Aggregate Model

Team Experimental Design

Experiment	Our Question	Our Hypothesis	Our Findings	Our Decisions

Base Case	How do we keep our quality of care high when we lose staff in team? What would care in our team look like over the next two years if we made no new decisions?	If we make no new decision in our team, then we expect a straight flat line - the same number of patients in each service over the next two years?	There were several flat lines for our services showing that they wouldn't change over the next two years if we made no new decisions. However, we were surprised that adjunctive would have a spike of doubling the number of Veterans waiting for this service from 3 patients waiting to 24 patients waiting to start and leveled out at about 10 patients waiting. For group we see we would drop substantially over the next two years the number Veterans receiving group therapy in our team even if we made no new decisions.	As we review patient's treatments needs each week we now know that we are under-utilizing our supply of group and putting too much pressure (over-referring) to adjunctive services. Given our pending loss of staff, how can we still meet the needs of our local Veterans?

Experiment 1	How do we keep our quality of care high when we lose staff in team? How can we still meet our local Veterans' needs even with a loss of a psychologist and social worker?	If we lose a psychologist and a social worker, then we expect a 50% reduction in appointment supply for Psy, CC, and Intake, then we expect less Veterans in our team will receive each of these three services.	We would see the number of patients waiting for an intake would double and then level back out. We found that other services were also impacted including a reduction in patients in medication management. Work pressure goes up for CC, PSY, Intakes. RVI gets even longer pulling us farther away from our evidence-based psychotherapy goals.	We want to experiment with ways to have our MD work at top of license and get enough referrals in the time. We don't want a reduction in access. So we need run experiments where adjust the service proportions.

Experiment 2	How do we maintain our current level of access to care for new patients (intake) for medication management? What happens to the RVI for psychotherapy.	If we return to our base case value for intake evaluations to 12 hrs/wk and we adjust our PSY and CC back to base case, and put their hours evidence based psychotherapy EBPsy. Serve more patients with EBPsy who graduate move out of that service in our team. We will adjust our service proportions as well, reducing Psy and CC to 0, and taking the remainder for EBPsy (14%)	Intakes and medication management are back to where they were in the base case. We see that after an initial increase in patients waiting to start EBPsy, we increase patients in EBPsy 8 fold over the next two, then ending rate would increase to one new Veteran ending EBPsy per week.	We can begin to adjust to refering more Veterans to EBPsy instead of Psy and CC, and we would get a lot more Veterans to EBPsy.

