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SURGICAL DEPARTMENT ? INFECTION CONTROL QUARTERLY REPORT

Author: Dr. Miranda Bailey, Chief of Surgery

Period: Q1 2026 (January 1 - March 31)

EXECUTIVE SUMMARY:

The Surgical Wing has achieved a historic milestone with post-surgical infection rates decreasing to an all-time low of 1.2% this quarter. This represents a 60% reduction from Q4 2025 (3.0%) and places us well below the national benchmark of 2.8%.

CONTRIBUTING FACTORS:

1. UV-C STERILIZATION PROTOCOL

The new UV-C robotic sterilization system, deployed in all 12 operating rooms since January 15, 2026, has been the primary driver of our improvement. Each OR undergoes a 15-minute UV-C decontamination cycle between procedures, in addition to standard manual cleaning. Bacterial colony counts on surface swabs have decreased by 94% post-implementation.

2. SURGICAL CHECKLIST COMPLIANCE

WHO Surgical Safety Checklist compliance has reached 99.7% (up from 91% in Q4 2025) following the introduction of mandatory electronic documentation. Non-compliance triggers an automatic alert to the attending surgeon and the Quality Department.

3. ANTIBIOTIC STEWARDSHIP

The revised antibiotic prophylaxis protocol, which standardizes pre-operative antibiotic administration timing to 30-60 minutes before incision, has achieved 96% compliance. Studies from our pharmacy department confirm a correlation between protocol compliance and reduced surgical site infections (SSIs).

4. HAND HYGIENE MONITORING

Electronic hand hygiene monitoring badges, worn by all surgical staff, have increased hand hygiene compliance from 78% to 97%. The system provides real-time alerts when staff approach a patient without performing hand hygiene.

DETAILED STATISTICS:

- Total surgical procedures Q1: 2,847
- Post-surgical infections identified: 34 (1.2%)
- Breakdown by procedure type:
 - * Orthopedic: 0.8% (8 infections / 1,023 procedures)
 - * General Surgery: 1.4% (12 infections / 857 procedures)
 - * Cardiac: 1.1% (6 infections / 545 procedures)
 - * Neurosurgery: 1.9% (8 infections / 422 procedures)

Prepared by: Dr. Miranda Bailey, MD, FACS

Chief of Surgery