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Report on
HealthCare System: Analytics

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Introduction

Heritage Provider Network is one of the largest integrated physicians networks in the world, providing health care for approximately 700,000 Californians. HPN connects patients with physicians, hospitals and specialists to provide quality care in a cost effective manner. HPN is a group of physicians, not an insurance company. HPN does not sell insurance.

HealthCare System and its challenges

More than 71 million individuals in the United States are admitted to hospitals each year, according to the latest survey from the American Hospital Association. Studies have concluded that in 2006 well over US $30 billion spent by Americans in avoidable hospitalizations, changing the approach to healthcare in a global manner. Doing so would improve the health care of all Americans, while at the same time lowering the cost of care for the average American family. If the Competition is successful, HPN expects it will be able to use the winning algorithm to both keep people healthy and out of the hospital and lower the cost of care.

Heritage Provider Network

The most important variables that influence Days In Hospital

The data provided was analyzed and through statistical methods the important variables identified are:
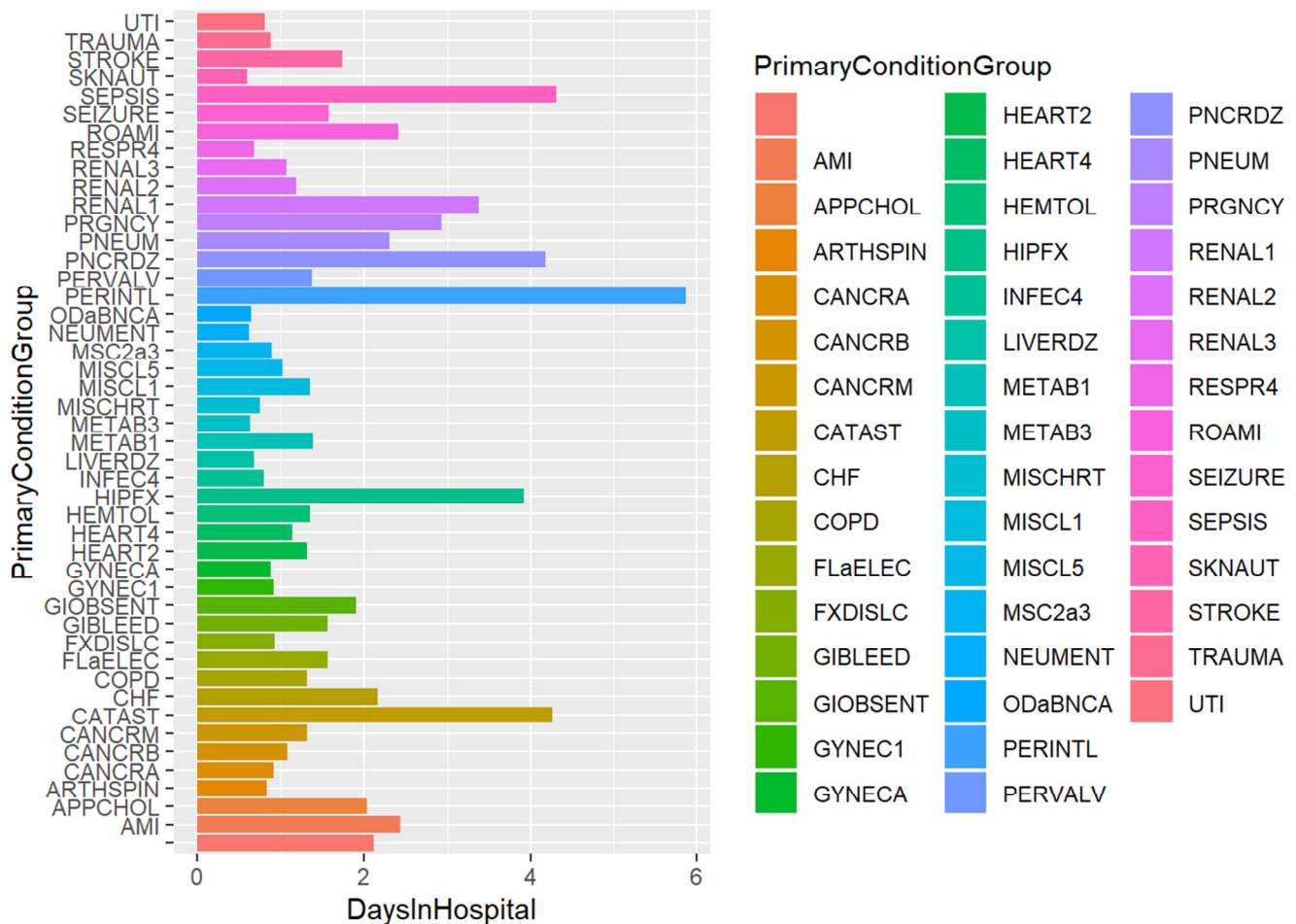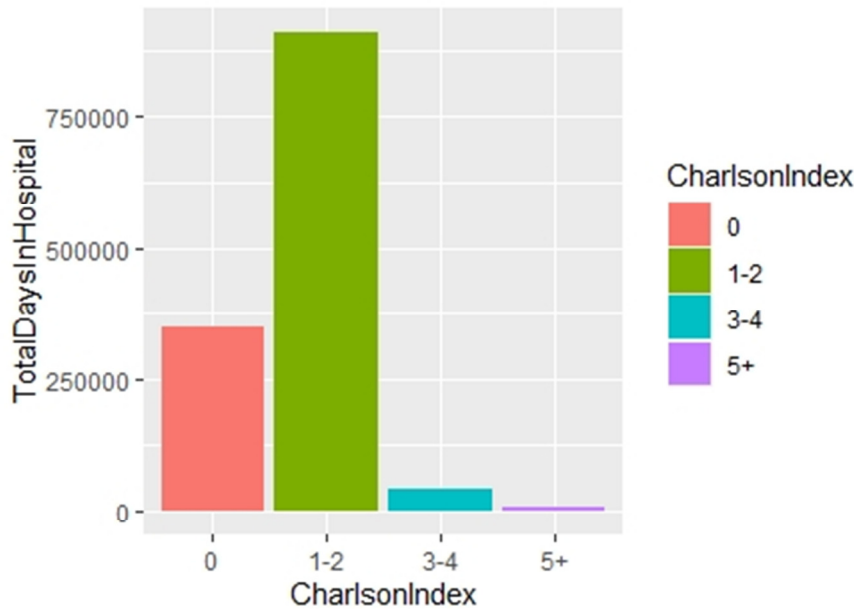
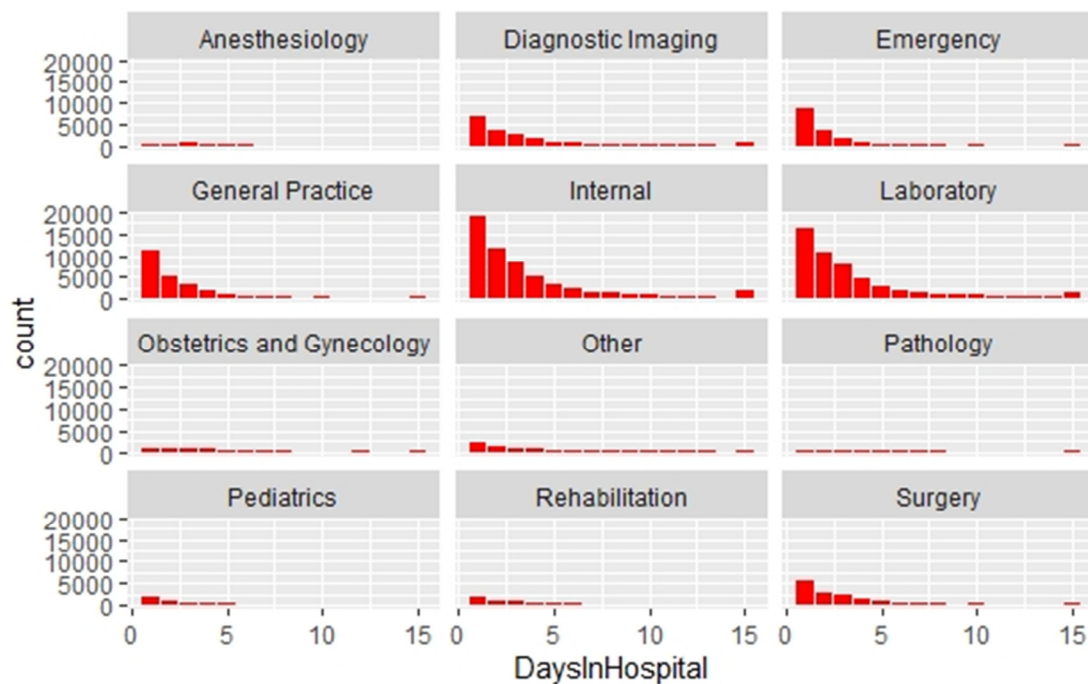Primary Condition Group