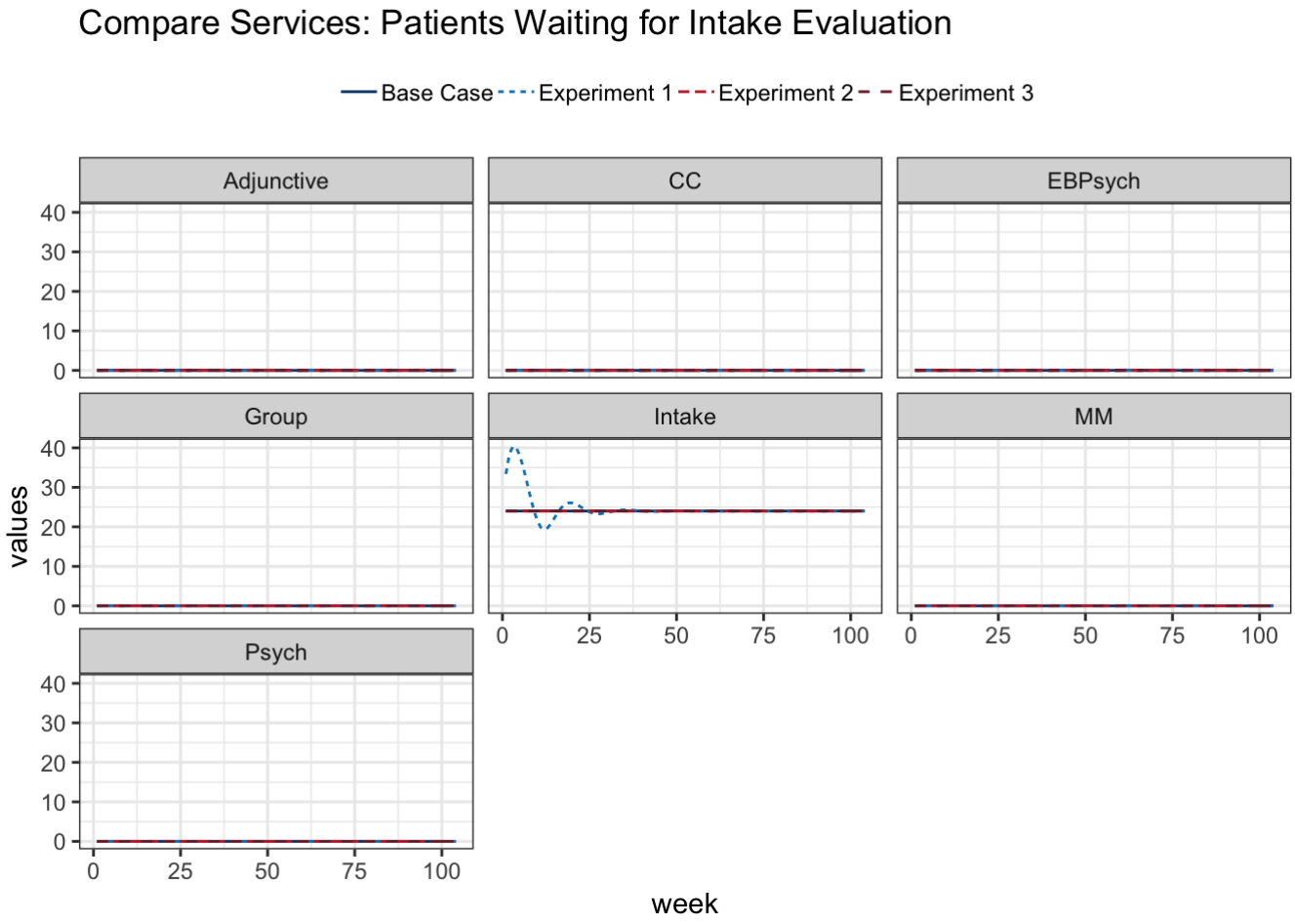
Experiment 3	How do we do even better? We can begin to adjust to referring more Veterans to EBPsy instead of Psy and CC, and we would get a lot more Veterans to EBPsy. But, what if we also adjusted our use of appointment supply and service proportions related to group?	If we reduce appointment supply for group from 10 hrs/wk to 5 hrs/wk, and we adjust service proportions to group 25% and leave EBPsy at 14%, then we'll see more patients starting EBPsy and completing EBPsy without increasing wait-times.	We increased the number of Veterans in Evidence-based Psychotherapy 14 fold over two years. We would have approximately 1 Veteran per week starting/completing an evidence-based psychotherapy course.	Even though we are about to lose a psychologist and social worker in our team, because we reallocated unused group time, and reduce Psy and CC to get more patients to EBPsy, without decreasing access/intakes, keeping medication management at the same level. Rebalanced our existing locals hours.

