

US Health Care: Quality as an Indicator of Cost

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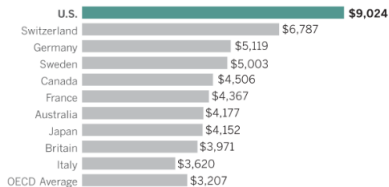
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Why this project?

- My experience 4 months ago when my wife had c-section.
- Why is health care so expensive, is it because of the quality?
- Can I help people find the best option or optimize quality with respect to their budget (quality vs price) in their State.
- Make data more accessible for people.

Overview: Healthcare Spending

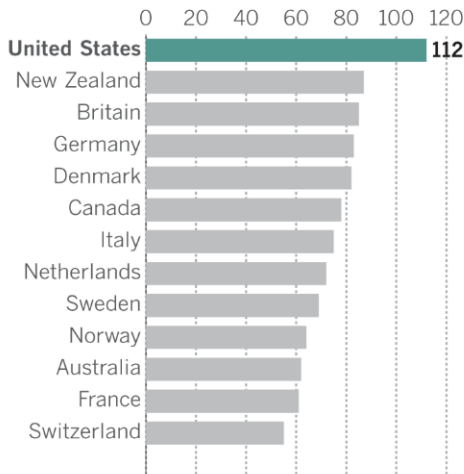
Countries with largest per capita healthcare expenditures, 2015



Source: Organization for Economic Co-operation and Development. Not all OECD members shown. (L.A. Times Graphics)

Overview: Healthcare Quality

Number of deaths per 100,000 from preventable diseases or complications had adequate healthcare been available, in 2013

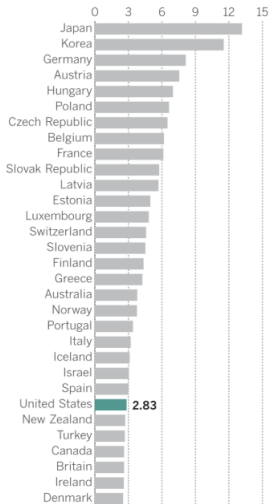


Source: European Observatory on Health Systems and Policies 2017 (L.A. Times Graphics)

Overview: Healthcare Quality

USA spend most on healthcare but the outcomes is far from great compare to the other countries, you can see figures below.

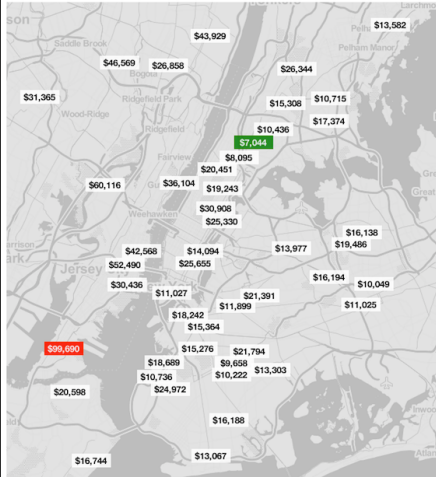
Hospital beds per 1,000 people by OECD countries, 2015



Overview: Healthcare Quality

What It Costs Here — And There

American hospitals charge vastly different sums for the same medical procedures. The cost of treating chronic obstructive pulmonary disease, for example, varies greatly from hospital to hospital throughout the New York area. At Bayonne Hospital Center in New Jersey, the average amount charged per patient is a staggering \$99,690, compared to an average of just \$7,044 per patient at Lincoln Medical and Mental Health Center in the Bronx.



Source: Health and Human Services. Map tiles and data: Stamen Design, OpenStreetMap.

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- Is fee for healthcare good indicator for quality of healthcare. My initial hypothesis is: Yes because the hospital charges more if they hire better doctors and good technologies which are both expensive to attain.
- Can we explain variability in price in terms of quality?

Data Set

- This project aims at evaluating the quality and cost of healthcare systems. For this purpose, statistical data for 3000 hospital have been used.
- The hospital quality data used here is from the HCAHPS Hospital Consumer Assessment of Healthcare Providers and Systems. Link to data set: [HCAHPS](#).
- The hospital payment data used here is from the CMS Center for Medicare and Medicaid Services. Link to data set: [CMS](#) for the year 2016. This data includes information on utilization, payment (total payment and Medicare payment), and hospital-specific charges for the more than 3,000 U.S. hospitals that receive Medicare Inpatient Prospective Payment System (IPPS) payments.