Measure and Understand Supply and Demand

Improving Primary Care Access

Understanding the patterns of both demand and supply on a weekly, monthly, or seasonal basis allows for focused efforts to shape demand to match supply, and/or increase (or decrease) supply during periods of high (or low) demand. Improving access is all about getting supply and demand in equilibrium, meaning there is no backlog of appointments and no delay between when the demand is initiated and when the service is delivered.

The gap between supply and demand not only contributes to a delay in meeting patients’ needs, but it can also be expensive and generate waste in the system. The experience of many health care organizations demonstrates that demand is not really insatiable, but actually predictable. In fact, the demand for any kind of service - appointment, advice, or message to a provider - can be predicted accurately based on the population, the scope of the provider practice and, over time, the particular practice style of each provider.

Periods of high or low demand can be anticipated, based on an analysis of demand data collected on all requests coming into the system. An improved access system uses these predictions as the framework to match its supply to the needs of a population of patients for any specific service. Therefore, measure supply, measure demand, and then compare the two.

Changes for Improvement

Measure Supply for All Provider and Staff

Supply refers to the clinical resources (members of the care team) available to a clinic. When the total resources are managed well, a clinic creates openness in its schedule to care for patients. Patients experience this openness primarily as the availability of clinic appointments. Start by measuring provider supply for appointments, which is the total hours of clinician time devoted to appointments on a daily, weekly, monthly, and yearly basis. Then measure the supply for other non-appointment processes, such as refills, messages, and lab review.

Measure Demand for All Services

First measure demand for appointments and then for all other care processes. The only way to really know your true demand is to measure it.
Demand for appointments can be divided into external and internal demand. External demand comes in the form of new patients to primary care, and referrals (consults) and physician-to-physician phone calls to specialty care. Internal demand to both primary and specialty care comes from provider- and patient-driven return appointments and may also include phone calls, faxes, emails, walk-ins, and return visits generated from today’s appointment.

True demand is the total number of requests for appointments received on any given day from both internal and external sources.

**Compare Supply and Demand**

After measuring the demand and supply for the practice, compare the two. If demand is greater than supply, use ideas in the change concepts Decrease Demand for Appointments and Optimize the Care Team to bring supply and demand into better balance. If the supply is greater than or equal to the demand, then Create and Use a Backlog Reduction Plan.