PROJECT PLAN FOR A MATERNAL CHILD HEALTH CLINIC IN NAMIBIA

ORGANIZATIONAL OVERVIEW:

Containers 2 Clinics (C2C) reduces maternal and child morbidity and mortality in low-income countries by providing access to high-quality primary healthcare for women and children. We deploy shipping containers converted into clinics to low-resource areas and collaborate with local organizations and governments to provide clinical, laboratory, pharmacy and health education services, strengthen national health systems and ensure long-term sustainability. As a result, we create a replicable, adaptable health care delivery model that provides low-cost, basic health interventions during the critical months surrounding birth and the first five years of life for the millions of women and children who are most vulnerable. The organization was founded by C2C President Elizabeth Sheehan in 2008 and opened its first maternal child health clinic in Port au Prince, Haiti in partnership with Grace Children's Hospital in 2010. We are preparing for a three-clinic deployment to the Erongo region of Namibia beginning in April 2012 in partnership with the Synergos Institute and the Namibia Ministry of Health and Social Services (NMoHSS). This project plan outlines details for the first of these clinics.

STATEMENT OF NEED:

Maternal and neonatal mortality rates have doubled in Namibia, a country of just over two million people, since 2000. Despite the committed leadership of the NMoHSS, political stability, status as a middle-income country, and a growing economy, Namibia's maternal, neonatal, and under-five mortality rates remain persistently high. Neonatal deaths constitute almost 40% of under-five mortality in Namibia. The World Health Organization recently ranked Namibia 168 out of 191 countries for global health indicators.

The health referral system in Namibia is overburdened. Rather than use local clinics as an entry point to the referral system, expectant mothers seek services from regional health centers and hospitals, even for non-emergency care. Up to 60% of patients who do present locally are referred to the central hospital for nonclinical reasons such as lack of staff capacity and skills or equipment failure. Consequently, central health facilities are overburdened and the overall quality of health services suffers. Expectant mothers, who cannot access a local clinic or, upon referral, travel to a central hospital, do not receive the antenatal care they need. Only one in three women in Namibia receives antenatal care in their first trimester. As their due dates approach, many expectant women move to urban areas, living in makeshift housing and squatter-like settings, to be close to a hospital for delivery.

The informal settlement of DRC on the eastern outskirts of Swakopmund, Namibia, has approximately 6,000 inhabitants but the population is expected to quadruple in the next two years as large industrial concerns in the region expand. DRC falls under the jurisdiction of the Swakopmund district of the Erongo Region NMoHSS. Swakopmund district is one of four districts in the Erongo region and has one central hospital and three health clinics, only one of which (Tamariskia) is geographically closer to DRC. The Tamariskia Clinic is the only public facility providing primary and antenatal health services to the area. It is located 5km from the DRC settlement, a distance that presents significant barriers to poor women and children who are not able to pay the N$17 transportation cost. Tamariskia is overcrowded and understaffed and women who go there can wait for up to five hours to see a clinician. Lack of adequate, comprehensive prenatal care has been a major contributing factor to the maternal mortality rate.

PROJECT OVERVIEW:

C2C clinics can alleviate the burden of overcrowding at Tamariskia clinic as well as central Swakopmund Hospital by expanding capacity to provide more comprehensive health services in the DRC area. Our clinics are designed for low-resource settings and are equipped with solar-powered ventilation, versatile power hook-up and water filtration. They are

durable against severe weather and secure against robbery. In addition they are movable, enabling easy relocation to optimize clinic accessibility. C2C's clinics offer laboratory diagnostic capability, including ultrasound, as well as a fully-stocked pharmacy. We will provide the NMoHSS ongoing annual financial support for five years to support health education programming and staff training as well as locally-hired personnel for facilities maintenance and clinic coordination support.

The NMoHSS office in Erongo has established a newly-formed task force (the RDU – Regional Delivery Unit) which conducts a monthly maternal death review, investigating the causes of maternal mortality and morbidity. C2C is partnering with the RDU closely to conduct an in-depth needs assessment to determine optimal clinic siting, health education programs, staffing configurations and referral plans for Swakopmund Hospital. Our goals for our clinics are straightforward. We seek to reduce maternal mortality and morbidity by:

- Improving access to high-quality maternal and children health services for families outside Swakopmund;
- Providing a robust health education program to engage community members as active participants in their health care;
- Reducing the patient flow burden on local clinics, like Tamariskia, by expanding care options outside Swakopmund;
- Assisting the Erongo region NMoHSS/RDU in increasing the number of safe deliveries by providing more pre- and post-natal care.

In addition to providing quality clinical care, C2C clinics will provide comprehensive health services and education on a weekly basis with topics that will include: early childhood immunizations, testing and treatment for malaria, TB, and HIV; micronutrients and vitamin distribution; reproductive and adolescent health; breastfeeding and early childhood nutrition; family planning; post-partum sepsis prevention and knowledge-sharing for community health providers.

IN-HOUSE EXPERTISE:

C2C has been operating its maternal health clinic in Port au Prince, Haiti for over a year where clinicians have treated over 7,000 women. We have developed valuable expertise in clinic design, site selection, installation, facilities maintenance, needs assessment, partnership development, health care programming and clinical staff training as a result of working with our partners at Grace Children's Hospital. Our president and founder, Elizabeth Sheehan, and Director of Operations, Allison Howard Berry, have thirty-five years of global health field experience between them. Our Director of Development and Partnerships, Jessica Thompson Somol, has over ten years of experience in the private sector bringing partnership development and business acumen to bear on reducing our cost basis and optimizing our operational efficiency. C2C has established a powerful relationship with its counterparts in the Erongo RDU and is confident and optimistic about our upcoming deployment outside Swakopmund.

