

## Project Motivation

It is estimated that in the next 10 years, 50 million people will die from HIV/AIDS related illness. The number of people who will need care is much larger than this. In Sub-Saharan Africa, agencies are trying to cope with this increasing demand for health care through distributed home-based care models. In order to provide the best care and distribute resources such as food and medication most effectively, these organizations have to be able to access and act on full information about the patients in their programs. But as these programs continue to grow, the outdated paper-based methods of data tracking are inadequate. A home-based care project may have 20,000 patients and not even know simple metrics, such as how many men, women, and children they are serving, or how many patients are suffering from tuberculosis. This is incredibly important from a care-giving perspective, and the information is also very valuable for impact assessment and fundraising to support the continuing programs.

## Technical Description

The Catholic Archdiocese of Lusaka, Zambia runs 60 Community Home-Based Care (CHBC) programs, with over 20,000 patients receiving care. They have a full paper-based information gathering system, and they have begun to digitize their data in excel, which is inadequate for the size and scope of their needs. Design and implement a data entry and analysis system to handle the data generated by this project. A suggested form would be an SQL database with a web-based (JSP) front-end for data entry and record analysis.

## Community

The main community partner for this project is the Community Home-Based Care program run by the Catholic Archdiocese, and is staffed by hundreds of volunteers who spend their time taking care of their sick neighbors. The CHBC program is the largest in Lusaka, and they tend to set the example for the rest of the programs. We have close and enthusiastic cooperation from the director of the program. Lusaka is a city of 2 million people, and it is estimated that in certain age-groups, the HIV infection rate is as high as 49% (based on anonymous blood-testing of prenatal care patients). There are resources being mobilized for care and prevention, and this project will make a big impact on those efforts. We are also working with a US based non-profit called the Power of Love Foundation to implement broader IT solutions for community based health care in Zambia.

## Project Status

There is a large team of MIT students working on a large-scale implementation of a generalized patient-tracking system. This project fills an immediate need and will contribute to this larger project as well. The CHBC has some of their data in electronic form (in excel) and they have computing resources available. This particular component is in the planning and specification stage.

## Contact

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