RESEARCH QUESTION:

Which procedures have the greatest variability between hospitals?

CONCLUSION:

The procedures that have the greatest variability are (in order):

Procedure	Max Score	Min Score	Range
Emergency Department	1180	0	1180
Heart Attack or Chest Pain	221	0	221
Surgical Care Improvement Project	100	0	100
Stroke Care	100	0	100
Preventive Care	100	0	100
Pregnancy and Delivery Care	100	0	100
Heart Failure	100	0	100
Blood Clot Prevention and Treatment	100	0	100
Pneumonia	100	20	80
Children's Asthma	100	34	66

APPROACH RATIONALE:

I have defined variability as the difference between (range) of maximum and minimum scores for each procedure. Here, score represent a rolled up metric of "timely and effective" care for each procedure in each hospital.

FINDING NOTES:

The greatest range is for Emergency department

procedures. This makes sense as the range of scenarios are so varied. You could be coming in with a intense headache or a spike through your arm.

The least varied is Children's Asthma which I imagine is a very routine, easy to diagnose procedure.

SQL:

Create transform table from master database

> CREATE TABLE range as
> SELECT condition,
> max(score_int) as max,
> min(score_int) as min
> FROM effective_care
> GROUP BY condition;

Create range and order by descending

> SELECT condition, max, min, max-min as difference
> FROM range
> ORDER BY difference DESC
> ;