# **IPRO 304**

# **User-Centered Design Solutions for Rural Health Workers in India**



# Problem statement and objective

# Methodology

The purpose of this project that will begin in Spring 2007 is to increase the "footprint" of health care workers in rural areas of India, that is, leverage the time and expertise of the workers to achieve a bigger and broader benefit to those who need health care.

The basic question is how to increase the ability of health care workers to see more patients, increase their diagnostic capabilities and track patients on a regular basis within the existing rural environment.

The scope of the project will likely require (1) characterizing the current health care delivery environment in rural India (some of this effort has already begun via IIT-Bombay), (2) understanding the capabilities and limitations of rural health care workers, (3) summarizing the range of health care needs and the extent to which they are being met, (4) evaluating the current level of technology used by rural health care workers, (5) identifying opportunities for using or adapting information or medical diagnostic technologies within the rural India setting, (6) determining the extent of education and training needed to introduce solutions, (7) creating a decision matrix that offers a way to evaluate the extent to which new design concepts and IT solutions can impact the performance and effectiveness of the rural health care worker in India, etc.

Investigation of the above issues will lead to consideration and evaluation of various concepts and solutions. These concepts and solutions will be prototyped in an iterative fashion that integrates new ideas and constraints and can lead to follow-on projects for further development.

During the course of this workshop we will implement the formative stages of a user-centered design process by developing and prototyping design concepts aimed at increasing the "footprint" of health care workers in rural areas of India. The flavor of this effort will be a practical or professional one, working towards implementation and design refinement.

#### **Team members**

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