

# **Health Care Project Work Statement**

Sponsored: HUMANA INC. INFUSION PROGRAM

**The Humana.Inc**

## **Analysis and Introduce of Foreign Policy in Health Care**

### Participants

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Any apparent association of this work to The Humana.Inc is fictional one, and the sole purpose of this work is a class exercise

# 1 Introduction and Background

Humana Inc. is a leading health care provider headquartered in Louisville, Kentucky. Humana is developing this infusion program to sponsorship research projects that aim to improve the efficiency and research new solutions to this industry. The health care system in United State is under great pressure. The system is high in cost, but the results in term of customer satisfactory are very poor. New solutions are needed to bring talent ideals and people into the challenge. Humana. Inc is aim to inspire that guides us to meaningful activities that bring joy to our lives; to presents of the meaningful relationships in your life and connections within community; to feel of being safe and the assurance that you are protected and to have the energy, physical freedom and desire to thrive in living every day

## 2 Problem Statement

Colorectal cancer (CRC) screening is a very effective method in earlier cancer decetion. Increase the participating rate of population attend this screening will lower the health cost and survival rate of the cancer. Through a questionare survery data conducted in a commuity population in urban China, this project is aimed to find the cause of the low participation rate and formulate a suitable public health policy to increase the participation rate.

## 3 Approach Method

Using contronl group that match the person who attend the CRC screeing with age, gender, eucation level ...ect.

Control 1: included those having a positive test results but refusing a CRC.

Control 2: included those who refused both positive test results and CRC.

Investigate the correclation between those parameter and the participation rate. After the data analysis, in term of the policy, the corresponding solution such as: 1.Raising the public awarenes 2.Painless CRC method needed to be developped 3.Government subsidized the cost of CRC. The data analysis in the end of the project should be able to provide the reasioning of choseing the most effective public policy.

## 4 Work Flow Chart

The period of performance for the project is beginning on 10/01/2012 through 12/01/2012. All the research will be completed within this timeframe. The final report and presentation will be delivered. Any modifications or extensions will not be allowed.

Below listed major milestones of projects different stage. Project will be expected to performing tasks throughout various stages of this project. The following is a list of these tasks which will result in the successful completion of this project:

### Kichoff:

- Literature research, selection of successful public health policies
- Analysis on different policies and chose the best candidates

### Design Phase:

- Develop the model to quantify the results of the polies
- Doing regression analysis on categorical analysis on different parameter: sex, gender, race, income level, education level
- Modify and finalize the model
- Present formal report on the model and model validation

### Apply Phase:

- Acquire sample or national data of specified region for analysis
- Acquire data and use the model to generated results according to the data
- Model modification and policies modification to generate reasonable and better performance
- Present formal public policies case backed with modeling results

### Project Closure:

- Formal report of a public policy consulting report
- Presentation of the project.

## 5 Milestones

Proposed deadlines for specific project tasks:

- Work Statement due date, Oct 16, 2012,
- Midterm Presentation due date, Oct 17, 2012,
- Progress Report due date, Oct 26, 2012,
- Final Presentation due date, Nov 6, 2012,
- Final Report due date, Nov 30, 2012.

## 6 Deliverable

### 6.1 From Team to Sponsor

The following outputs are expected from this project:

- regressional analysis of the data on the questionnaire survey data. Certain correlation relationships between the variables in the survey will be suggested
- Completed model. Model that able to predict the participating rate of CRC in term of relevant variables.
- Validation of the model using a different population set.
- Corresponding effective public health policy will be provided according to the model claim
- Technical report and presentations summarizing the work.

### 6.2 From Sponsor to Team

In order for our project to be of successful one, we will need:

- Sponsor have no obligation to the research team during the project cycles.

## References

- [1] E. Bender. *An Introduction to Mathematical Modeling*. Dover Publications, 1978.
- [2] J. Miller. *The Chicago Guide to Writing about Multivariate Analysis*. The University of Chicago Press, 2005.
- [3] M. Raugh. *UCLA IPAM RIPS Manual*, 2012.