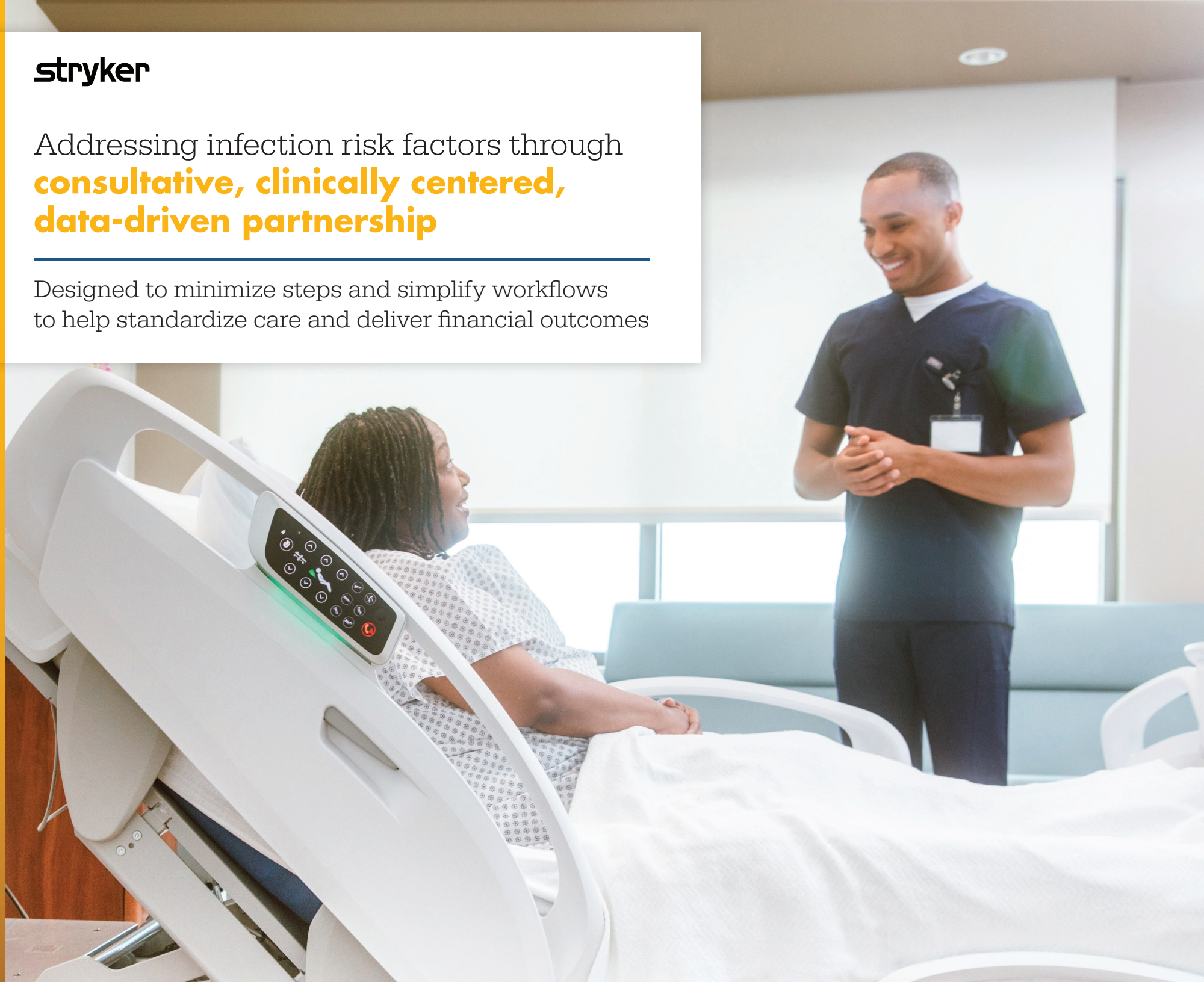
