



THE BUSINESS PARTNER
FOR YOUR IDEAS



PRO-OR: OR SCHEDULING TOOL TO IMPROVE OPERATIONS AND REDUCE COST

HEALTHCARE IT

Operating room (OR) scheduling tool that optimizes resource utilization, increases efficiency, and decreases hospital costs.

TECHNOLOGY TYPE

Software
Operating Room (OR)
Scheduling
Machine Learning
Artificial Intelligence
Surgery Centers
Hospitals

STAGE OF DEVELOPMENT

- Prototype used in clinics with retrospective data shows utilization rate increasing from 53% to 88%.

- Next version will focus on AI capabilities for prospective scheduling.

LEARN MORE

Reference Number: U-6363

Aaron Duffy

Technology Manager
aaron.duffy@tvc.utah.edu
801-585-1377

TECHNOLOGY SUMMARY

Hospital operating room (OR) planning is a complex task where numerous resources must be synchronized in order to achieve optimal resource utilization and cost efficiency. Many outpatient ORs use block scheduling to assign time to surgeons requiring hospitals to staff an entire surgical team of nurses, anesthesiologists, and technicians for an entire day when only a couple procedures are scheduled. This creates staffing conflicts and reduces efficiency, ultimately increasing hospital costs.

Pro-OR is a smart web-based software with easy user interface, designed to improve utilization of OR time integrating various details and factors such as time needed for a procedure and hospital goals. Embedded algorithms strip patient data from schedules to allow hospitals and surgical centers to share best practices for optimizing OR time. The software is being developed for prospective OR scheduling and staffing to offer insight into cost-containment schemes.

FEATURES AND BENEFITS

- Offers insight into cost-containment schemes.
- Mitigates day-to-day variability.
- Increases number of surgeries that can be performed per day by reducing block scheduling with unused OR time.
- Offers real-time optimization of workflow.

RECENT PUBLICATIONS

Larsen, S., Falk, J., Sakata, D. (2017). Using a real-time, financially-driven software prototype to prospectively improve operating room scheduling, utilization and efficiency. *Western Anesthesia Residents' Conference 2017*.

INVENTOR PROFILE

Derek Sakata, M.D., [Professor - Anesthesiology](#)

Joe Falk, M.H.A., Director - Perioperative Business Services

DATE UPDATED: 7/15/2019