Suicide Prevention Model

Team Experimental Design

Experiment	Our Question	Our Hypothesis	Our Findings	Our Decisions
Base Case	How do we improve the quality of care in our team for patients with high symptoms or high suicide risk? What happens to our high symptom and high risk patient populations over the next two year, if we make no new decisions in our team?	If we make no new decisions in our team, we expect that over the next two years we would see no new improvements in quality, our Veterans' suicide risk would stay the same?	If we made no new decisions, then things would stay the same in our team and we would have 4 patients with a high risk.	For next time what will experiment with is implementing measurement based care to see the impact on patients' symptoms and risk.

Experiment 1	How does implementing measurement based care to impact on patients' symptoms and risk?	If we implement measurement based care, we expect that over the next two years we would see improvements in quality, which means our improvement rate should go up, detection rates should go up, low patients will remain in care for longer, high symptom patients will go down, we should reduce the number of high risk flag patients in our team. We expect that Patients waiting to start GMH would increase.	With implementation of measurement based care we shift the ratio of high symptom to low symptom (60% to 20% high symptom). The number of patients with a high risk flag would reduce by over 50%. So, wait times would go up overall, because we are not stepping down this new higher proportion low symptoms in our team.	Next time we will experiment with Stepped Care so that the improvements we are seeing in our team, don't lead to an increase in wait times for stepping down to PC, and try to understand what going on with why patients waiting to start is still going down.

Experiment 2	How does implementing Stepped Care between GMH and PC, don't influence wait times for stepping down to PC, and the step down rate?	If we fully implement stepped care between GMH and PC, then we expect that wait times to step down from GMH to PC would go down, and we expect that wait times to step up from PC to GMH would go down too.	We found that we would reduce the number of patients waiting to start much faster in the Stepped Care experiment then in our MBC experiment. The ratio of High symptom patients to low symptom patients went up, increasing wait time for step up, wait time to step down went up , we did not get as big of a reduction in our number of high risk flag patients.	Next time, for experiment 3 let's combine our MBC exp 1, and our Stepped Care exp 2. Let's take a look at the overall MH Continuum of Care or look specifically at PC, not just our own team.

Experiment 3	How does implementing MBC and Stepped Care impact our primary goal to decrease patients symptoms and suicide risk? Overall MH Continuum of Care (or look specifically at PC not just our own team?	If we fully implement stepped care between GMH and PC and we implement MBC in our GMH team, then over the next two years we expect to reduced time to improve, time to unflag high risk patients, time to detect; we should see more patients move from high symptom to low symptom, we would expect wait times for patients waiting to start in our GMH team to go down, we expect improvement in the recommended step down rate GMH to PC, and step up from PC to GMH.	The combined experiment reduced our patient load, because of the reinforcing feedback, "higher care quality increase recovery." We reduce the number of high risk flag patients from 4 to 1. We improve wait times for joining our GMH team by nearly 10 times. Wait times for stepping up to SMH are the best under the combined experiment. But we still have more work to do for improving wait times to step back down to primary care.	When we a make a change in our team, we can get several wins for our patients, but those improvements can have tradeoffs and we have to coordinate with other local care settings to address new issues that emerge. As we significantly reduce the proportion of high symptoms in our team, they need a place to go, so we need to work with our PC/PCMHI to find a solution to that.

