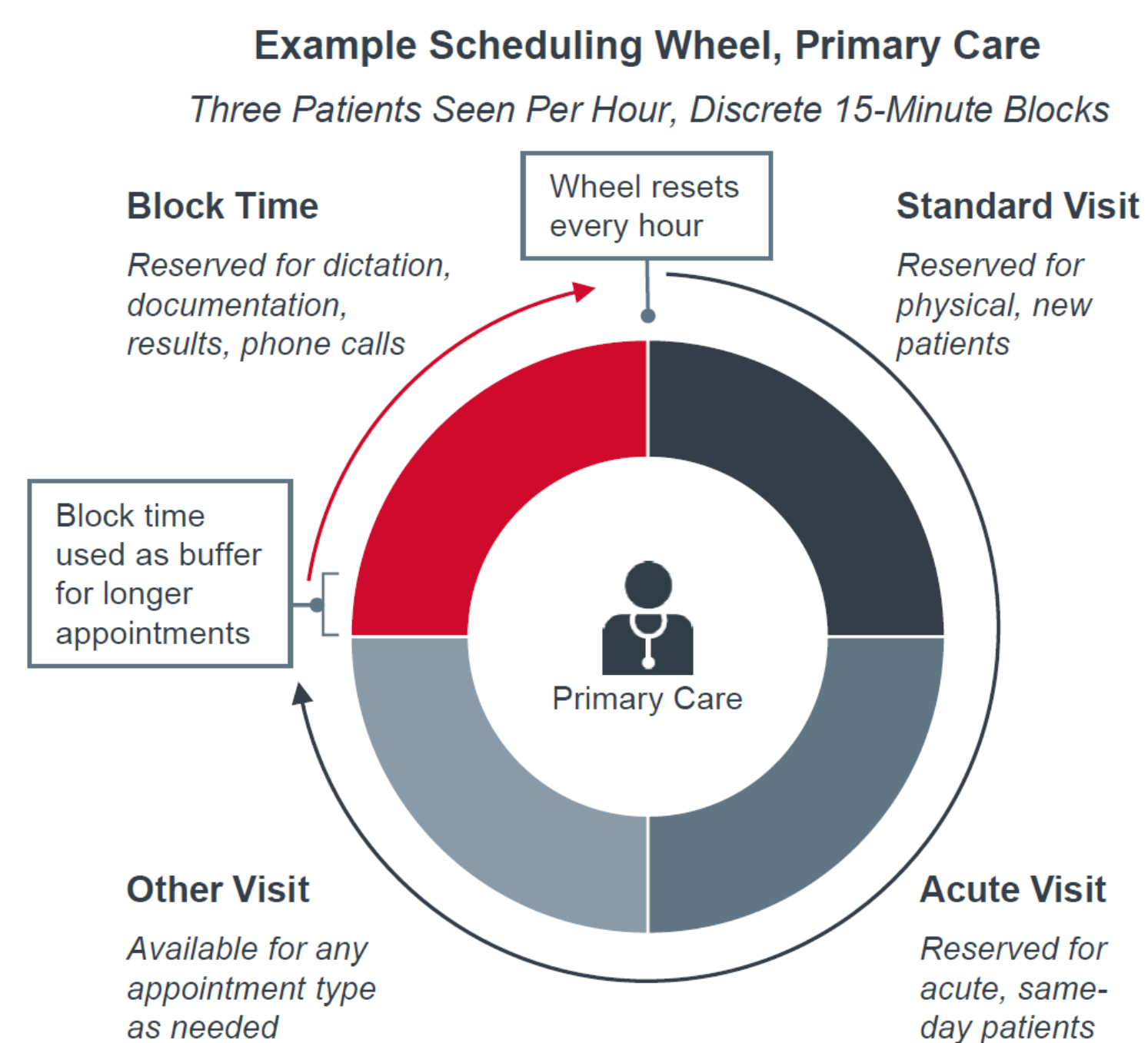


Researching the Scheduling Wheel for Family Medicine at PCC

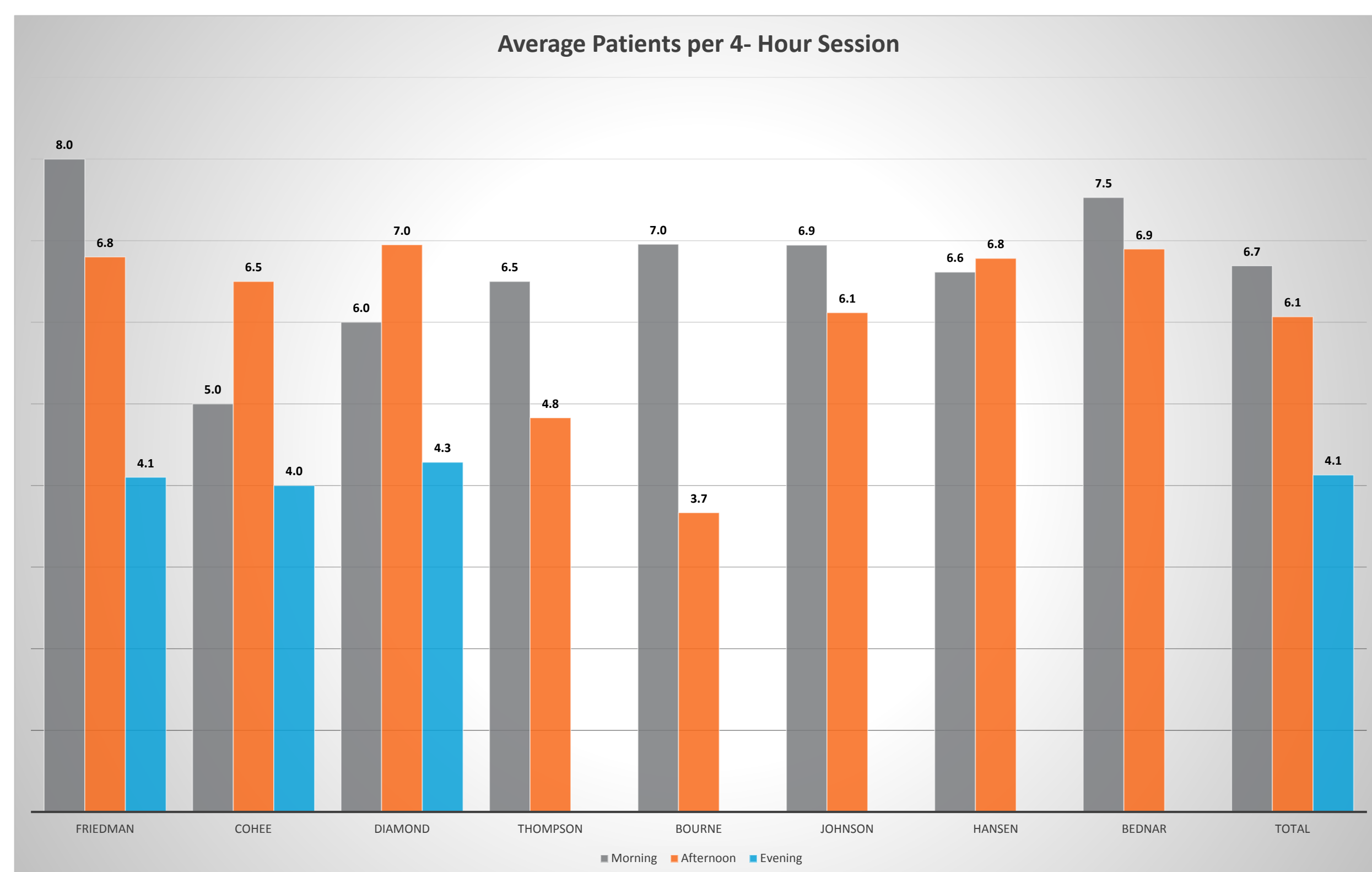
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SUMMARY: Care providers in the family medicine department at PCC report stress and burnout due to the schedule of patients they see. The Chair of the department requested an analysis of the potential to implement a scheduling wheel practice, whereby providers would retain 2-4 open appointments per 4-hour session to allow time to catch up from appointments that ran late. This project researched the implications of implementing a scheduling wheel model in the Family Medicine Clinic at PCC and concluded that a scheduling wheel model would reduce appointment availability below the optimal level.