Changes to Model Parameters Relative to Base Case

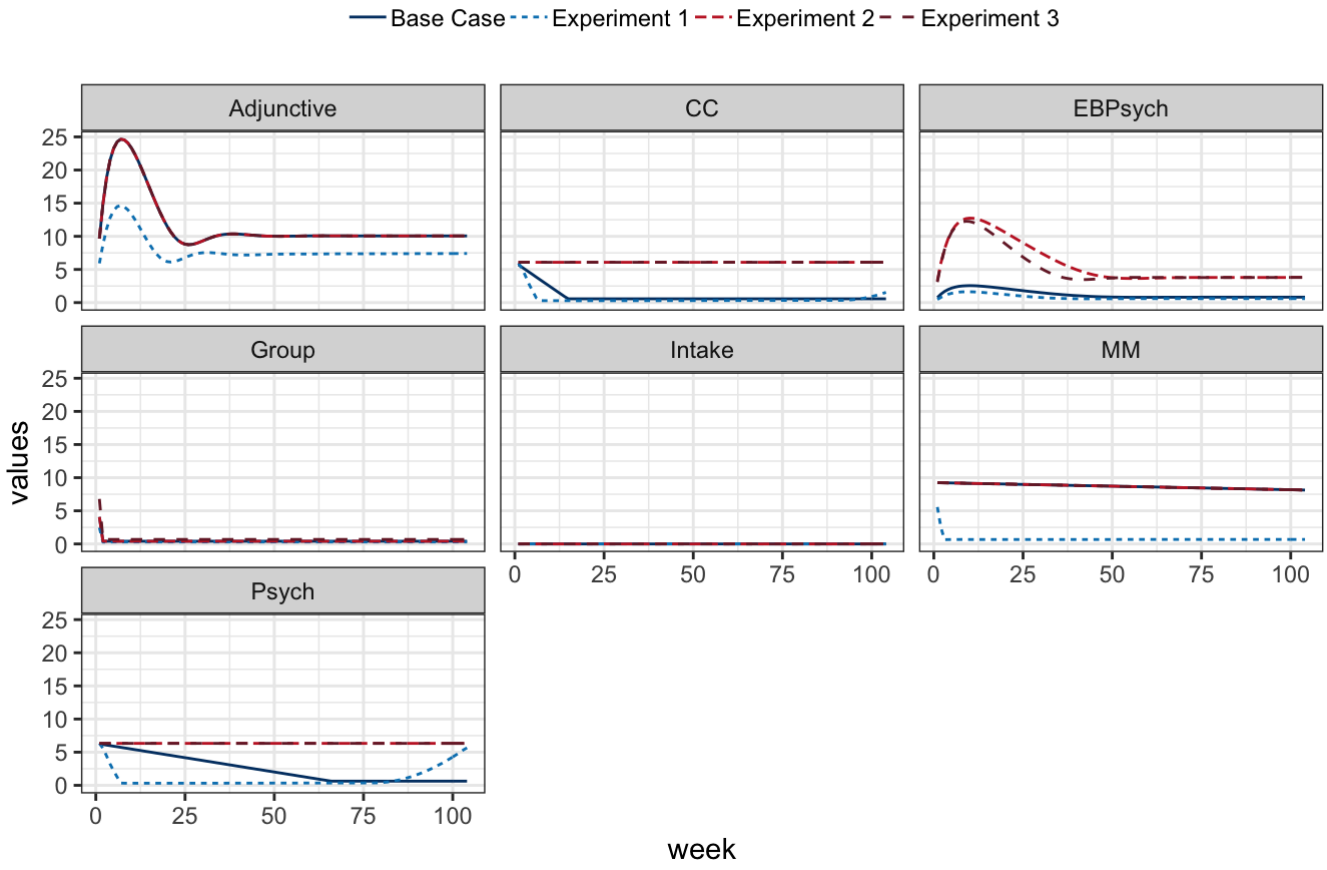
Experiment	Variable	values
Experiment 1	Psych - Appointment Supply	12.00
Experiment 1	CC - Appointment Supply	4.00
Experiment 2	Psych - Appointment Supply	0.00
Experiment 2	Psych - Service Proportions from Team Data	0.00
Experiment 2	EBPsych - Appointment Supply	12.00
Experiment 2	EBPsych - Service Proportions from Team Data	0.14
Experiment 2	CC - Appointment Supply	0.00
Experiment 2	CC - Service Proportions from Team Data	0.00
Experiment 3	Psych - Appointment Supply	0.00
Experiment 3	Psych - Service Proportions from Team Data	0.00
Experiment 3	EBPsych - Appointment Supply	17.00
Experiment 3	EBPsych - Service Proportions from Team Data	0.14

