

# 7.1 project ideas

## diabetic readmissions

<https://archive-beta.ics.uci.edu/ml/datasets/diabetes+130+us+hospitals+for+years+1999+2008>

After the Affordable Care Act, acute care readmissions have significantly impacted hospital financials. Diabetics in particular are prone to readmission as the disease affects so much of the body and complicates care. This data set has observations of many features from diabetic patients from 130 hospitals over a 9 year period. Included is the admit and discharge date that can be used to define readmissions. The value from the analysis would come from identifying what features / combination of features carry the most weight in predicting a readmission.

## communities and crime

<https://archive.ics.uci.edu/ml/datasets/Communities+and+Crime>

Of the available features, what are the best predictors of high crime? Interesting to this dataset is the police department racial makeup and per capita data. This could be used to normalize areas with dense police populations and also investigate racial considerations.

## concrete strength per dollar

<https://archive.ics.uci.edu/ml/datasets/Concrete+Compressive+Strength>

This will need to be supplemented with cost data for the various ingredients included. This is a straight-forward analysis that would be good practice and its findings easily validated. The real-world commercial value of this analysis is also immediately apparent.