Exploration

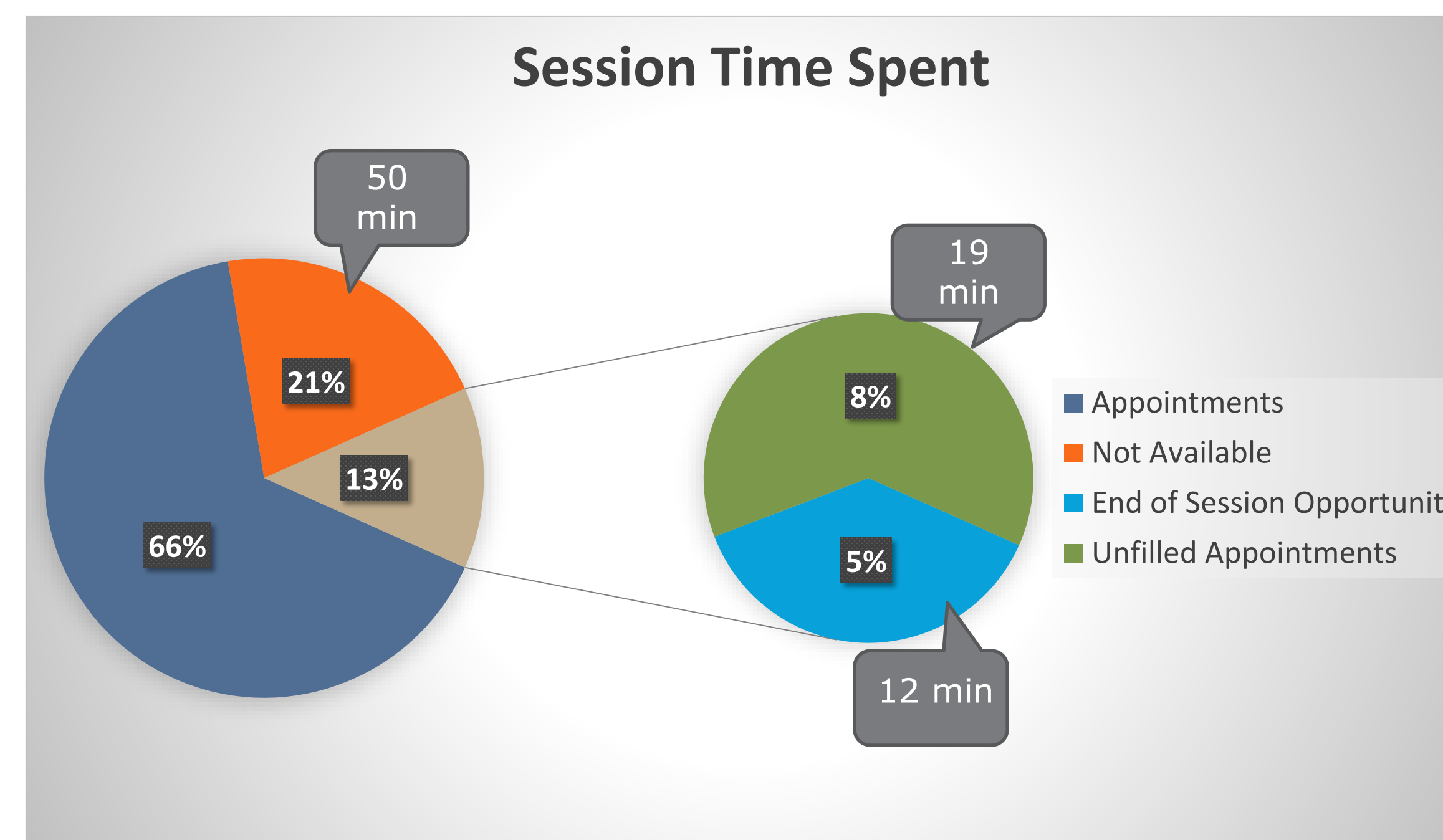


1 The scheduling wheel is a scheduling practice developed at Aurora Medical Center and presented by the Advisory Board Company. The graphic above shows the practice of scheduling three patients for 15 minutes each, followed by a "buffer" to accommodate longer appointments and provide administrative time for the care providers. The intent is to reduce stress on providers when appointments run long and to reduce the after-hours burden of documentation and communication around patient issues.



