
# Psychotherapy Model

## Team Experimental Design

| Experiment | Our Question | Our Hypothesis | Our Findings | Our Decisions |
|---|---|---|---|---|
| Base Case | What would happen over the next two years if we made no new decisions in our team? How many of our Veteran patients are getting evidence-based psychotherapy now? How do we get more patients in to psychotherapy without wait-times? | I expect that if we don't start graduating some of the patients who are engaged in psychotherapy for far more than their first three months then we won't be able to start more patients in psychotherapy. | We're spending more time as a team on patients who have been engaged in care for > 3mos. In our base cases of no new decisions then we have 4 appt/wk available. | Next time we'll experiment with increasing the proportion of patients who graduate to 75%. |
| Experiment 1 | How do we get more new patients in to psychotherapy without compromising care for our existing patients | If we graduate 75% of our psychotherapy completers 8-12 sessions then, we will start more than 4 new patients in psychotherapy each week in our team. | We would over two years switch from spending our time on patients who've been engaged for > 3 months to patients engaged for < 3 months, we would not be starting any more new patients. | Next time, we will experiment with graduating patients engaged in care > 3 month rather than focusing only on graduating those right when they complete their first 12 weeks. |

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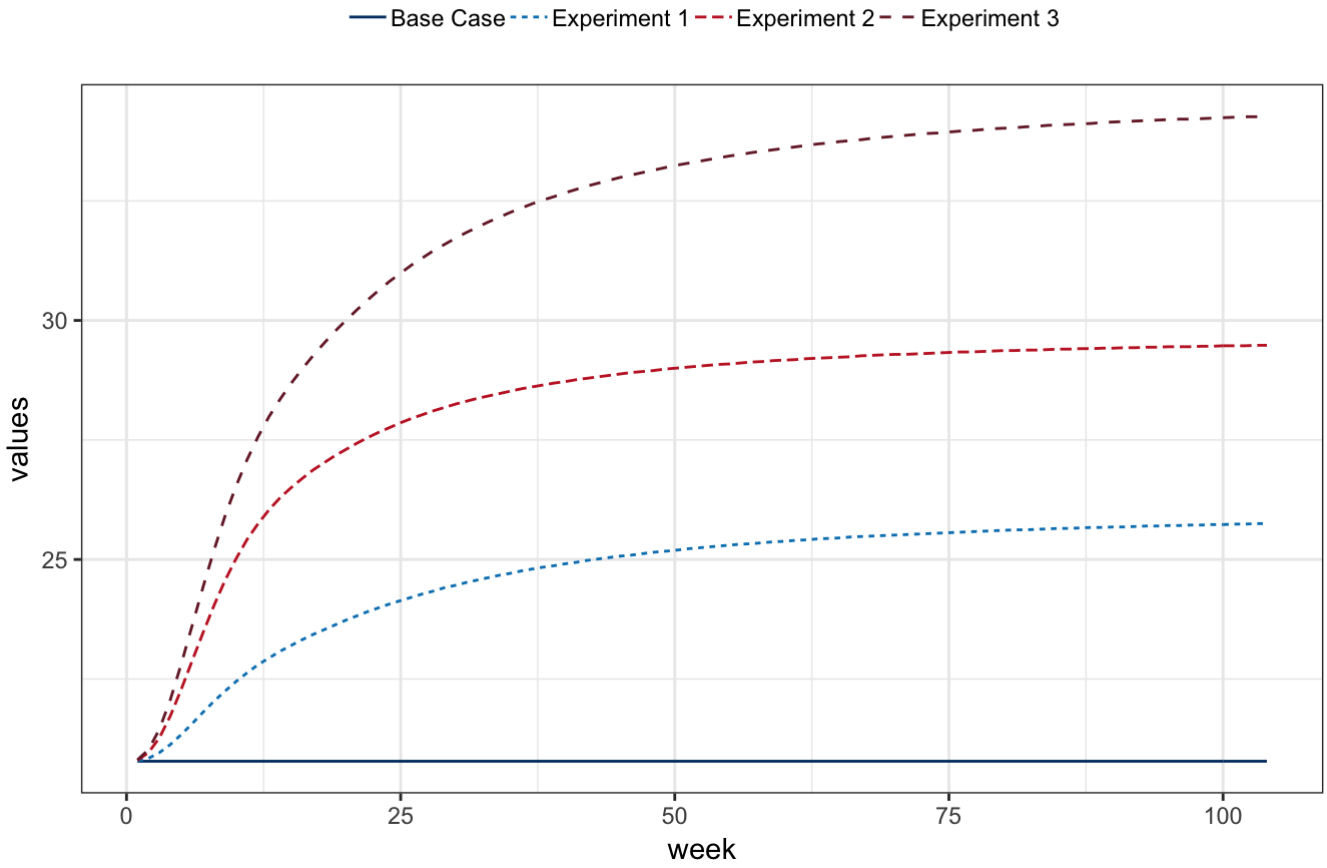
|---|---|---|---|---|
| Experiment 2 | Next time, we will experiment with graduating patients engaged in care > 3 month rather than focusing only on graduating those right when they complete their first 12 weeks. | If we change the engagement time for patients engaged > 3 months by 50%, then it will increase the appointment supply for new patients, meaning that up to 6 new patient per week could start psychotherapy. | So we increased the number of new Veteran patients in psychotherapy from 3.5 to 5. 45 Veterans per week. We increased the number of Veteran in psychotherapy by over 200 patients. And, the majority of our time was spent on patients getting 10-17 visits of psychotherapy. | Next time we will combine experiment 1 focusing graduating those who complete psychotherapy by 75% and experiment 2 reducing the engagement in weeks by 50%. |
| Experiment 3 | How much does it improve Veterans' care in our team when we combine experiment 1 focusing graduating those who complete psychotherapy by 75% and experiment 2 reducing the engagement in weeks by 50%? | If we combine both experiments to increase the graduate rate of patients who complete a full course of psychotherapy and we reduce the duration of engagement > 3 months, then we would be provide psychotherapy to more Veterans overall to 500, and we would increase the number of Veterans who start psychotherapy to >6 Veterans. | We were able to increase over two years the total number of Veterans who start psychotherapy in our team from 371 to 613 and increase all the other flow in between, including increasing the number of Veteran who complete psychotherapy from 4 over two in our base to 133 Veterans completing and graduating from psychotherapy in our team within their own first 12 weeks. | We are able to increase the number of Veterans who get psychotherapy by decisions that are under our control in our team. We will think through which of our patients may benefit from stepping down from psychotherapy into another service after they complete a full course, in order to provide psychotherapy to more Veterans in our community locally. |

