RESOURCES OPTIMIZATION OF
UW MEDICAL CENTER AMBULATORY CLINIC
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Research Objective & Scope:
Develop a tool or a standardized process to help effectively and efficiently manage three main resources in clinic operations: Staff, Providers and Space while maintaining a high applicability rate for all 137 clinics and improving patient flow.

Functional Diagram - Proposed Implementation

Capacity Calculator
- About: Pre-determined formulas set in place that only requires user input of past clinic data to calculate
  - FTE & Exam Room capacity
  - Monthly/yearly basis
  - Within 5-10% tolerance
- Business: Quantitatively measure clinic resource utilization
- Capabilities: Easy to navigate
- Verification: Tested user input data from other clinics
  - General Internal Medicine: predicted value is 3% higher than past value
  - Sports Medicine: predicted value is 11% higher than past value

Kanban System for Exam Room Status
- About: Visual signals defined to indicate exam room status
- Business: Reduce complexity & improve exam room turnover rate
- Capabilities: Provide a standard across all clinics
  - Epic Card System – accommodates for less technologically advanced clinics
  - Epic System – simplify current process

Exam Room Assignment
- About: Based on providers busiest one-period of appointments
  - Assigned in the morning on a daily basis
- Business: Improve level/load utilization of exam rooms
- Capabilities: Provide a new standard across all clinics
- Verification: Pediatric Care Clinic sample data results for exam room utilization over the 3 different days of observations

MA Scheduling
- About: Analytical decision making process approach for scheduling
- Business: Improve utilization of MA throughout the day
- Capabilities: General solution for all clinic cases
- Verification: Pediatric Care Clinic sample data results for exam room utilization over the 3 different days of observations

Patient Appointment Checklist
- About: Transitions paperwork to an online process
  - Must be completed prior to patient appointment
  - Enable easy access to medical info. for patients
  - Centralize information storage via cloud
  - Digital paper can be accessed through Kiosks or mobile app
  - Encourage more patients to sign-up for e-care
- Business: Streamlines paperwork process, increase provider-patient time & improve overall patient flow
- Capabilities: Increase utilization of e-care for clinics and patients

Main Recommendations: Development & Test

Recommendations

Recommendations

Implementation

Trade Studies
- Not enough time allotted for data collection and on-site observations due to time constraint and communication issues
- Disparities in our data and observations due to site variability and communication issues

Lessons Learned

List of General Assumptions
- Provider and MA shifts assigned are consistent
- Clinic statistics are accurate and reflect standard operations of UWMC
- MA to provider ratio is consistent across all clinics
- No overtime for Staff and Providers
- Staff and Providers are expected to utilize all of their FTEs

Lessons Learned

Acknowledgements

Acknowledgements

Patricia Buchanan
Jennifer Herman
Jacqueline Sam
Alyssa Williamson
Carol Vangelos
Blake Walden
Jennifer Mars

Mark Harrast
Julie Blodsoe
Lori Nelson
Jake Berman