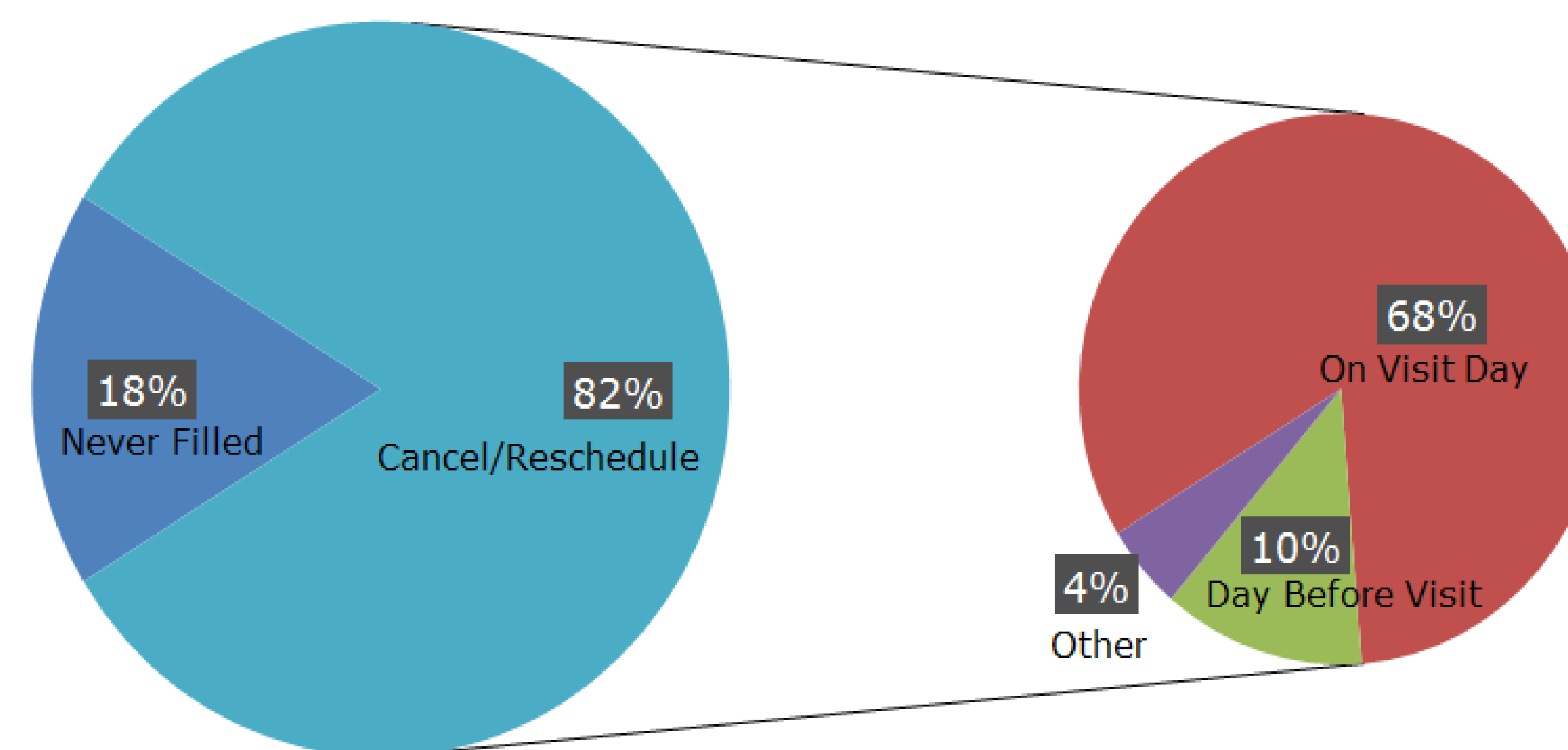
2 In the case of the Family Medicine clinic at UVA PCC, the expected number of patients per 4-hour session was 8-12, scheduled for 20 or 40 minutes each. An analysis of the current patient volume was much lower than expected. Clinicians were seeing an average of 6.4 patients per session. Replacing an appointment slot with a buffer each hour would reduce the average to 2.4 patients per 4-hour session. Further investigation was needed to determine the root cause of the low throughput.

