Infectious Disease Tracking System

# Summary

This system that would track, predict at individual and macro level the disease at the scale India needs. The goal is to make responses precise, speedy, cost-efficient and scaled. This system then can be even donated/licensed to WHO or other countries.

# Introduction

Tracking infectious diseases the traditional is inefficient. Following are special needs of India that need new thinking,

* With a large, highly mobile and dense population
* Multiple modes of communication
* Very informal ways of interactions
* Human nature of few to flaw rules in panic
* Not everyone at all the time can be careful

Traditional method involving questionaires and subjective questions, alone have following drawbacks,

* These cannot scale at very large numbers
* These are rather slow
* These can be error prone, we may miss out on some tracking
* These are mostly reactive

Proposal is to track movements of individuals and assign probabilities to each person. Once a person crosses the threshold, that person is under active tracking.

# Proposal

There are three elements to the approach,

* Use cell-phone based tracking information
* Assign probabilities to people
* Use automatic video/sensor based measurement samples to improve probabilties

