

- Which procedures have the greatest variability between hospitals?

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2017-02-27 06:29:53,885 Stage-2 map = 0%, reduce = 0%
2017-02-27 06:30:00,356 Stage-2 map = 100%, reduce = 0%, Cumulative CPU 1.33 sec
2017-02-27 06:30:06,753 Stage-2 map = 100%, reduce = 100%, Cumulative CPU 3.19 sec
MapReduce Total cumulative CPU time: 3 seconds 190 msec
Ended Job = job_1488136239136_0042
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 5.46 sec HDFS Read: 153756
HDFS Write: 2938 SUCCESS
Stage-Stage-2: Map: 1 Reduce: 1 Cumulative CPU: 3.19 sec HDFS Read: 7662 HD
FS Write: 863 SUCCESS
Total MapReduce CPU Time Spent: 8 seconds 650 msec
OK
p.measureid p.measurename stddev_score
OP_2 Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival 0.214550
92347839494
OP_29 Endoscopy/polyp surveillance: appropriate follow-up interval for normal
colonoscopy in average risk patients 0.2090221868382952
OP_23 Head CT results 0.18825888365250704
OP_30 Endoscopy/polyp surveillance: colonoscopy interval for patients with a h
istory of adenomatous polyps - avoidance of inappropriate use 0.17689349238422
164
OP_22 Left before being seen 0.1506024060669673
IMM_3_OP_27_FAC_ADHPCT Healthcare workers given influenza vaccination 0.149114
86335978497
OP_31 Improvement in Patient's Visual Function within 90 Days Following Catara
ct Surgery 0.1322253489290472
VTE_6 Hospital acquired potentially preventable venous thromboembolism 0
.1253001386521943
STK_4 Thrombolytic Therapy 0.12345107506919534
IMM_2 Immunization for influenza 0.1230688296194046
Time taken: 47.874 seconds, Fetched: 10 row(s)
hive>

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As shown above, sigma or standard deviation of score is used as a metric for variability in procedure. Clearly, the difference between standard deviation scores between the top two procedures is fairly small. The procedure which shows the most variability is Fibrinolytic Therapy with Endoscopy/polyp surveillance: colonoscopy etc being a very close second. It is probably instructive to note that the simplicity of the procedure probably determines the lack of variability in the procedure administered. By that token, it is hardly surprising that “Immunization for influenza” shows the least amount of variability