Cystic Fibrosis Design Challenge

Module 1 Assignment: Defining the Problem

Due: Tuesday, January 25, 2016 in class. Please print 1 copy for submission and also provide 3-4 copies for the other members of your group.

Assignment:

You are part of a team of scholars from different disciplines who have been tasked with the challenge of designing innovative solutions to some of the most debilitating symptoms for cystic fibrosis patients. As such, before you are able to come up with solutions you need to first define what the problem is empathize with the problem/patient/user at hand. In order to this, you need to first need to prepare a one-page problem definition report as follows:

1. **Problem definition:** 2-3 sentence problem definition statement in which you clearly define the problem assigned to your team.

2. **Interview Questions:** You will be able to gather more information through informational interviews with both a practicing CF clinician and a mock patient with cystic fibrosis. In order to prepare for this in class exercise, please develop of 4-5 questions each for both the CF clinician and the patient that will help you understand the problem and design innovative solutions.

3. **References:** List 2 primary sources that you used to define the problem statement above.

List of issues in Cystic Fibrosis Airway Disease

1. CF Airway Inflammation: Current solution: Corticosteroids
2. Chronic Bacterial Infection: Current solution Antibiotics
3. Mucus build up and airway: Current solution blockage: Mucolytics
4. Exacerbations: Combination of all of the above.