CareAdvantage from the Johnson & Johnson Medical Devices Companies (JJMDC) helps 25-hospital IDN address risks for surgical site infections (SSIs) and bloodstream infections (BSIs)

Even with infection rates at or below national benchmarks, this IDN held infection prevention as a top priority, given mandatory reporting of healthcare-associated infections (HAIs), potential reimbursement penalties imposed by the Centers for Medicare and Medicaid Services (CMS), and most important, the impact HAIs can have on the lives of patients and their families.

Recognizing that the JJMDC expertise in infection risk management complemented its current infection prevention efforts, this health system utilized the CareAdvantage approach to help implement standardized, evidence-based infection control practices, engage and educate clinicians, and prepare for accreditation audits through the appropriate utilization of JJMDC devices.

### Needs Identification

Before developing a plan to mitigate potential risks for infection, the IDN’s infection control team first needed to understand current clinical practices and identify potential risks for SSIs and BSIs that existed in their health system.

For this 25-hospital IDN, the CareAdvantage approach brought unique expertise and a systematic process to identify potential risks for infections through the appropriate utilization of JJMDC devices.

At each facility, clinical nurse educators from JJMDC partnered with the quality team to discuss the facility’s infection control goals, including those related to policies, procedures, and education of staff.

Additionally, the JJMDC nurses conducted on-site, HIPAA-compliant assessments in each facility, identifying potential risks for infection related to the closure of surgical wounds and the maintenance of vascular access devices and dressings.

In total, the JJMDC team observed 330 surgical incisions and 207 vascular access devices. The team also reviewed each facility’s inventory of JJMDC infection control products to help optimize inventory levels and locations.

Detailed reports summarized the observations from JJMDC’s in-facility assessments. Representatives from each facility’s quality, clinical, and supply chain teams reviewed the reports which provided insights into current practices that otherwise would be difficult to ascertain from medical records or standard hospital reports. Some key findings included:

- Low awareness of evidence-based infection control devices in facility
- Inconsistent use of antimicrobial devices to protect patients
- Non-optimal inventory locations

As part of their efforts to mitigate potential risks for infection, the IDN’s infection control team wanted to standardize policies and practices across their numerous facilities.

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CLABSI = Central line-associated bloodstream infection

*For FY2015, Medicare reimbursement has been reduced at 88% of IDN’s facilities due to VBP, HAC, and RRP.
JJMDC in-depth assessments and facility-specific recommendations provided key resources to complement and extend the IDN's existing infection prevention initiatives.

1. Spreading Knowledge

JJMDC worked with the facility clinical educators to plan and implement a series of infection prevention lectures where a nationally recognized infection prevention expert engaged participants in a discussion on the latest evidence-based infection prevention strategies. These events attracted a wide audience from across the IDN, including key clinical, C-suite, quality, and supply chain representatives, and provided a platform to rally the IDN's team around a shared commitment to infection prevention.

2. Strengthening Clinical Practices

In each facility, highly trained JJMDC clinical representatives conducted hands-on education sessions with physicians, nurses, and support staff to ensure appropriate JJMDC device selection and usage. These sessions were designed to help healthcare professionals continue building their knowledge of how to protect patients from risks for infection and ensure compliance with hospital policies.

3. Standardizing Processes

Utilizing JJMDC supply chain expertise to analyze current ordering, inventory management, and product stocking processes, the IDN standardized facility practices related to central line dressings and wound closure. These changes removed non-standard products from the IDN's supply chain and increased availability of evidence-based devices at the point of patient care, enhancing compliance with the IDN's infection prevention strategies.

Delivering Results

After 6-months, the IDN achieved its goals to standardize practices across facilities, implement evidence-based infection control practices, and identify potential risks for infection. The IDN collected data on SSI rates for a period of 10 months.

- **37.5%** Reduction in SSI rates for hip, knee, colon, and hysterectomy surgeries at the participating facilities (over 10 months)
- **12** Facilities standardized their infection control practices
- **200+** Clinicians educated on evidence-based infection prevention protocols

In the ongoing battle against infection, the strongest prevention programs continually check their defenses.

The CareAdvantage approach is designed to provide health systems with on-going feedback on their readiness to defend against risks for infection, such as those that arise from the inevitable turnover of staff or shifting demographics of patients.

### Infection Risk Management Key Success Factors

1. Align on infection prevention goals
2. Identify metrics to track progress
3. Don’t assume. Assess and test
4. Use data to make decisions
5. Engage a wide range of stakeholders
6. Repeat assessments at regular intervals

> “Preventing HAIs requires a structured, data-driven process to continually evaluate risks, engage senior leaders, and provide education. It is rare when you can partner with a supplier who understands and can support all of these needs.”

- Corporate Director, Infection Prevention and Quality Management
To learn more please visit www.CareAdvantageJJMDC.com or email CareAdvantageJJMDC@its.jnj.com.

References
4. Evidence-Based Surgical Bundle Training Attendance Record. December 2015.