## Changes to Model Parameters Relative to Base Case

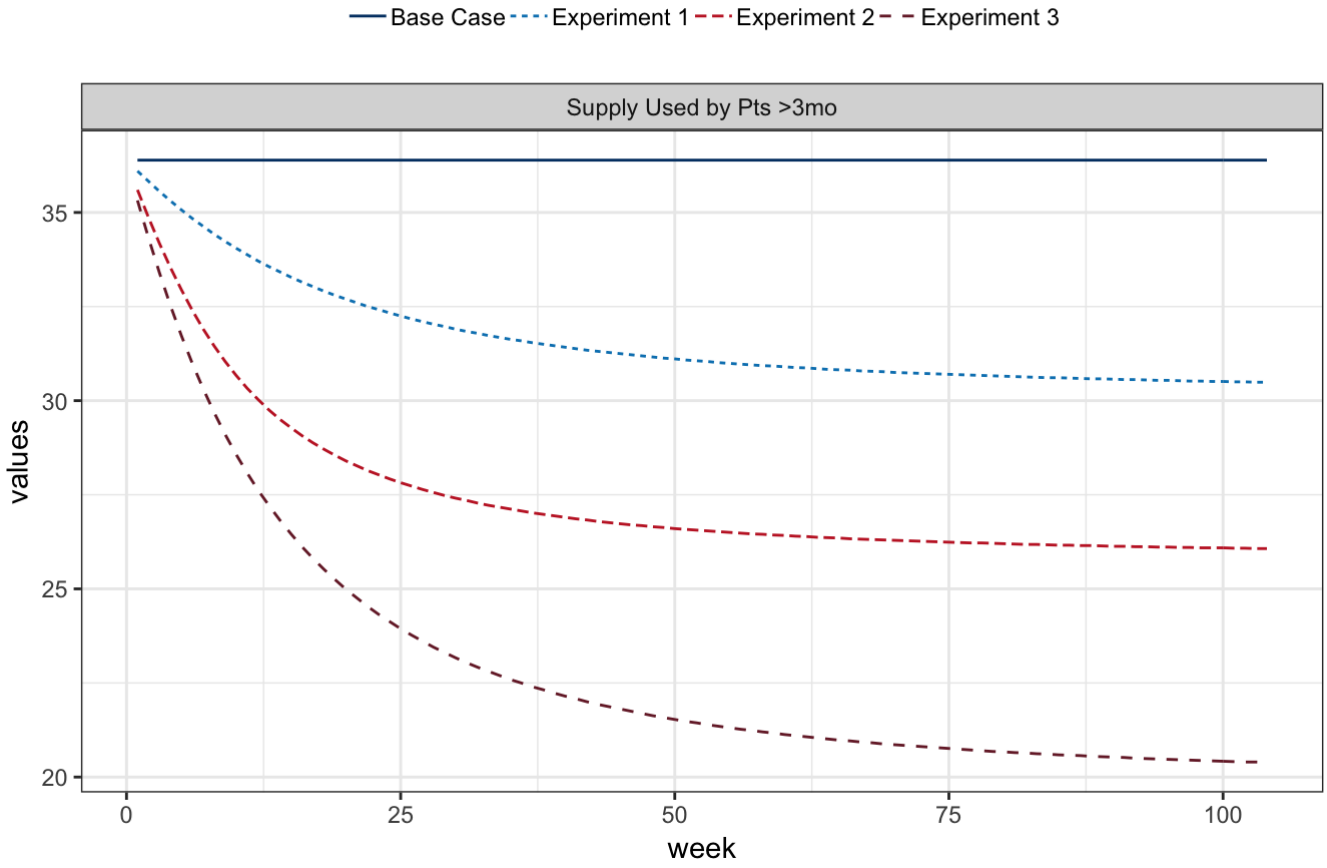
| Experiment | Variable | values |
|---|---|---|
| Experiment 1 | Completers who Graduate % | 0.75 |
| Experiment 2 | Change in Engagement Time of Patients Past 3 Months | -0.50 |
| Experiment 3 | Completers who Graduate % | 0.75 |
| Experiment 3 | Change in Engagement Time of Patients Past 3 Months | -0.50 |

