Pan Chen

IST-719 Spring 17 - Tuesday

Prof. Hemsley

4/3/17

Why They Did Not Show Up: a data exploration on the patient’s no-show problem

**Dataset description:**

The dataset I am working on has 300,000 medical appointments data as rows and their 15 characteristics as columns. Those characteristics include the patient’s gender, age, day of the week of the appointment, what kind of their appointment is, are they receiving government’s financial help on medical bills, whether the healthcare provides send them SMS reminder, etc., and most importantly, whether they show up to the appointment or not.

**My super compelling story:**

I am interested in this dataset because missing medical appointment has become a prevalent problems for the healthcare systems in many countries including the US, as missed appointments cost the U.S. healthcare system more than $150 billion a year (<http://www.post-gazette.com/business/businessnews/2013/02/24/No-shows-cost-health-care-system-billions/stories/201302240381)>. As the politicians and the people of this country are always complaining about too much money spent on the healthcare, I want to explore what factors might contribute to the no-show problem to the medical appointments.

**My audiences:**

My audience could be the healthcare providers who want to decrease the patient no-show rate, or the government agency who wants to increase the efficiency of the spending on healthcare system.

Poster Layout – Page 2, 3

**My questions:**

1. Does the patient’s age has something to do with their no-show rate? – PAGE 4
2. Does the patient’s gender has something to do with their no-show rate? – PAGE 5
3. Does the day of the week of the appointment has something to do with their no-show rate? – PAGE 6
4. Does the patient’s preexisting conditions have something to do with their no-show rate? – PAGE 7
5. Does text message reminders affect the no-show rate? – PAGE 8

Data Source: JoniHoppen on kaggle.com (https://www.kaggle.com/joniarroba/noshowappointments)