

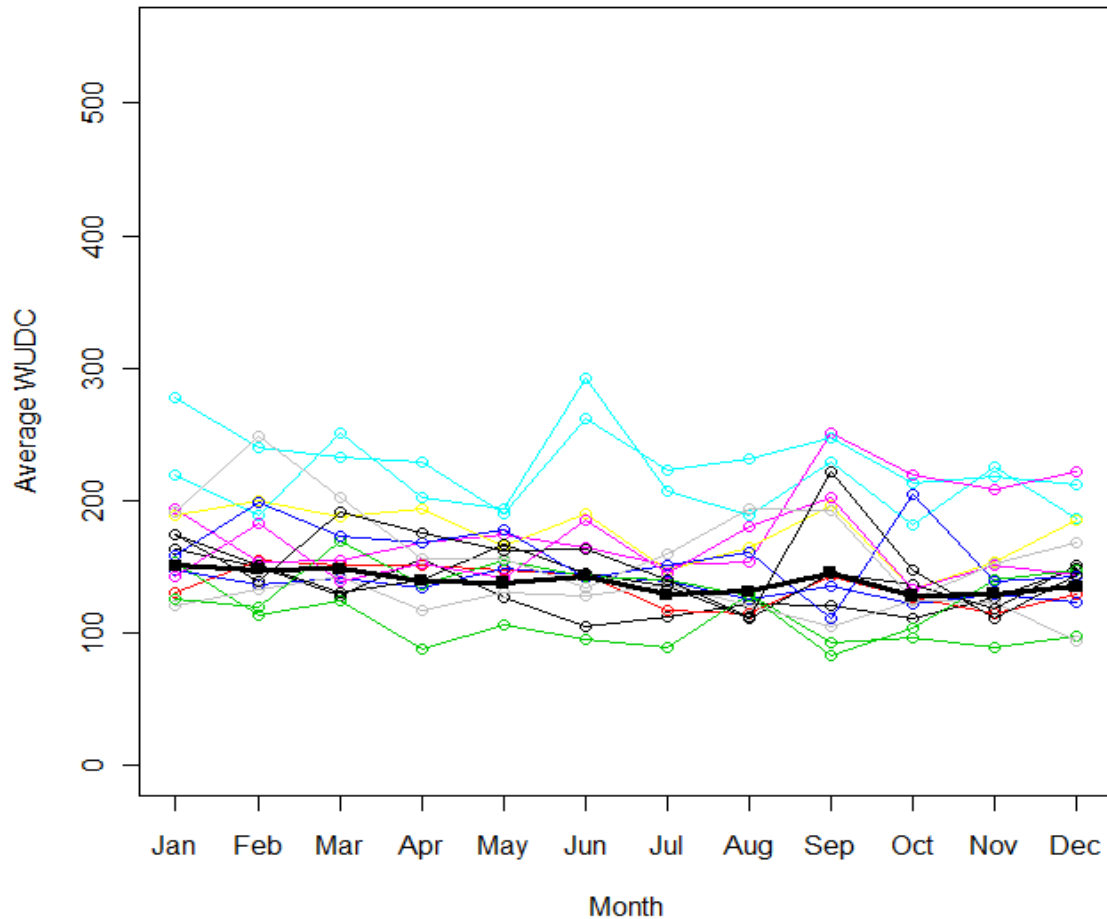
HIT Implementation Results

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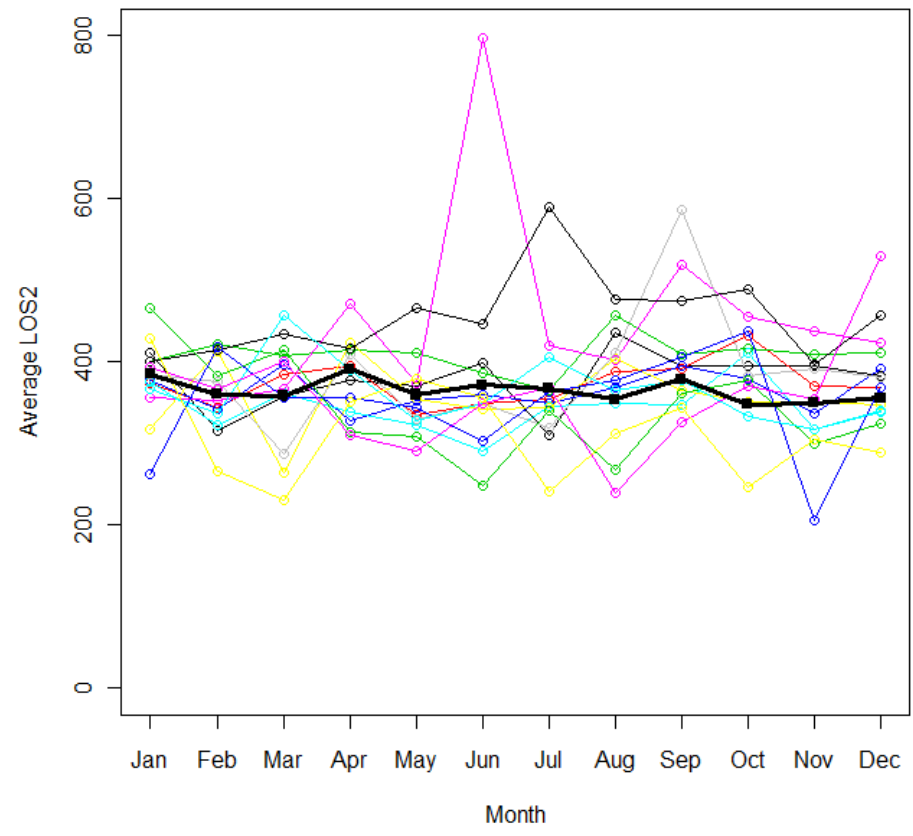
Generally No Large Impact

- Most performance measures are flat
 - Workup time
 - Length of stay
- Some evidence of a slowdown
 - Increased door to doctor times
 - Slight increases in some LOS