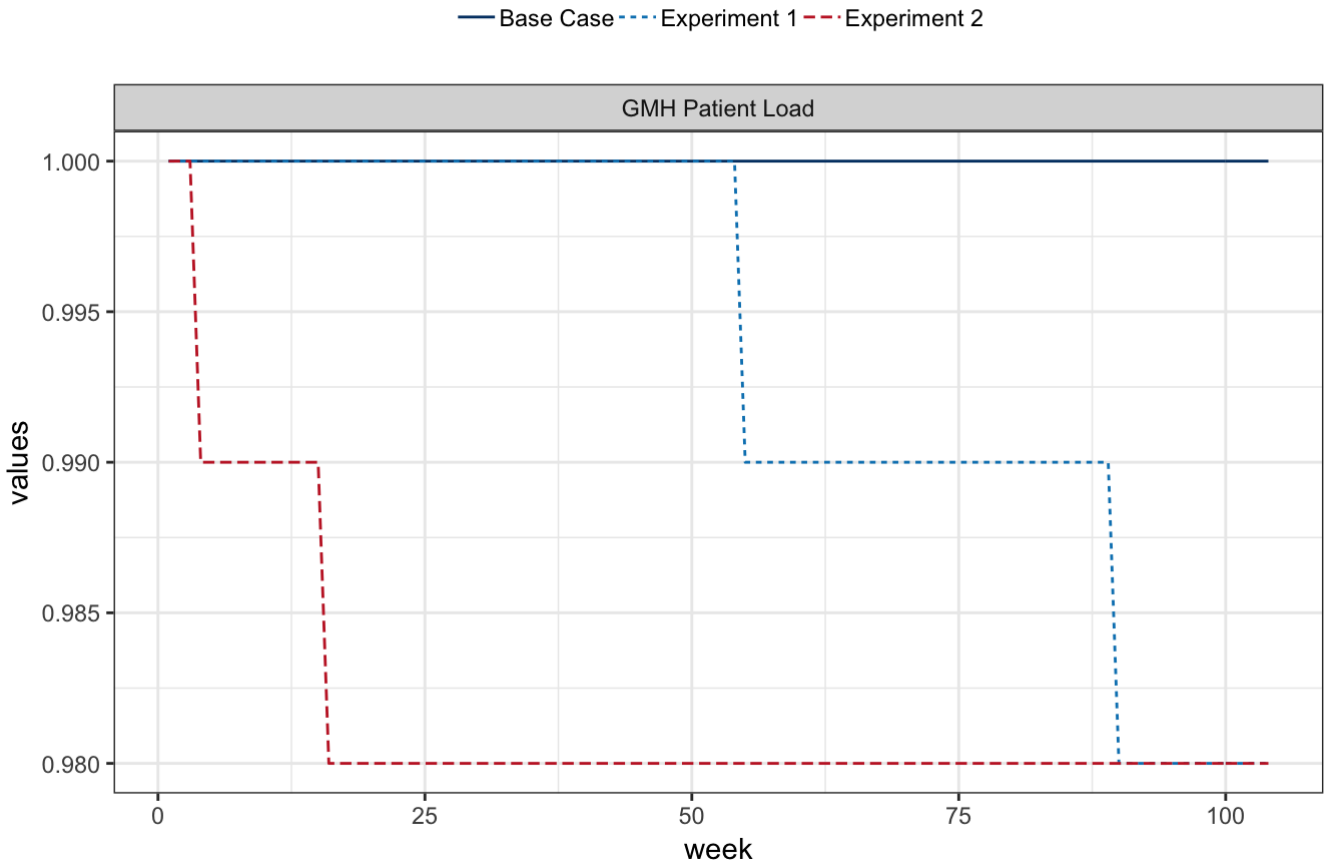
Changes to Model Parameters Relative to Base Case

Experiment	Variable	values
Experiment 1	GMH New Patient Start Rate	6.21
Experiment 1	GMH Manageable Total Patients	517.25