## Team Graphs

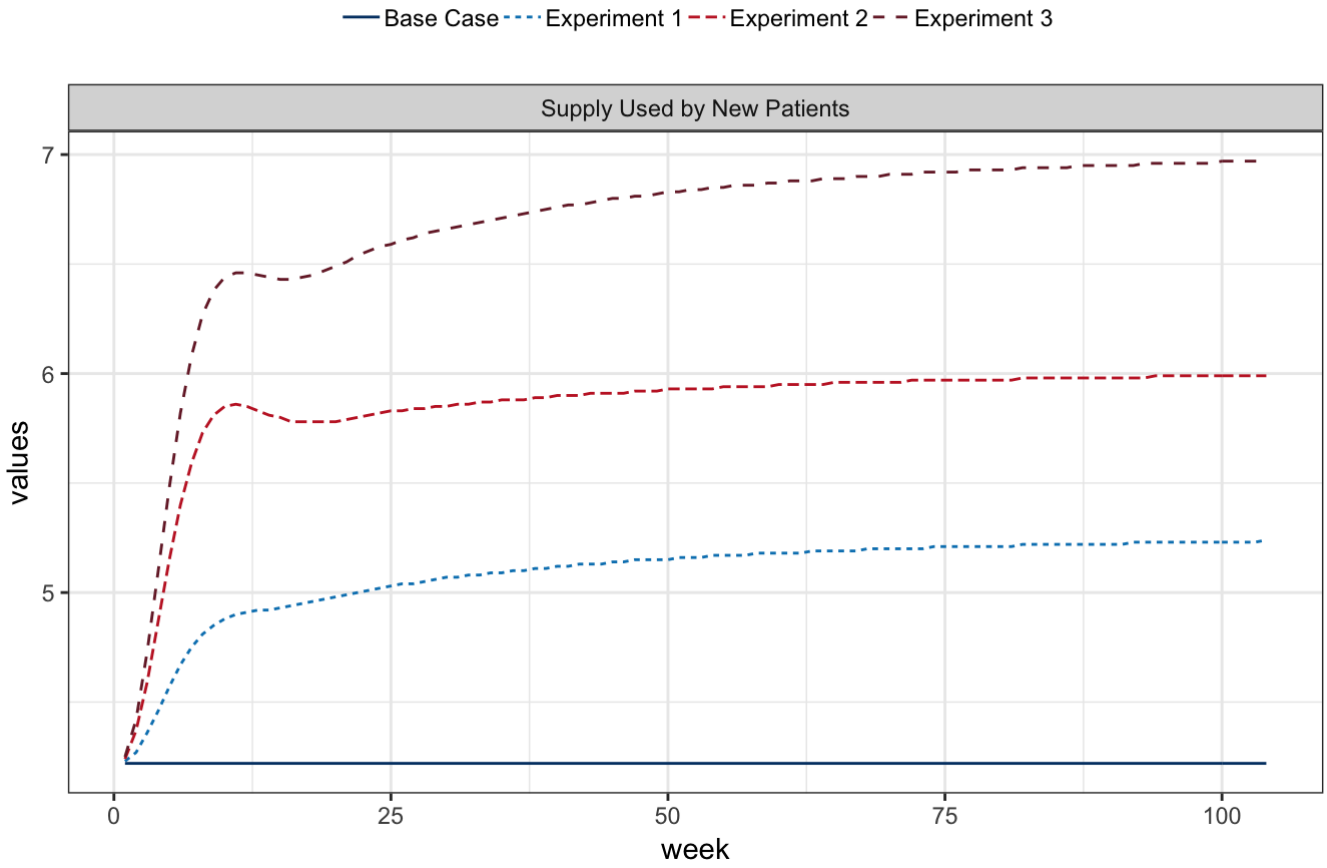
## Compare Services: Supply Used by Pts<3mo