Experiment 3	CC - Appointment Supply	0.00
Experiment 3	CC - Service Proportions from Team Data	0.00
Experiment 3	Group - Service Proportions from Team Data	0.25

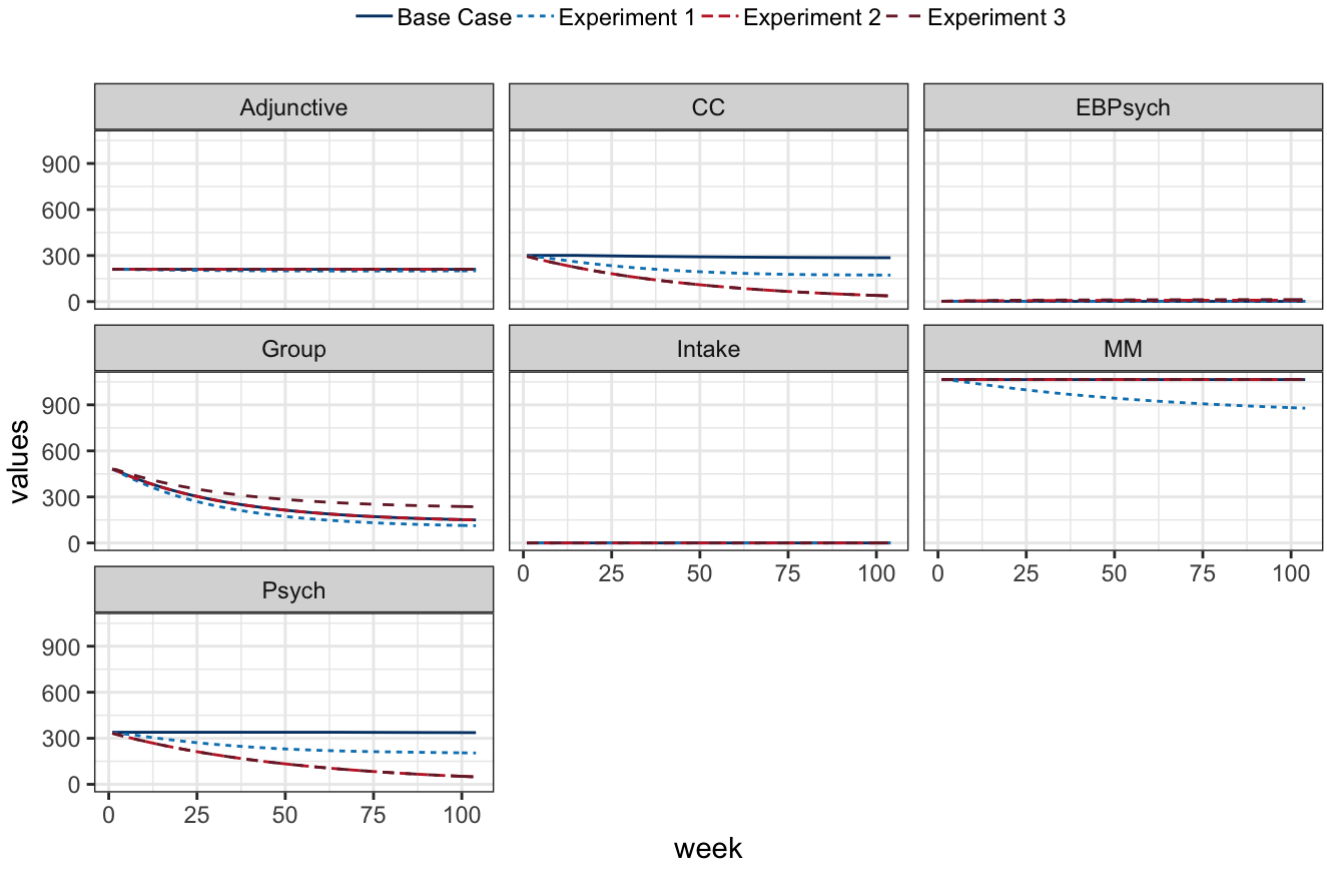
Team Graphs



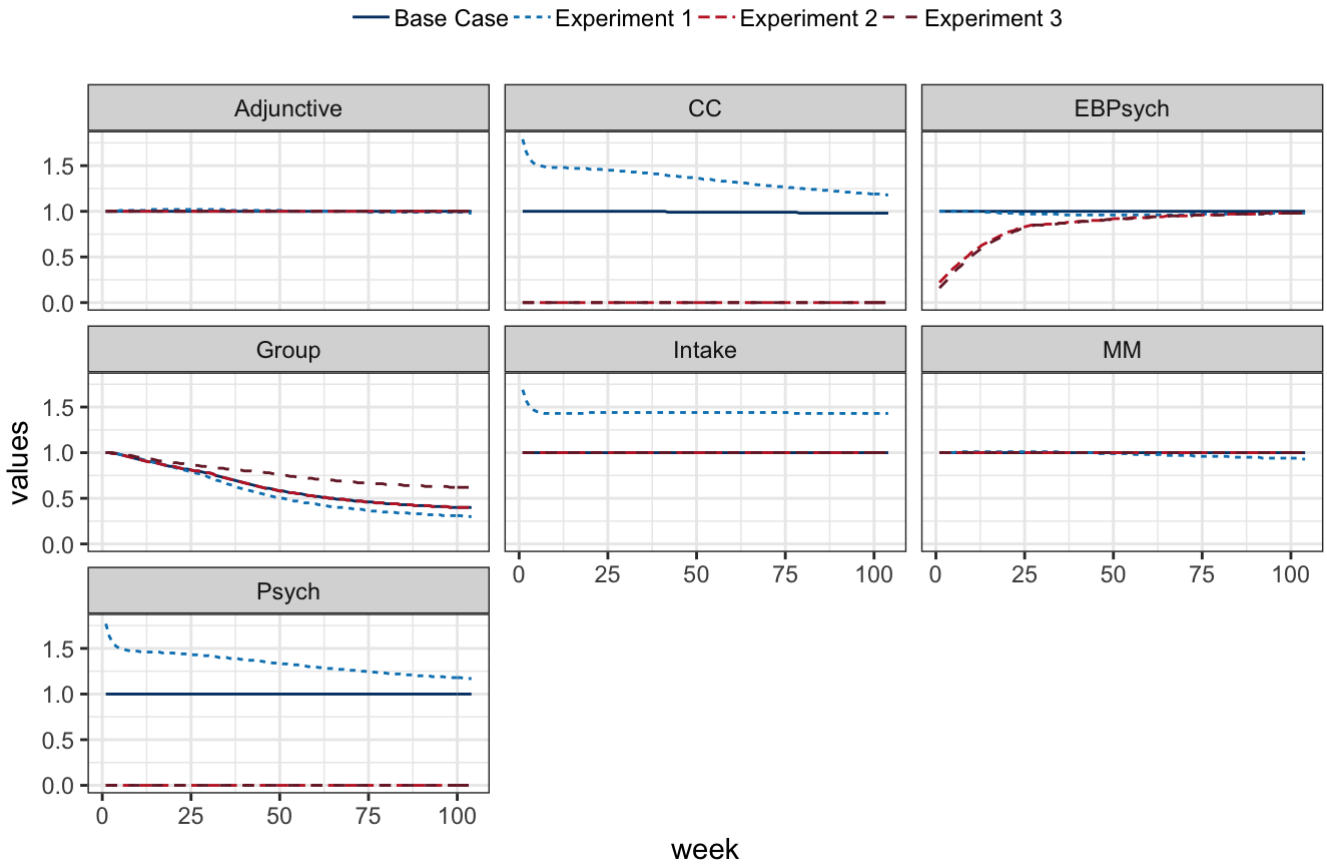
Compare Services: Patients Waiting to Start a Service