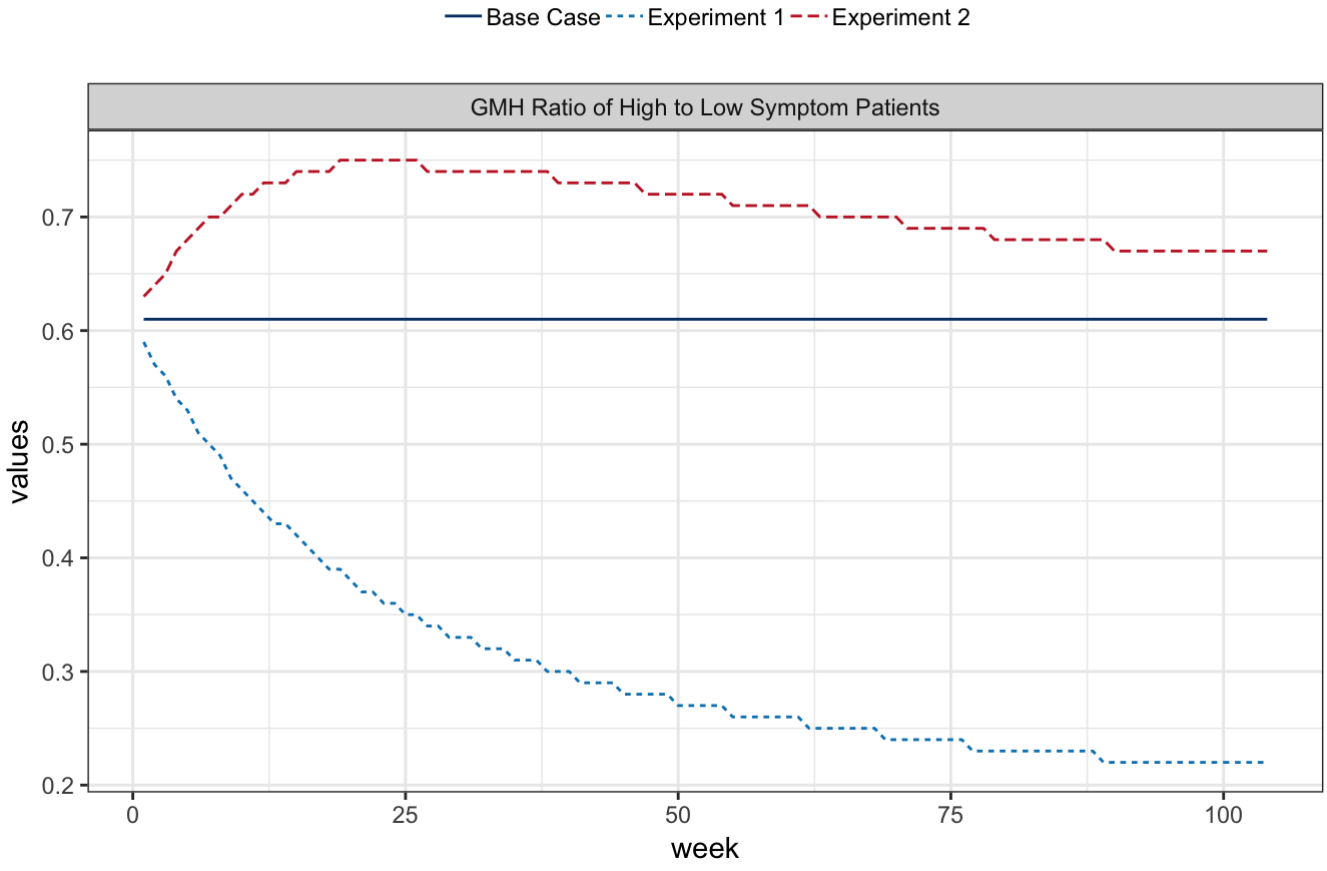
Experiment 1	GMH Time to Detect	6.00
Experiment 1	GMH Time to Ending	67.50
Experiment 1	GMH Time to Improve	26.00
Experiment 1	GMH to PC/PCMHI Engagement Time before Step down	45.50
Experiment 1	GMH New Patient Start Rate	6.21
Experiment 1	GMH Implement MBC	1.00
Experiment 2	GMH New Patient Start Rate	9.36
Experiment 2	GMH Manageable Total Patients	517.25
Experiment 2	GMH Time to Detect	12.00
Experiment 2	GMH Time to Ending	45.00
Experiment 2	GMH Time to Improve	52.00
Experiment 2	GMH to PC/PCMHI Engagement Time before Step down	22.75
Experiment 2	GMH New Patient Start Rate	9.36
Experiment 2	GMH and PC/PCMHI Implement Stepped Care	1.00
Experiment 3	GMH New Patient Start Rate	8.93