Charlson Index

AgeAtFirstClaim

Sex

<u>Primary Condition Group Distribution</u>

Some key <u>pairs</u> of variables and explore the relationships between them.
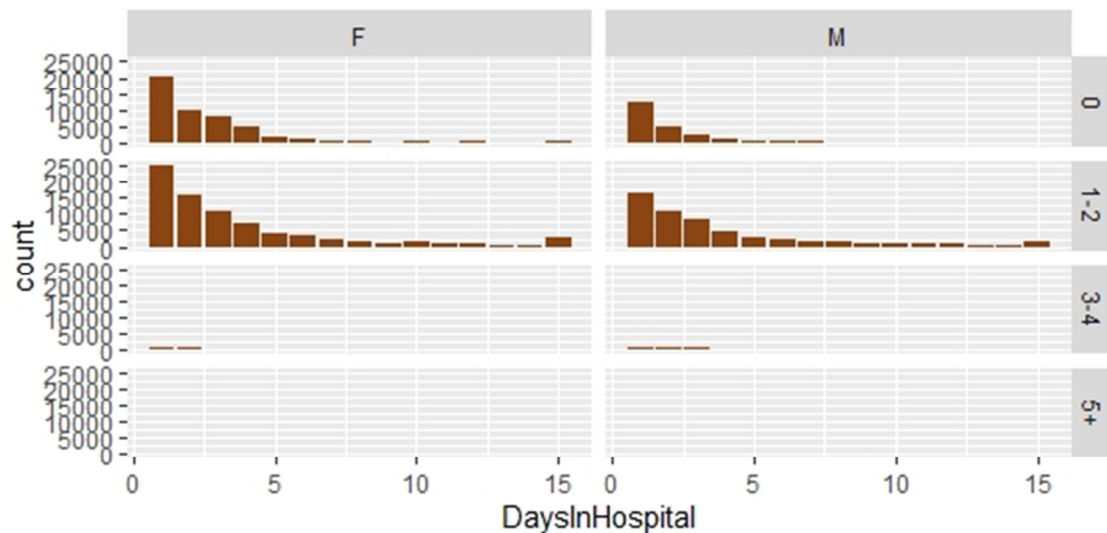
The Days in Hospital (Days in Hospital greater than zero) distribution for Specialty variable indicates that

the days in hospital for Laboratory , General Practice and Internal Specialty have greater count than

the   other Specialty categories and the days in hospital

The Days in Hospital (Days in Hospital greater than zero) vs CharlsonIndex for the Male and Female Gender indicates that
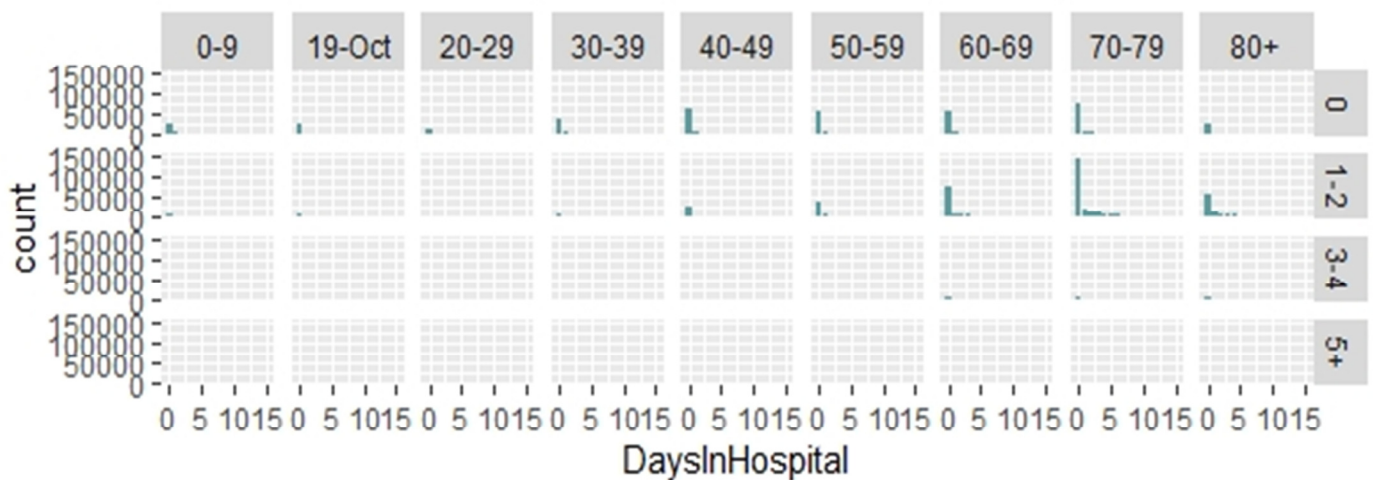
Majority of the claims were for the CharlsonIndex 0, [1-2]