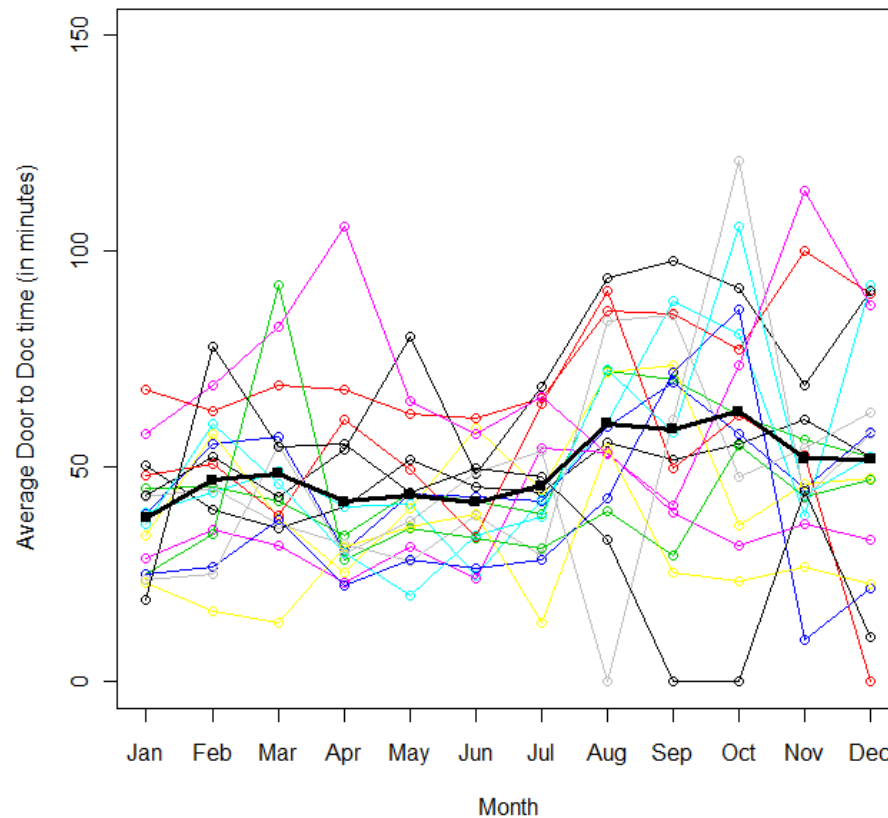
Workup Time Remains Flat



Length of Stay Is Flat

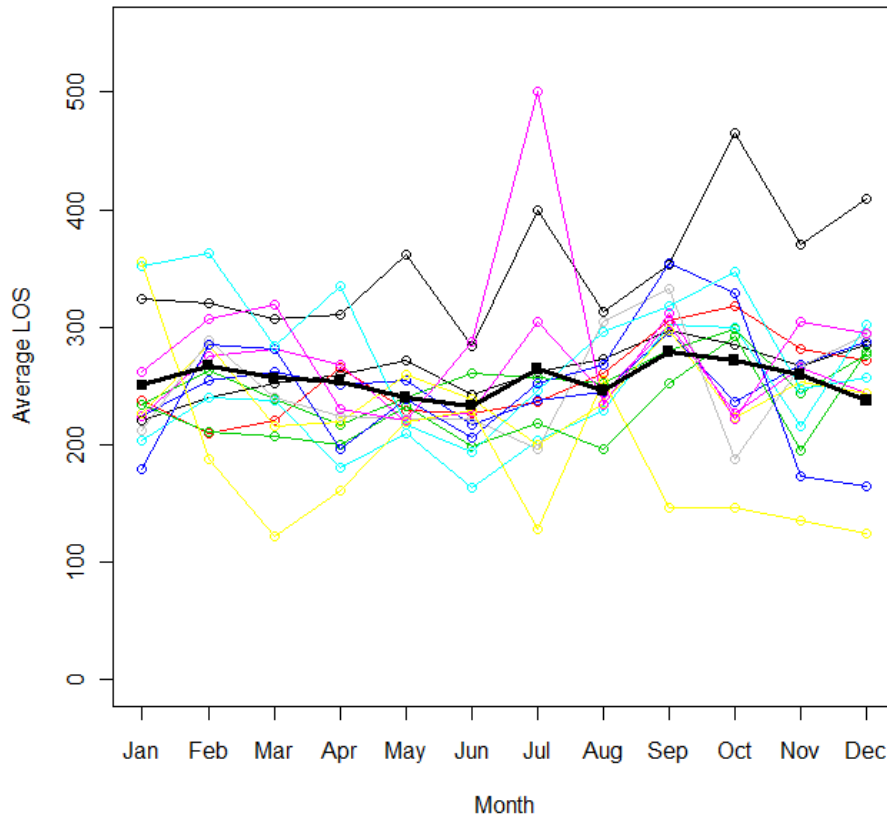


Increase in Door-to-Doc Time



Door-to-Doc time increases after implementation, but slowly comes down afterwards

