

VISUALIZING NATIONAL RATES OVER TIME

How can changes in national rates be displayed over time?

Chartbook data visualizations allow users to explore the monthly national observed admission counts, readmission rates, and observation stay rates for three conditions: acute myocardial infarction, heart failure, and pneumonia. Results can be viewed on an adjustable timeframe from January 2006 through the present year.

AS SHOWN IN THE GRAPH BELOW:

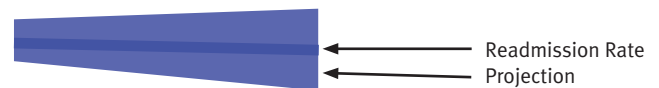
FOR THE ADMISSION COUNTS:

- The light gray bar represents the admission count based off the preliminary claims. The dark gray “projection” area represents the estimated range for which the admission count will fall based on the final action claims (with 95% certainty).



FOR THE READMISSION RATES:

- The dark blue line represents the readmission rate based off claims. The light blue area represents the projection.

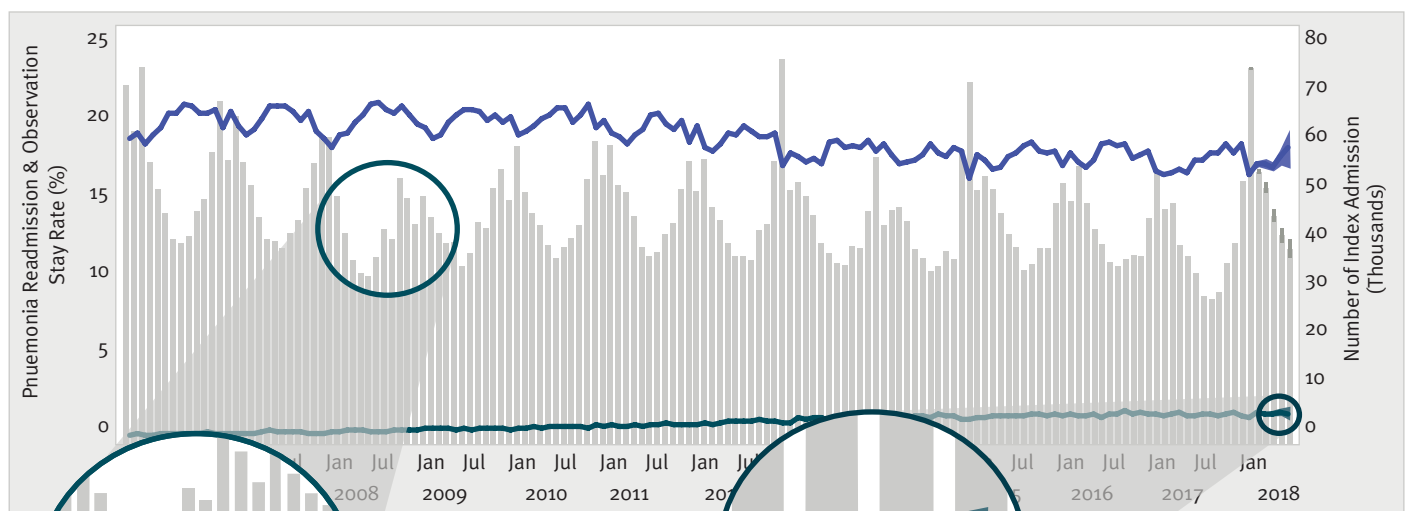


FOR THE OBSERVATION STAY RATES:

- The teal line represents the observation stay rate based off the claims. The light teal area represents the projection.



NATIONAL RATES FOR PNEUMONIA ADMISSIONS, READMISSIONS, AND OBSERVATIONS STAYS (JANUARY 2006- JUNE 2018)



The number of admissions is decreasing overall, but not uniformly. The customizable timeframe reveals seasonal trends in the data. **Admissions are higher in the winter months.**



For the most recent six months, admissions, observation stays, and readmissions are **estimated using a predictive model** because claims from the most recent six months are not considered final.



