

In Search of Reputable Doctors: **A Provider Recommendation App**

Metis Final Project Presentation
by Itelina Ma

Sept, 2015

Finding a reputable, “good” doctor is hard ...



ZocDoc
BOOK AN APPOINTMENT



CASTLE CONNOLLY
AMERICA'S
TOP DOCTORS®



healthgrades



Angie's list.

And current resources have limitations

**Not all doctors
participate or
are listed**

**Slow and
outdated provider
search sites**

**Consumer reviews are
not always reliable**

CMS releases a comprehensive dataset on physician referrals ...

CMS Physician Referral Data

- Referring doctor
- Referred-to doctor
- Total Referrals
- Doctor information
(address, specialty)

Representing a rich resource for studying physician network relationships

CMS Physician Referral Data

- Referring doctor
- Referred-to doctor
- Total Referrals
- Doctor information (address, specialty)

Network Analysis

- Eigenvector Centrality (“importance”)
- Degree (“connectedness”)

Using network analysis I developed an interactive recommendation app

CMS Physician Referral Data

- Referring doctor
- Referred-to doctor
- Total Referrals
- Doctor information (address, specialty)

Network Analysis

- Eigenvector Centrality ("importance")
- Degree ("connectedness")

Interactive App

www.providersearchcompanion.com

Questions?