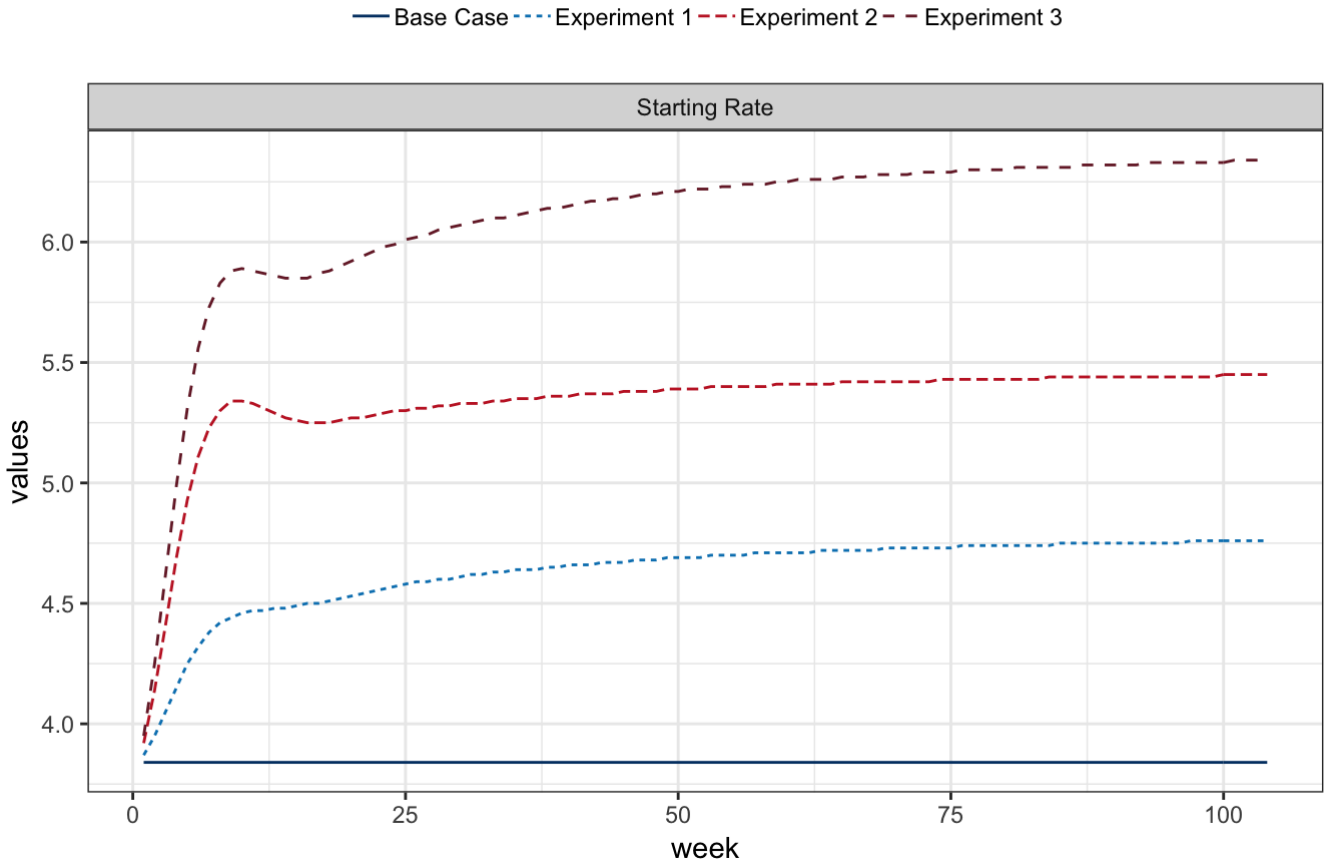

## Compare Services: Supply Used by Pts >3mo



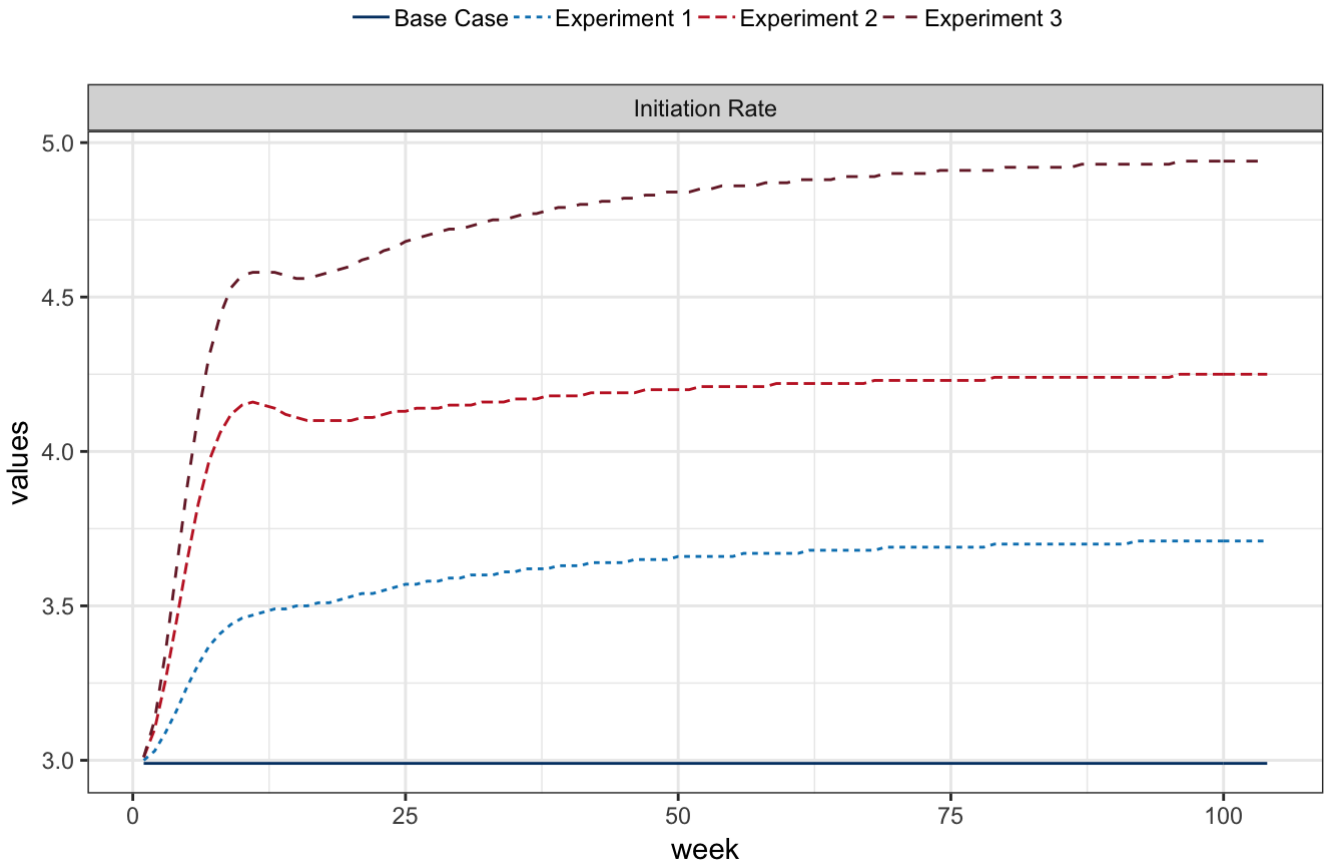
## Compare Services: Supply Used by News Patients




## Compare Services: Starting Rate



## Compare Services: Initiation Rate




## Compare Services: Graduation Rate