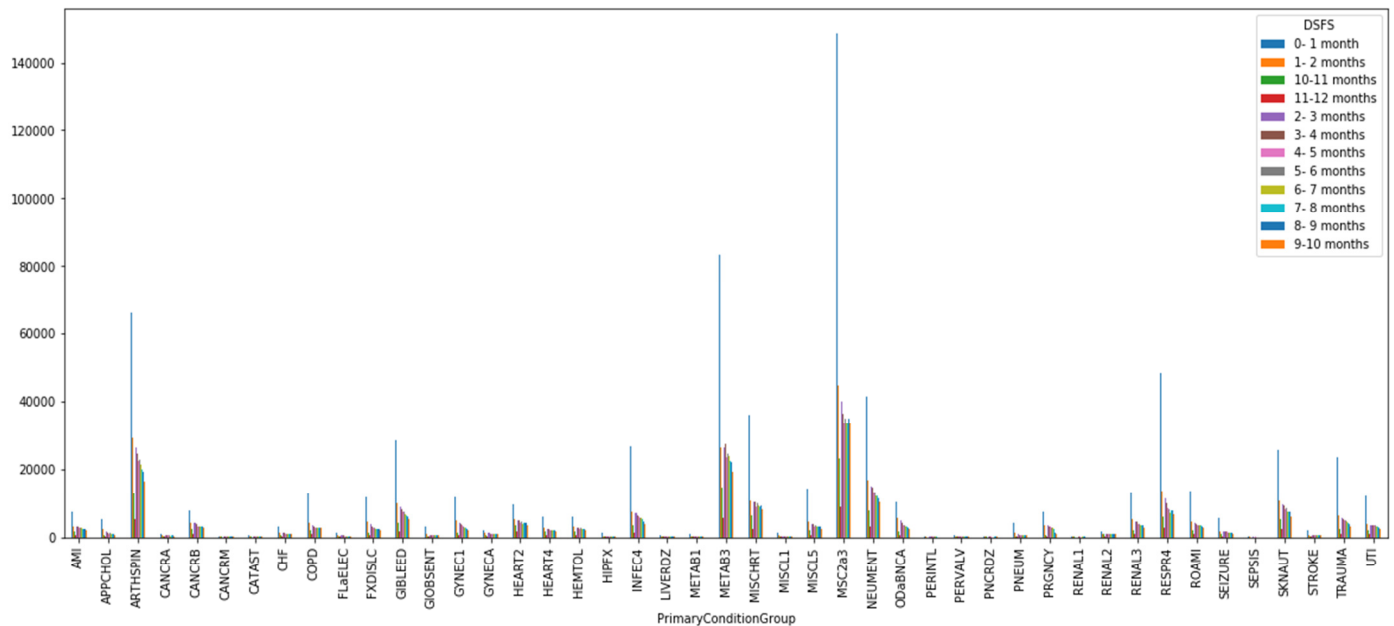Females had greater number of Days in Hospital than Males

Analysis and Inference

A person with **comorbidity** has two or more significant clinical conditions. Most chronic diseases become more common with **age**. The likelihood of having two or more significant conditions is 60% by the **age** of 75-79 years, and more than 75% by 85-89 years

DSFS Days Since First Claim for Primary Condition Groups indicates that **Frequent claims**(i.e [0-1] and [1-2] months) have been majorly for the Condition Groups Arthropathies(ARTHSPIN), METABOLIC(METAB3),And MISC2a3

A Deeper Analysis of Data to help further Analysis

Analysis of Data for the
TRAUMA Primary Condition Group and
SURGERY-MUSCULOSKELETAL SYSTEM(SMS) ProcedureGroup indicates that

The Place of Service for the Surgery of the members was found to be majorly in the Ambulance ,Office

The ProcedureGroup for these injuries were in the Emergency Department and Internal ProcedureGroup

Since this information is of patients from accidents or injuries, patients should be educated about the preventive measures to avoid such injuries or Safe Driving Tips should be provided

Citations:

https://www.gponline.com/comorbidities-older-people/elderly-care/article/1440520