The Changing Nature of Equipment Planning

**Gloria Cascarino**
Senior Associate, Director of Medical Equipment Planning, Francis Cauffman

**Larry Creech**
Senior VP of Perioperative and Emergency Services, RWJBarnabas Health
AMBULATORY CARE EQUIPMENT PLANNING CHALLENGES AND SOLUTIONS

GOOD NEWS AND AH-HA! MOMENTS

Gloria Cascarino, Senior Associate
Director of Medical Equipment Planning
Francis Cauffman
OVERVIEW

• Ambulatory Surgery Centers

• Diagnostic and Imaging Centers

• One-stop Clinics and Physicians’ Practices

• Urgent Care and Freestanding EDs
Ambulatory Surgery Centers

- Variety of cases
  - Ortho
  - Gyn/Breast
  - MIS
  - Urology
  - Plastics, Eyes, Dental
  - Endoscopy and Pain Procedures
- Throughput, throughput, throughput
- Space limitations
  - Focus on revenue-producing rooms
  - Limited storage space
TYPES AND CHALLENGES

Diagnostic and Imaging Centers
- Large-scale equipment/space and utilities limitations
  - MRI
  - CT Scanners
  - Nuclear Imaging
  - Non-invasive Cardiology and Diagnostics – Stress, Echo, Ultrasound, Mammography
  - X-Ray
- Expensive equipment - $$$$$
- Throughput, throughput, throughput
- Short design and construction phases
  - Quick, accurate decisions required
TYPES AND CHALLENGES

Urgent Care Centers and Freestanding EDs
• Variety of populations
• Variety of cases
• Variety of rooms – Exam, Treatment, Diagnostics, Lab

One-Stop Clinics and Physicians’ Practices
• Variety and synergy
• Exam and Procedure (and sometimes Diagnostics)
• Space limitations
Increase the volume, not the space!
Density: “Quantity per space or unit of area, closely compacted together.”

High-Density Shelving
• Freestanding – no added construction costs
• Boosts storage space by up to 50%
• Overhead track
• Floor track
Increase the volume, not the space!
Density: “Quantity per space or unit of area, closely compacted together.”
STORAGE SOLUTIONS
LOSE THE AIR – INSERT CREATIVITY

*Increase the volume, not the space!*

**Panel Systems**
- Wall-hung
- Freestanding
- Bins and baskets of all sizes
- Wheels!

**Par Walls**
- Customized to the contents
- Integrated power strips
STORAGE SOLUTIONS
LOSE THE AIR – INSERT CREATIVITY

INCREASE THE VOLUME...

NOT THE SPACE!
STORAGE SOLUTIONS
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INCREASE
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STORAGE SOLUTIONS
LOSE THE WALL – INSERT CREATIVITY

*Increase the volume, not the space!*

**Pass-thru Cabinets**
- From ORs to Supply Room or Core
- Solid, mirrored or glass doors
- With or without interlock

**Pass-thru Blanket and Solutions Warmers**
STORAGE SOLUTIONS
LOSE THE WALL – INSERT CREATIVITY
STORAGE SOLUTIONS
LOSE THE WALL – INSERT CREATIVITY

INCREASE THE VOLUME...

NOT THE SPACE!

ACE SUMMIT AND REVERSE EXPO
Flexible Surgical Tables

- Adapt to many specialties
  - Accessories for Ortho, Urology, GYN, GI, LAP, Lumbar
- Accommodate up to 1,200 Lbs
  - High-weight/low-height
- Imaging-capable
UNIVERSAL O.R. SOLUTIONS
Nuclear Medicine Camera

- Smaller footprint: can be installed in an 8’ by 12’ room
- Improved patient line-of-sight
- Reduced scan time: 3 to 5 minutes
  - Throughput, throughput, throughput!
CT Scanner with Reduced (or Eliminated?) Control Room

- Computers installed inside the gantry rather than in the Control Room
- Scanner controlled by Tablet
  - Patient positioning
  - Scanning
- Tech can stay inside room, behind a lead shield
DIAGNOSTIC IMAGING SOLUTIONS

LATEST TECHNOLOGY
DIAGNOSTIC IMAGING SOLUTIONS
LATEST TECHNOLOGY

VERSION 1

ACE SUMMIT
AND REVERSE EXPO
DIAGNOSTIC IMAGING SOLUTIONS
LATEST TECHNOLOGY

VERSION 2

ACE SUMMIT
AND REVERSE EXPO
IN CLOSING

• Be creative!

• Support the design with flexible equipment and efficient storage solutions.

• Challenge the “typical thinking.”

Gloria Cascarino | 215-327-4240
gcascarino@franciscauffman.com
RENOVATIONS, REDESIGN & RE-ENGINEERING
STERILE PROCESSING DEPARTMENTS AND
ENDOSCOPY SERVICES

Donald Larry Creech, Senior VP,
Perioperative and Emergency Services
RWJBarnabas Health
PLANNING FOR
STERILE PROCESSING REDESIGN

• All Departments To Be Included In Planning

• Setup Timeline Grid on all Processes

• Project Manager

• Modify Surgery, Clinic and Obstetrics schedule
PLANNING FOR
STERILE PROCESSING REDESIGN Cont’d/

• Weekly Review Meetings

• Review Staffing (Agency and OT)

• Increase Loaner Trays

• Add Drying Cabinets
PLANNING FOR
STERILE PROCESSING REDESIGN Cont’d/

• Ultrasonic Processing Sinks

• Decrease Instrument Processing

• Return on Investment
IMPROVEMENT OUTCOMES

• Increased Square Footage

• Increased All Throughput Processes

• New Loaner Drop-Off Space

• Doubled Processing Space
IMPROVEMENT OUTCOMES Cont’d/

• Quadrupled Ultrasonic Process

• Increased Productivity

• Reduced Redundant Steps

• Average of 20% Increase in Capacity
LESSONS LEARNED

• Construction Dollars Affecting Surrounding Areas

• Power Outlets/Voltage

• Infection Control

• Transportation/Rain Days
LESSONS LEARNED Cont’d/

• Tilt of Cart Washer

• Drying Cabinets

• Ventilation

• Drain Size

• Steam Lines
Use Cycle Management System For Regulatory Compliance
AUTOMATION OF FLEXIBLE ENDOSCOPE LIFECYCLE MANAGEMENT

• Track Endoscopes
  – Location
  – Status
  – Utilization

• Use Cases
  – System Supports Tracking and Recording of Devices
  – Increased Infection Prevention
  – Avoids Theft or Misplacement
  – Repair or Replacement History
Improved Documentation & Alerts

- Cleaning Cycle Verification
- Reprocessing Validation and Throughput Time-Stamping
- Adherence to SOP’s
- Identify Instruments with Non-Use (i.e. past 7 days)
- Missing Device Notification (i.e. post 24 hours)
- Scope Histories
- Scope Tracking
- Repair Tracking
- Utilization Summaries
SURGICAL BACK TABLE
OR TIME OF SETUP AND TURNOVER

• EFFICIENCY

• STANDARDIZATION

• EASE OF ACCESSIBILITY

• EDUCATION OF NEW STAFF
DECREASE TIME OF SETUP

• DECREASE OF OPENING TRAYS AND NUMBER OF TRAYS

• STANDARD SETUP

• DECREASE ROOM TURNOVER

• DECREASE SPACE NEEDED IN OR
DECREASE TIME OF SETUP Cont’d/

• DECREASE STERILIZATION TIME AND SUPPLIES

• DECREASE OVERTIME
Q&A