

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis.

The summary statistic provided is the participants' observed event rates. An exact 95% exact binomial confidence interval was calculated for each participant's observed rate. A higher rate indicates better performance. The percentiles were calculated after ordering the participants' measures from the smallest to the largest. The 10th percentile value, for example, is the value that is larger than 10% of all participants.

Distribution	July 2008 - June 2011 Observed rate	July 2010 - June 2013 Observed rate
# Participant	185	218
# Operations	20929	28039
Mean	0.91	0.94
STD	0.13	0.095
IQR	0.10	0.063
0%	0.00	0.34
10%	0.78	0.85
20%	0.87	0.91
30%	0.91	0.94
40%	0.94	0.96
50%	0.95	0.97
60%	0.97	0.98
70%	0.98	0.99
80%	1.00	1.00
90%	1.00	1.00
100%	1.00	1.00
Midwest	40	45
Northeast	50	58
South	60	77
West	35	38

Note that two time periods have one year overlap. We chose to report these time periods because in the five years from 2008 to 2013, the definition of the measure denominator was consistent in the database. The results are more comparable than if we included 2007 data.

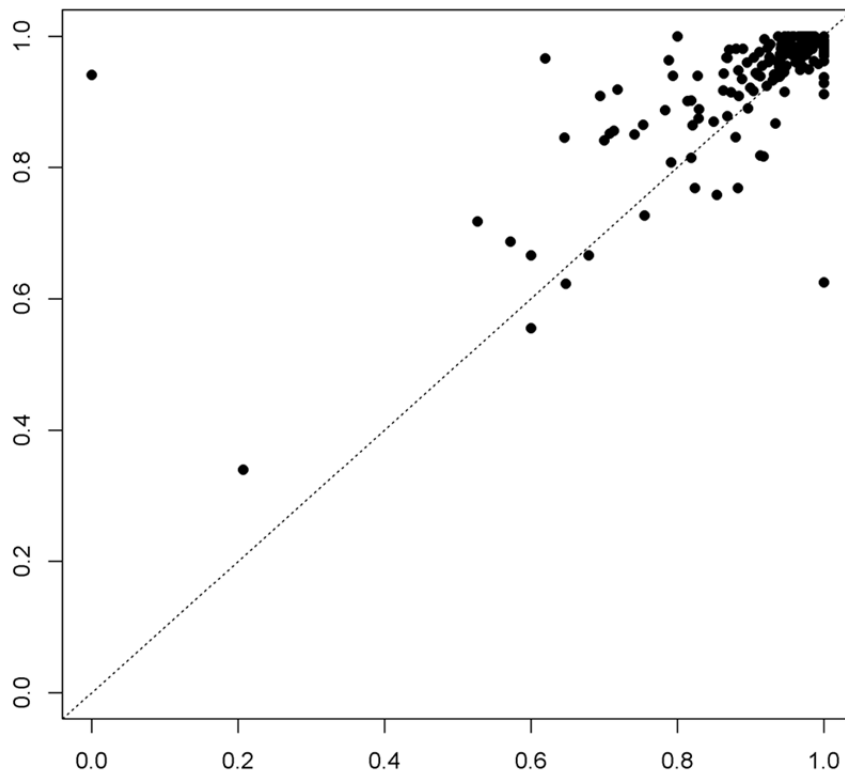
We report the measure for all STS participants with eligible cases even if the number of cases (denominator) is small. It is known that with or without risk adjustment, small number of cases yield less reliable estimates. Therefore, to facilitate a more reliable comparison across time periods, we also provided the measure summary in only participants with 50 or more cases and participated in at least 24 out of the 36-month period.

Distribution	July 2008 - June 2011 Observed rate	July 2010 - June 2013 Observed rate
# Participant	98	129
# Operations	17618	24611
Mean	0.92	0.95
STD	0.10	0.076
IQR	0.083	0.046
0%	0.21	0.34
10%	0.79	0.87
20%	0.87	0.93
30%	0.92	0.95
40%	0.94	0.96
50%	0.95	0.97
60%	0.96	0.98
70%	0.97	0.99
80%	0.98	0.99
90%	1.00	1.00
100%	1.00	1.00
Midwest	22	25
Northeast	23	34
South	30	47
West	23	23

The figures below show the changes in participant specific observed rates and risk adjusted rates between two recent 3-year time periods. Only participants that reported data to STS in both time periods are included.

Changes of measure from July 2008 - June 2011 (x-axis) to July 2010 - June 2013 (y-axis)

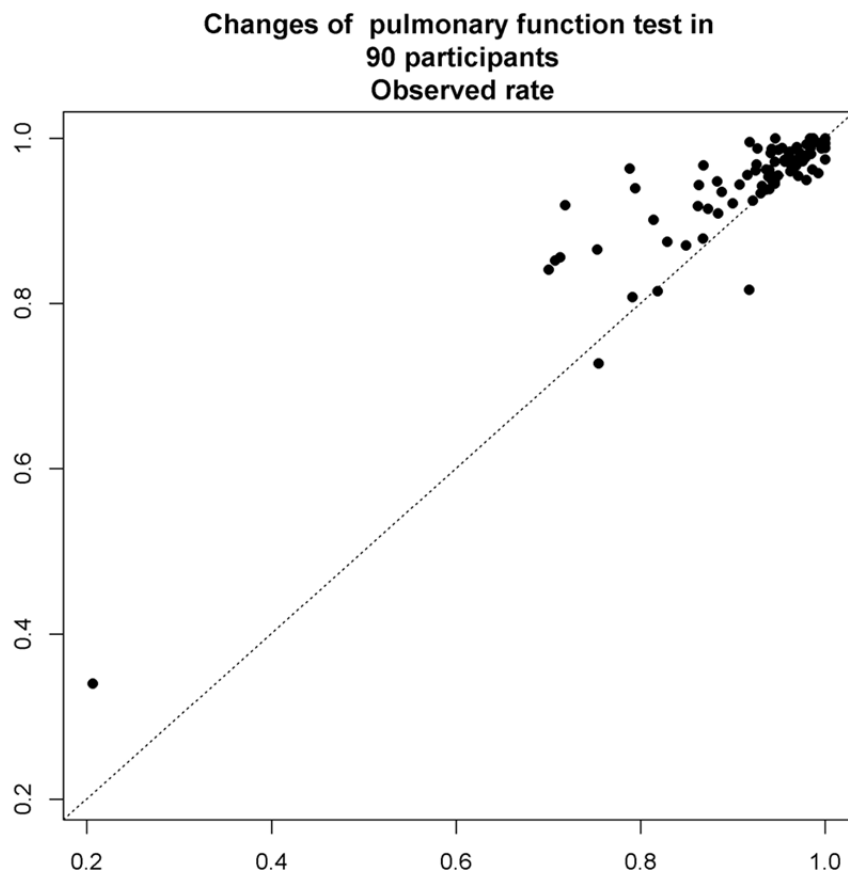
**Changes of pulmonary function test in
181 participants
Observed rate**



The Spearman rank correlation of the measure between the two time periods is 0.73. The Pearson correlation is 0.68.

Similarly, we created the figures comparing the observed rates from the two years in participants with more than 50 cases or more and reported data in at least 24 months in each time period.

Changes of measure from July 2008 - June 2011 (x-axis) to July 2010 - June 2013 (y-axis) in STS database participants who reported in 24 or more months of the 3-year period and a total of at least 50 eligible cases (denominator) in each year



The Spearman rank correlation of the measure between the two time periods in these relatively larger participants is 0.82. The Pearson correlation is 0.90.