**Challenge**

- High volatility in number of patients that arrive in a given shift

**Data**

- Identify most predictive patient factors
- Determine number of patients to book based on predictive model

**Results**

- Potential to reduce patient arrival variation by 32%
- Pooling reduces variance in patient arrivals from 4 to 2

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**Data Analysis:**

1. Categorize patients into “Types” based on Age and Appt Type
2. Calculate each Types’ probability of arrival
3. Find optimal # of each Type to book during each shift such that expected # of patients = target # of patients
4. Ensure # of each Type booked in a shift is about equal to their empirical frequency

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**Results w/o Pooling:**

For an 8-patient provider with 4 hours to schedule, book:

- 3 Type A patients
- 3 Type B patients
- 5 Type C patients

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**Results w/ Pooling:**

For an 8-patient provider with 4 hours to schedule, book:

- 6 Type A patients
- 6 Type B patients
- 13 Type C patients

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