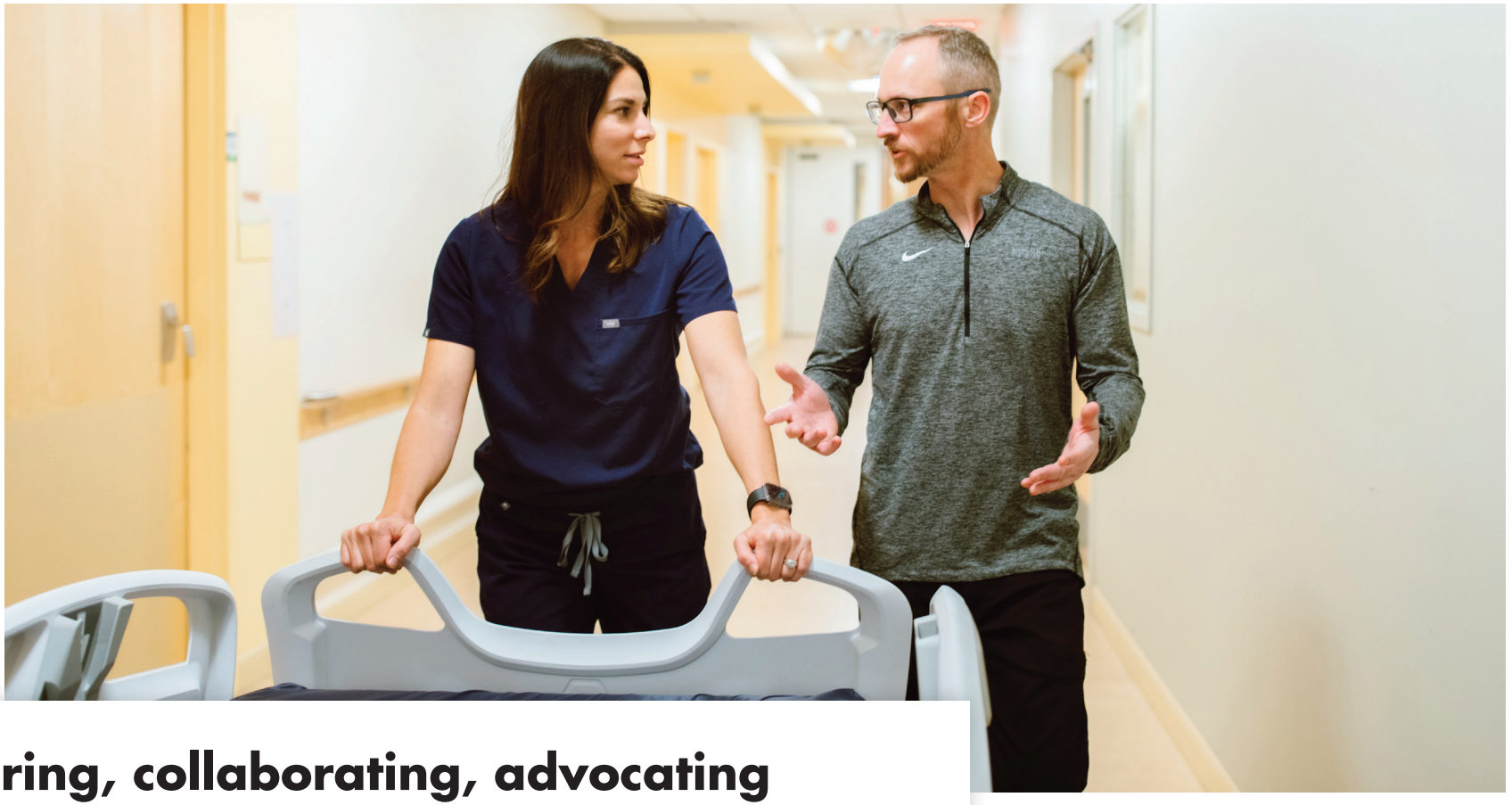
stryker