Team Graphs

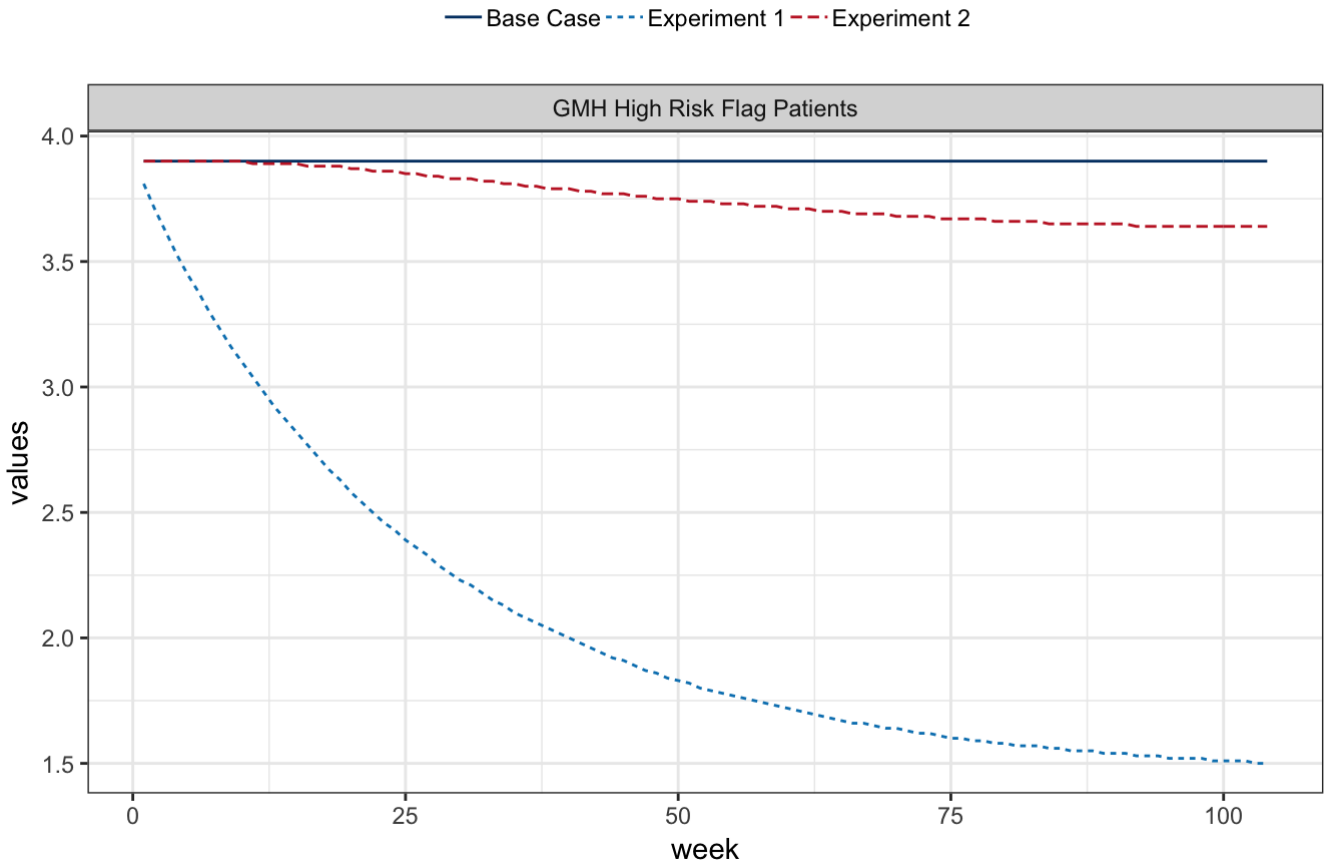
GMH Patient Load