Evaluation



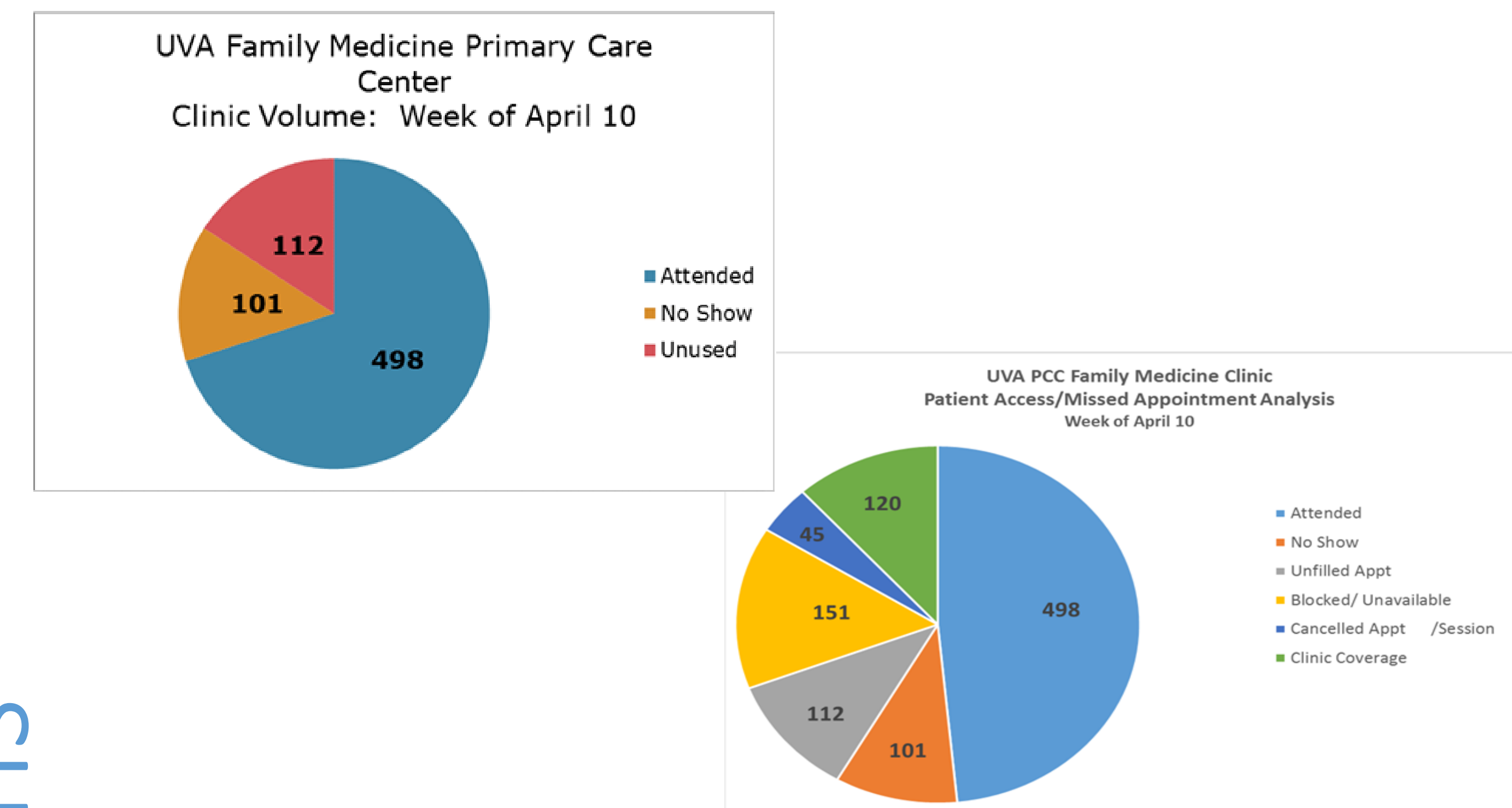
3 A deeper dive showed considerable lost opportunity in unfilled appointments. Providers are only schedule for 66% of their 4-hour session. The rest of the time is lost to blocked schedules for meetings and appointments that are unfilled at the time of the session. Some providers were working with schedulers to block their last appointment each session and on an ad-hoc basis when behind schedule. Also, an average of one appointment per day was unfilled at the start of the session. These were sometime due to late cancellations, but because of the scheduling process, they were not filled with urgent appointments.