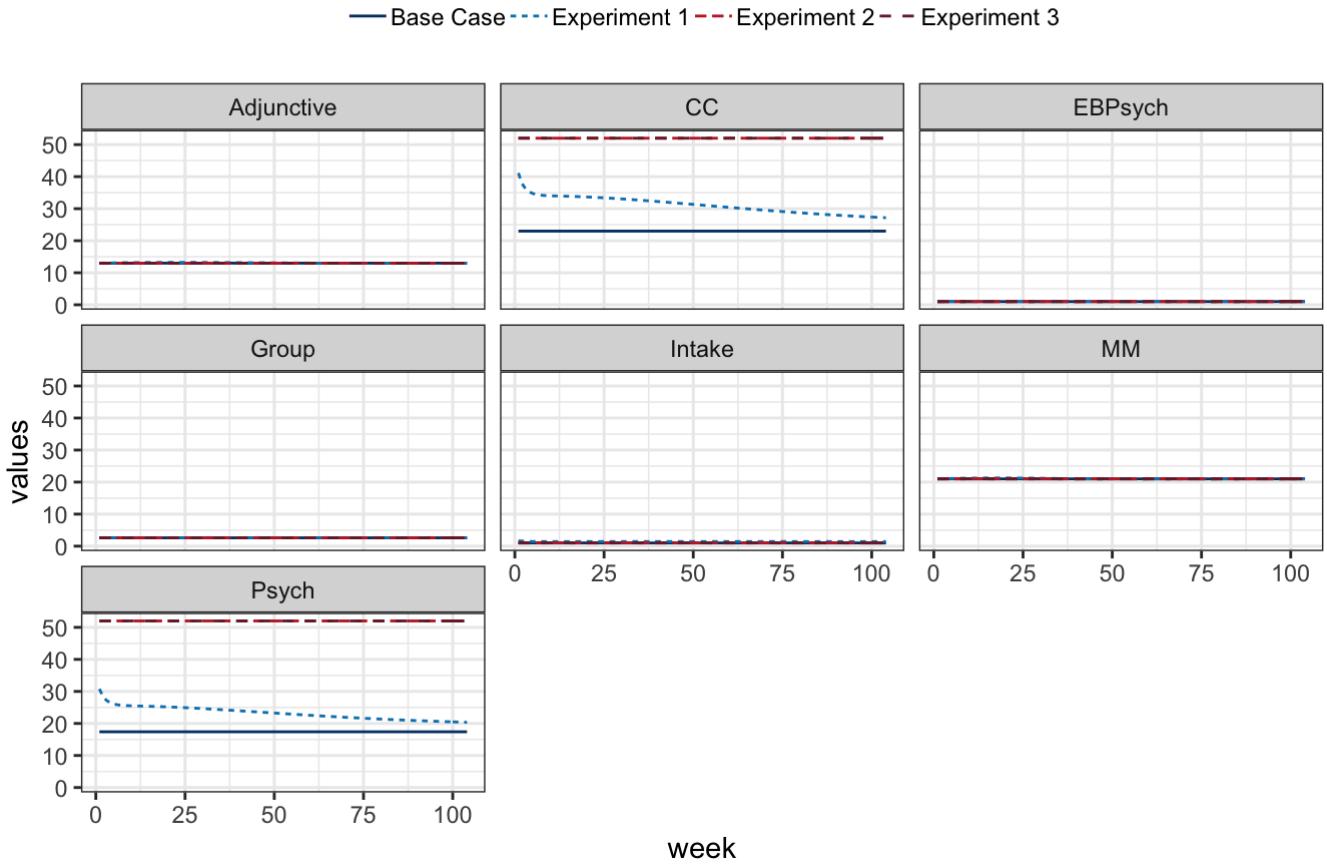
Compare Services: Patients in Service



Compare Services: Work Pressure



Compare Services: Actual Return Visit Interval



Compare Services: Actual Hours Available for Service