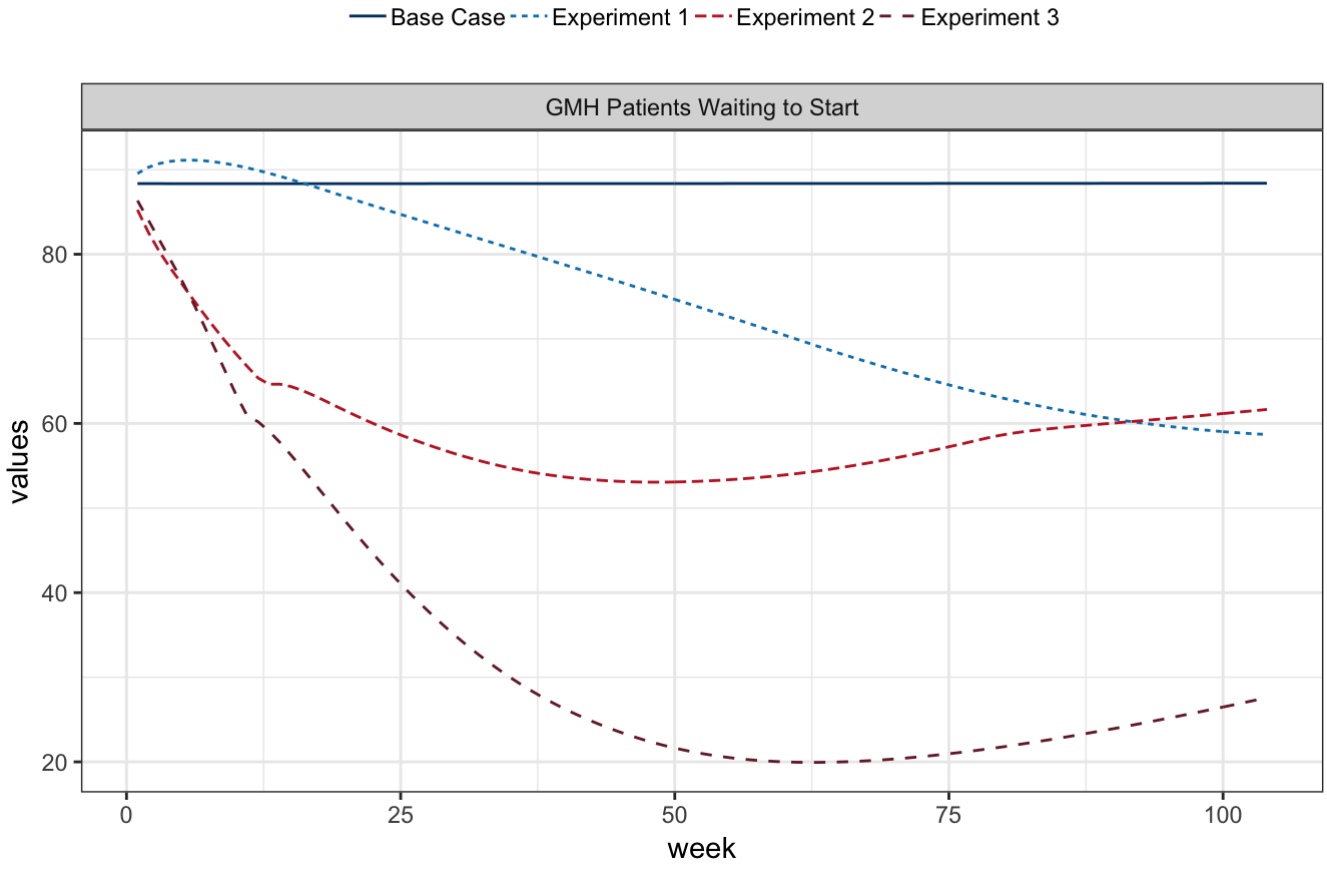
GMH Ratio of High to Low Symptom Patients



