate and analyze any broader trends in the country that could have affected overall treatment rates. Examples of events or trends include changes in government and government health policy, change in public or private health system infrastructure (such as referral systems), overall trends in facility service delivery or access, and pandemic lockdowns, natural disasters, or regional wars. Analysis of contextual shocks (one-time events) and trends over the evaluation period will be retrospective over the period of program activities rather than a strict baseline-endline comparison.

Each endline study will systematically assess information on children being treated for clubfoot in targeted areas by providers or in facilities not partnered with or supported by MiracleFeet to estimate the total number of children being reached, in each country, for comparative analysis with respect to the baseline study in that country. Endline studies in all three countries will also compare numbers of children being treated (and quality of treatment) in MiracleFeet-supported clinics (zero at baseline for Chad and Côte d'Ivoire).

While MiracleFeet and GiveWell agree that continuity of evaluators from baseline to endline is ideal in the abstract, we equally acknowledge that availability, stability, and quality of evaluation experts and consultancy firms vary over time. We will invite baseline study evaluators to express interest in the endline study opportunity, anticipating they will have an 'incumbency' advantage through experience gained during execution of the baseline study. Nonetheless, consultants for each country's endline study will be selected through open competition, similar to the baseline selection process, to assure best-value performance and quality. All consultants selected to conduct an endline study will be required, and explicitly and specifically guided, to adhere strictly to the prescribed search and data collection protocols (as agreed with GiveWell), written into their MiracleFeet contract. Selected consultants will transparently document their pre-evaluation plan, field experience and adjustments, the model used to estimate totals at endline, and process for evaluating the change over time in treatment and quality.

Similarly to the baseline studies and depending on the number of identified non-MiracleFeet clubfoot clinics, endline study evaluators will gather clubfoot treatment data in non-MiracleFeet clinics from all clinics or from a representative sample of clinics, stratified by types and levels of facilities according to the health sector structure in that country as appropriate. Each endline study will incorporate findings at the time of the baseline, and will include a fresh search for other population, health, or statistical information that may be available with relevance to birth defects in general and clubfoot treatment and quality specifically, as well as other data on disability, child health, and related topics important to include in endline analysis.

Evaluators at endline will conduct new primary and secondary data collection, then extrapolate from available population and health data to estimate total numbers of children being treated and quality or benefit of treatment they are receiving. Estimations will include, as feasible, numbers of children receiving different types of treatment (e.g., surgical, Ponseti, other medical or traditional methods), and stage of treatment (e.g., correction, tenotomy, maintenance for the Ponseti method). Additional data from official or health sector sources with respect to quality or outcomes of treatment, costs associated with access to treatment at different types of facilities or in different parts of the country, and other factors affecting demand, supply, or access to quality treatment of clubfoot in the national healthcare system will be sought and examined to determine the extent to which its quality (completeness, reliability, timeliness) justifies inclusion in analysis at endline.

The endline report for each country will explain data collection, analysis, and estimation method along with explanation of adjustments to the original design or field plan according to conditions and other events or knowledge encountered while conducting of the study, allowing transparency of process in producing the estimate. Each endline report will, as noted above, evaluate change over time in number of children being reached with quality treatment for clubfoot following launch or expansion of MiracleFeet programs in each country.

Budget

MiracleFeet anticipates working within a $500,000 budget for this comprehensive evaluation. This includes a total of $180,000 for baseline evaluations in the three countries, plus $225,000 for endline evaluations (more complex analysis to reach comparative, retrospective findings and conclusions). We have also budgeted $40,000 for the data audit, $25,000 for staff costs, and $30,000 for travel costs to facilitate quality oversight as well as close collaboration in design and implementation details with baseline/endline evaluation consultants. The budget is indicative of expected costs and may need to be updated as activities progress.

Line Item	Budget
Philippines Evaluation	
Baseline Study	$60,000
Endline Study	$75,000
Chad Evaluation	
Baseline Study	$60,000
Endline Study	$75,000
Cote d'Ivoire Study	
Baseline Study	$60,000
Endline Study	$75,000
Data Audit	$40,000
Staff Time/Costs	$25,000
Travel Costs	$30,000
TOTAL:	**$500,000**