

Workshop on Key Operational Characteristics and Functionalities of a State-of-the-Art Patient Scheduling System

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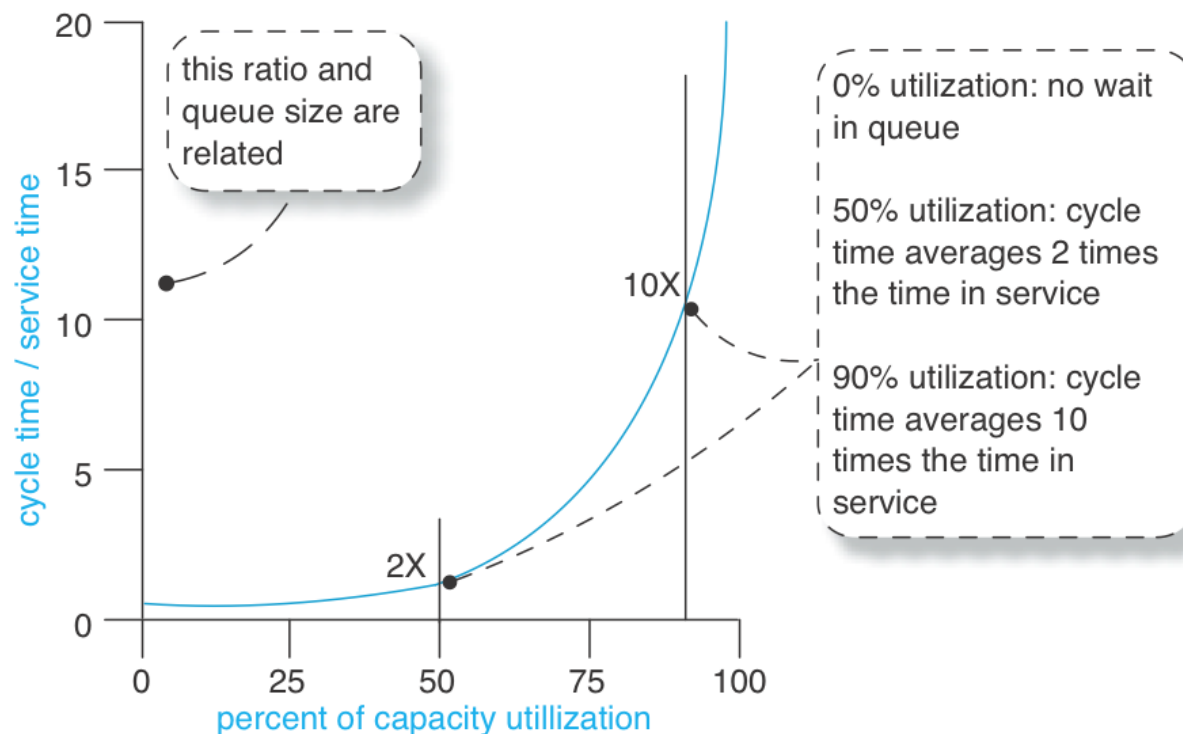
The irreducible problem

- Providing good, predictable, repeatable, safe, quality service to patients (customers)
- Provide joy in practice to clinicians
- Meet financial goals

Immutable laws of waiting around

$$L = \lambda W$$

Length of queue = arrival rate * average wait time



Our context for scheduling

- Our principal value:
 - The needs of the patient come first
- Reflected in:
 - Integrated group practice
 - Physicians are salaried, offering neither personal benefit nor penalty for decision-making
 - Unhurried exam
- We are primarily a destination medical center
- We are also a research and education center

Scheduling principles

- We optimize to patient itinerary completion
 - Goal 5-7 days
 - Achieve 90%
- Managing scheduling mechanics
- Managing capacity
 - “Staff on Floor” metric
 - Calendar times for staff and visit types
 - Planning, and load/capacity balancing between specialities
 - Flexible itineraries: adding a service as needed

Scheduling mechanics

- Early days, preferences and plans of specialties and individual physicians
- Scheduling within specialty, then scheduling across specialities
- “Decision trees”
- Built into proprietary Mayo Scheduling System
- Logic of MSS transferred into Epic Cadence, decision trees loaded in Epic Cadence

Next challenges

- Pressure on reimbursement
- Increasingly sophisticated and complex integration
- Consumer expectations – open access and self-scheduling

Interoperability – vis a vis scheduling

- Destination medical center
 - Ability to receive outside materials is important
 - Ability to return patient to medical home
 - Ability to coordinate care
 - Opportunities to provide virtual care
- HL7 FHIR is highly necessary not completely sufficient
 - It may be a revolutionary wedge of the type we have seen before