IMPACT EVALUATION:

C2C will be working with PharmAccess Foundation in Namibia to conduct monitoring, evaluation and impact assessments for the DRC clinic. PharmAccess Foundation is an Amsterdam-based, not-for-profit organization dedicated to the strengthening of the health systems in Africa. It's Namibia office has gained extensive experience in the Namibian health sector, running various workplace programs on HIV-prevention, implementing the Okambilimbili Regional Health Insurance Project, conducting various health-related research projects and working with the Mister Sister Mobile Primary Health Care Clinic Project, a mobile primary health care service model geared toward meeting the needs of lower income individuals and their families.

C2C and PharmAccess will measure and monitor the impact of the DRC clinic by:

1. Implement a data management system for the clinic that gathers data needed for measuring the output of the clinic. The system will capture (amongst others): numbers of patients seen, number of visits per patient, demographic patient details, diagnoses given, medicines used, referrals (in specific of deliveries) and follow-ups after referrals.
2. Conducting a patient experience survey. Once the clinic has been operational for 6 months a patient experience survey can be conducted. This survey provides feedback on the client experience and on the health care history of the patient. The health care history section will provide information on the improved access and the possible decongestion of the Tamariskia Clinic. A change in the patient behavior regarding clinical visits will only be noticeable after six months. The survey will consist of a small number (5-10) Key-Informant Interviews, and structured interviews with all patients visiting the clinic over a specified period (period to be determined by the

sample, which is determined based on the actual number of visits to the clinic over the first six months of operation).

While project indicators are still being determined with PharmAccess, a preliminary list of indicators follows:

Output Indicators	Outcome Indicators
Increased # of women accessing pre- and post-natal care services	• Healthier woman and children in the DRC community • Access to pre-natal care resulting in fewer maternal deaths • Improved service delivery at Tamariskia as a result of manageable patient flow
Increased # of visits per patient	
Increased # of community members with satisfactory knowledge of maternal and infant health behaviors	
Decrease in maternal/infant death rate	
Decrease in patient flow burden at Tamariskia	
Increased child immunization coverage rate	
Increased # of patients seeking health services	

PharmAccess will run quarterly data reports on the clinical data for C2C management and provide a high level analysis thereof. Performance evaluation will include a six-month and one-year review as well as a two-year impact evaluation.

REQUEST FOR GRANT:
The total 2012 budget for our DRC/Erongo clinic is $157,225. Clinic fabrication, transit and installation costs $71,700 in Projected 2012 local operating costs are $48,300 (includes local staff salaries, educational materials and clinic maintenance). Estimated project management/staff travel costs are $37,225.

PROJECT FUNDING SOURCES:
Pro bono contributions:
A.P. Moller- Maersk – shipping and transit
Steelcase Corporation - Cabinetry, countertops and furniture
IMEC and Miga –medical and lab/pharmacy equipment

Synergos cost share contribution: $20,000
Individual contributions: $87,225

C2C will provide annual programming and personnel support for five years after clinic installation (until 2016). The C2C Board of Directors is committed to providing annual support for these programs in the scenario where corporate or foundation support is not forthcoming. After five years, all operational and budgetary oversight of clinic operations transfers to the Namibia MoHSS.

CLINIC DEPLOYMENT TIMELINE:

DRC/Namibia C2C Clinic Deployment Schedule

Revised:20 Mar 2012

		01-15 February 2012	15-29 February 2012	01-15 March 2012	15-31 March 2012	01-15 April 2012
Site Preparation & Logistics	LAND	Target plot demarcated; GPS coordinates established; Permission to utilize land obatined / signed document	Wall parameters determined; cost quotation solicited; vendor determined	Wall installation begins Contractor and cost quotation identified for container footings	Footings for containers laid	Clinic arrives in DRC; placed on footings
	WASTE	Toilet facility options identified; confirmed with MoH regulations	Toilet construction cost quotations solicited	Cost quotations evaluated; solution selected; vendor installation timeline in place	Toilet solution installed Schedule for rubbish/waste pick-up determined with Swakop Hospital	
	SHADE	Municipality engaged in dicussion about water and electric connections - installation options, installation costs, and ongoing costs	Quotations obtained for shading solution	Vendor and implementation schedule identified for shading solution	Shading solution installed; trees planted	
	UTILITIES	Municipality engaged in dicussion about water and electric connections - installation options, installation costs, and ongoing costs	Water and electric modifications scheduled for installation		Water and electric connections installed at clinic site	Water and electric connected to clinic
Clinical Programming		MoH identifies staffing configuration for clinic (#/schedule for nurses, docs, pharam/lab tech, admin support)	Specific personnel appointed to clinic; job descriptions and contracts in place	(staffing appointments continued)		Personnel familiarized with C2C clinic Clinc opens to patients
Health Education Programming		Specific health education topics recommend by MoH; existing resources identified	C2C begins recruitment for clinic coordinator, who will have primary responsibility for executing health education	Candidate for clinic coordinator identified	Clinic coordinator begins planning health education curriculum for DRC	Health education programming launched
Community & Stakeholder Engagement		All key stakeholders identified and notified about DRC clinic deployment plans Local community leaders in DRC are contacted about clinic plans	Local community meeting about clinic launch is scheduled and facilitated	Stakeholder "roundtable" convened (MoH, NGOs, private companies)	Local community meeting about clinic launch is scheduled and facilitated	Clinic launch event with community invited
Monitoring & Evaluation		Key goals and metrics established Baseline study needs established; contractor identified	Data collection protocol for Swakopmund Hospital deliveries designed; implementation begins Baseline study conducted	M&E Protocol in development	M&E Protocol finalized	M&E Protocol in use beginning with clinic opening.