VISUALIZING NATIONAL RATES OVER TIME

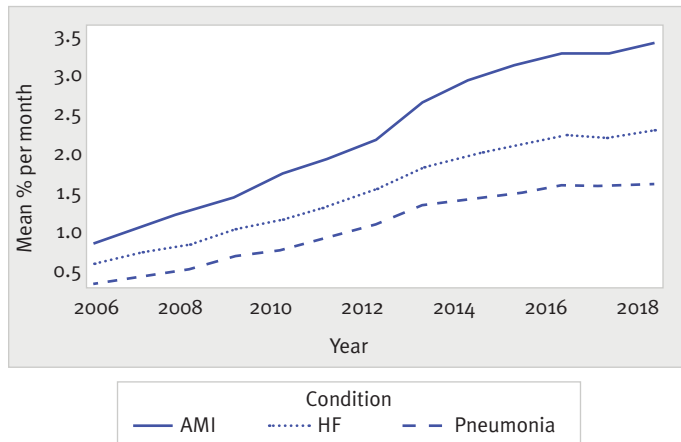
Admission Count: Number of hospitalizations for a given condition during the specified time frame.

Observation Stay Rate: (Number of hospitalizations with an observation stay within 30 days) / (all hospitalizations) during the specified time frame.

Readmission Rate: (Number of hospitalizations with a readmission within 30 days) / (all hospitalizations) during the specified time frame.

ADDITIONAL FINDINGS FOR TRENDS IN THE NATIONAL RATES:

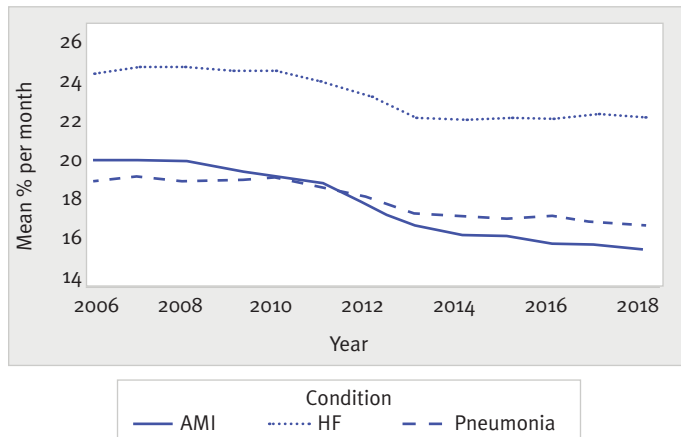
THE OBSERVATION STAY RATE IS INCREASING.



AMI had the highest observation stay rate.

3.0% of admissions in December 2017 resulted in an observation stay.

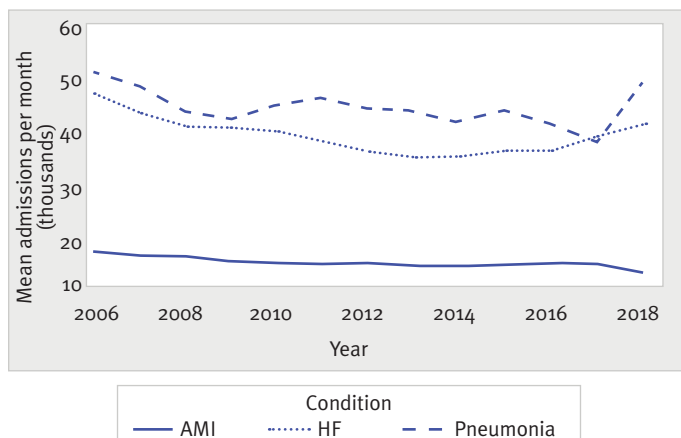
THE READMISSION RATE IS DECREASING.



HF had the highest readmission rate.

23% of admissions in December 2017 resulted in a readmission.

THE NUMBER OF ADMISSIONS IS DECREASING.



The number of admissions is decreasing.



AMI: Acute Myocardial Infarction HF: Heart Failure

THE CMS HOSPITAL CHARTBOOK ALLOWS YOU TO EXPLORE MORE MEASURES FOR SPECIFIC TIME FRAMES.
FOR QUESTIONS CONTACT CMSCHARTBOOK@YALE.EDU.