Slight Increase in Length of Stay

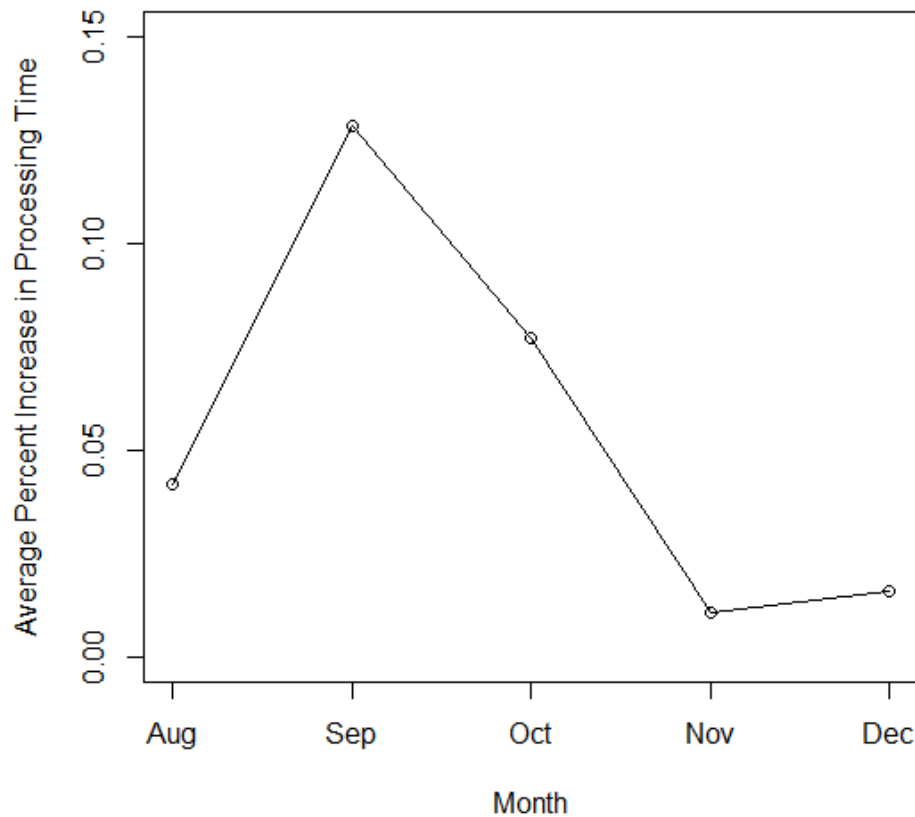


Length of stay also increases immediately after implementation, but comes back down quickly afterwards

Changes Over Time?