January 2017 Unfilled Visits



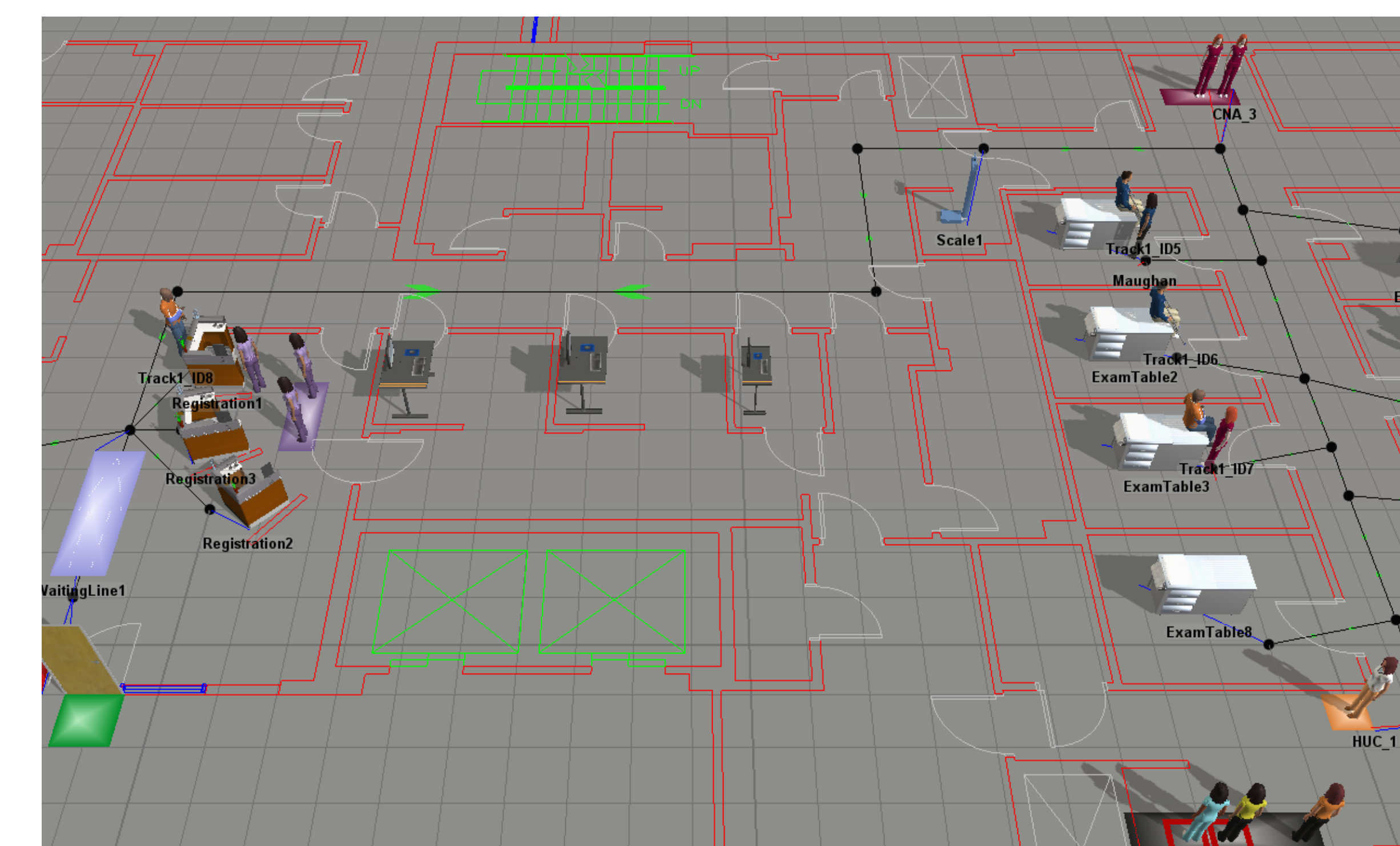
4 Analysis of the appointments that were unfilled at the beginning of the session showed that the majority were due to late cancellations. However, when patients called for same-day urgent appointments, schedulers used a designated set of appointment times, rather than trying to fill any available slot. To combat the effect of missed opportunity, the number of same-day, urgent appointments was reduced, and schedulers were instructed to fill any open appointment slots with last-minute requests.

Recommendations



5 Clinic leadership recognized the need to more closely monitor appointment availability and schedule blocking. They developed a graph to monitor attended, no-show and unused appointments. OSE recommended a more robust analysis to show more detail around the schedule and improve their ability to monitor appointment utilization.

FlexSim Simulation of Family Medicine Patient Flow



6 Because the scheduling wheel practice was not feasible given the low appointment utilization, OSE recommended other ways to address physician burnout. We developed a simulation to evaluate a team-care delivery model, which allows nurses to more fully support providers during clinic visits. OSE also recommends right-sizing provider panels, so patients see their primary provider whenever possible and providers are more familiar with the patients' needs.