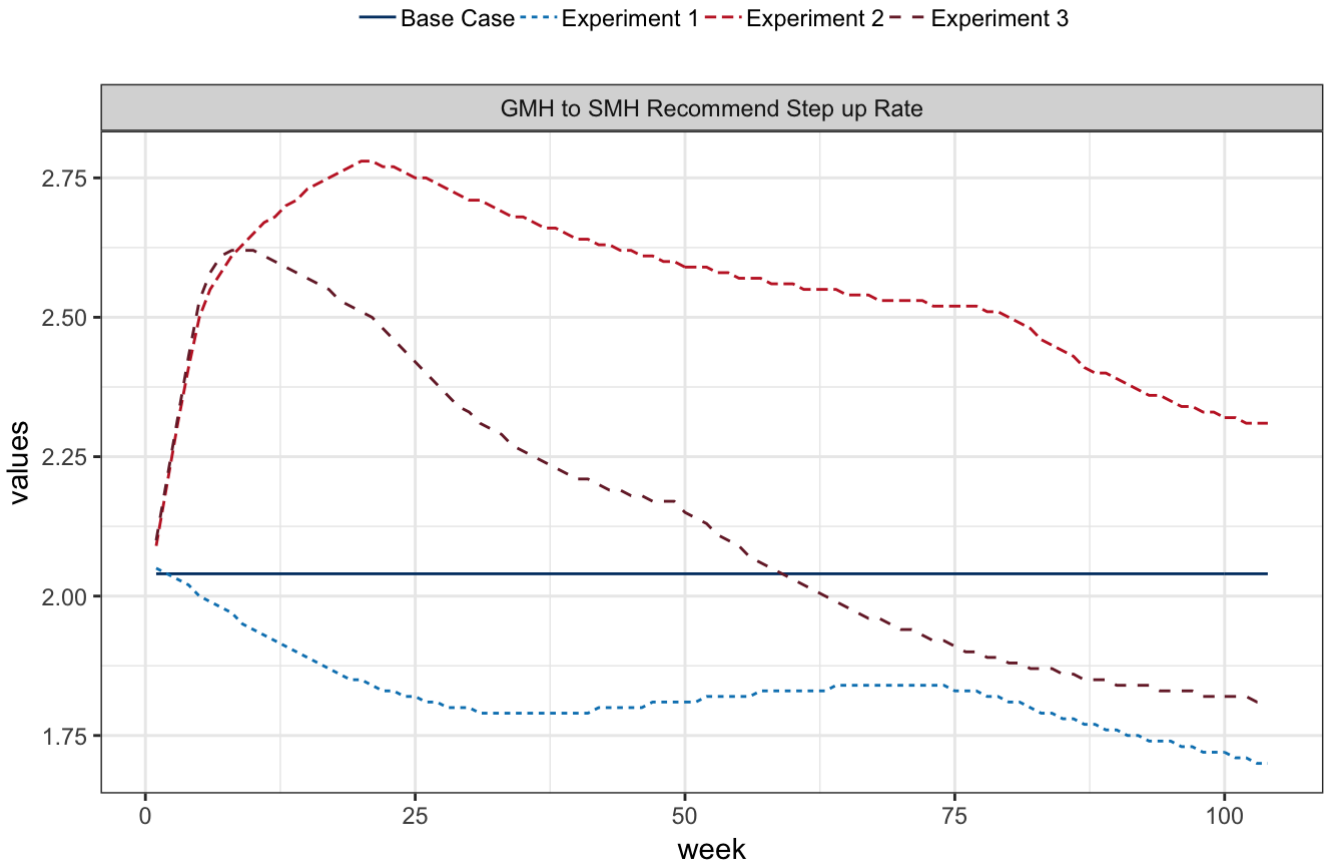
GMH High Risk Flag Patients



GMH Patients Waiting to Start



GMH to SMH Recommend Step up Rate



GMH to PC/PCMHI Patients Waiting for Step down