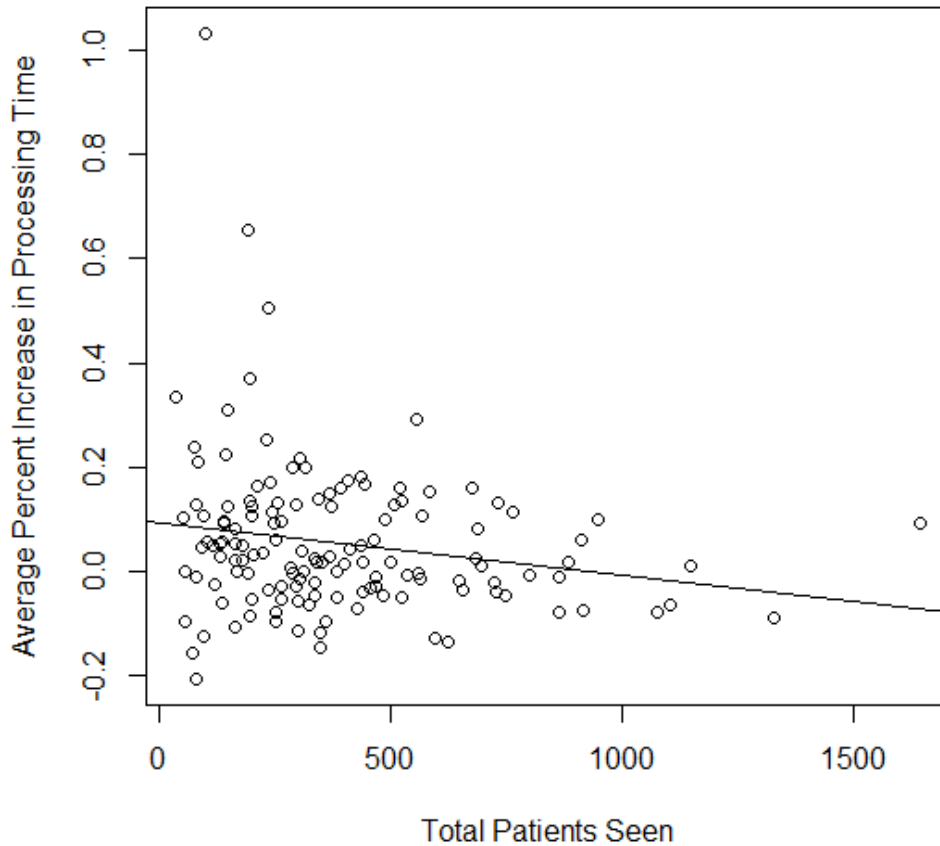
- We measure each doctor's performance metrics over time
 - Performance changes vs. time?
 - Performance changes vs. use?
- “Performance” for each doctor in each month is defined as the percent increase in workup time and length of stay over the average workup time and length of stay from Jan-July

Decrease in Processing Time After Adoption



Processing time (average of workup time and LOS) initially increases after adoption, but comes down quickly over time

Decrease in Processing Time With Usage



Processing times decrease the more patients a physician sees using the new system after adoption

Time vs. Usage?

- There is a significant increase in processing time the first two months after implementation (95% C.I. = 4% to 13%, $p < .001$)
- Average processing time decreases by 1.7 percentage points each month after implementation, on average ($p = .059$)
 - performance increases each month after implementation
- Average processing time decreases by .01 percentage point, on average, with every patient treated ($p = .029$)

Age

- Slowdowns after implementation increase with doctor experience (.0034% increase in processing time per year, $p = .018$)
- However, there is a negative interaction effect ($p = .001$) between age and usage
 - Older doctors catch up to younger doctors with usage

Gender

- No real differences
- Women have insignificantly faster treatment times($p = .354$)

Conclusion

- HIT implementation leads to a short-term decrease in performance
- Performance rebounds rather quickly, over time and with use
- By December (5 months after implementation) there is no statistically significant increase in processing times (mean = 1.6% increase, $p = .34$)