By using linear programming to develop the schedule, we derived high impact results from our program. It generates full schedules rapidly (solve time < 1 minute). Based on mutual satisfaction from the project we fostered each other's work. Coverage Requirements: The night team requires: (1) zero or two interns every day, and (2) two, three or four seniors every day.

Clinic Requirements: The residents must also be scheduled for clinics, separate from the obligation to the Night team. Each resident requires 1 clinic day (1) when their clinic is available. It must be on a day before they begin a Night sequence (2).

Minimum Work Sequences: Every resident’s Nights sequence must be at least 2 consecutive nights.

Maximum Work Sequences: Every resident’s Nights sequence must not exceed 6 consecutive nights.

Emergency Medicine Conferences: Residents must attend at least one of their conferences during the two-week rotation. Conference is on a Tuesday and Wednesday.

Metrics

Preferred Durations of Work Sequences: Ideally, residents should work between 3 and 5 night shifts in a row.

Preferred Shift Equity: Ideally, residents should have the same amount of shifts per block.