Addressing infection risk factors through **consultative, clinically centered, data-driven partnership**

Designed to minimize steps and simplify workflows to help standardize care and deliver financial outcomes





Partnering, collaborating, advocating

In the complex discipline of infection prevention, having the right partner beside you and behind you can make all the difference.

We want to be that partner.

With solutions designed to fit seamlessly with your protocols and backed by consultative, clinically centered and data-driven partnership, we are here to help you address reducing risk factors associated with infection, enhance workflow efficiency for bedside care providers and drive sustainable change.

Our consistent methodology, based on years supporting clinical research and protocol formation, includes products designed to minimize steps and simplify workflows, to help standardize care and deliver financial outcomes.

We start by understanding your protocols and current practice, helping you identify clinical outcome trends and hidden costs, and make the case for change. We support your team education efforts to help drive continued competency. And all along the way, we help you secure support from executive leadership and communicate performance by creating tailored compliance and outcomes reports.

The impact of infection risk factors on safety and quality

Infection risk factors are prevalent in hospitals and impact costs, length of stay and mortality.

Surgical site infection and post-operative pneumonia

- 2-5% of inpatient surgical patients experienced a surgical site infection (SSI) in a 2014 report[1]
- $44,333 was the average cost to treat an SSI in a 2023 study[2]
- SSI was the #1 reason for unplanned postoperative readmission in in a 2015 study[3]

Hospital-acquired pneumonia

- 36% of NV-HAP patients develop sepsis according to a study published in 2020[4]
- 6.5 days length of stay increase for NV-HAP patients in a study published in 2023[5]
- 22% NV-HAP mortality rate according to a study published in 2023[6]

Catheter-associated urinary tract infection

- About 25% of sepsis cases come from complicated UTI, including CAUTI, as noted in a 2023 study[7]
- 2.5 days additional length of stay, according to a 2023 study[8]
- 30% mortality risk from resulting septicemia[7]

Incontinence-associated dermatitis

- 47% of hospital patients are incontinent and of those, 46% have IAD, a 2018 study found[9]
- Up to 33% of hospitalized adults experience perineal skin damage according to a 2004 study[10]

Hospital-acquired infections from bacteria in basins and tap water

In a 2012 study analyzing basin sampling results of 1,103 basins from 88 hospitals across North America:[11]

- 62% of basins were contaminated
- 45% of basins were colonized with gram-negative bacilli
- 35% of basins were colonized with VRE

Surgical site infection and post-operative pneumonia

Two to five percent of all surgeries lead to a surgical site infection (SSI).[1] *S. aureus,* the most common cause of SSIs, can be found in bacterial reservoirs all over the body, including the nose, mouth and skin.[12, 13] Process variation, workflow complexity and undesirable outcomes can result from using inconsistent products and processes from patient to patient for pre-op prep. What's more, multiple products packaged separately can lead to compounded hidden costs.

Data-driven partnership

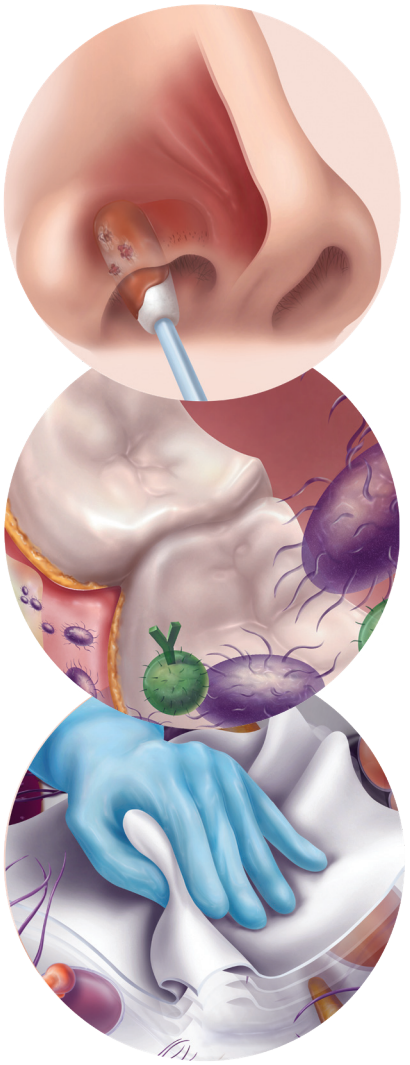
We can partner with you to look at data you've collected on your current SSI rates and compliance to protocol to identify where process variation is occurring. Working together, we can help you standardize the pre-op prep process to address the three reservoirs of the body – skin, nares and oral cavity. From there, we will help you determine the potential cost avoidance associated with SSIs, methicillin resistant *Staphylococcus Aureus* (MRSA) and post-operative pneumonia in your facility.

Stryker's Sage Nose to Toes

Nose to Toes is an all-in-one product bundle for pre-op prep designed to eliminate process variation and to help nurses save time while delivering consistent care as part of a comprehensive protocol. The bundle includes 2% CHG Cloths, 3M™ Skin and Nasal Antiseptic, and an American Dental Association (ADA)-approved toothbrush and applicator swab. Nose to Toes components are also available separately and in different bundles.

Outcomes*

- C-section: 95.3% reduction in SSI, in a 2015 study[14]
- Cardiovascular: 57.2% reduction in SSI, in a 2010 quality improvement (QI) initiative[15]
- Hysterectomy and colon: 67% decrease in SSI, in a 2019 QI initiative[16]



*These results reflect the policies, protocols, technology and training implemented by these hospitals and the results are not necessarily representative of what another hospital may experience.

Non-vent hospital-acquired pneumonia

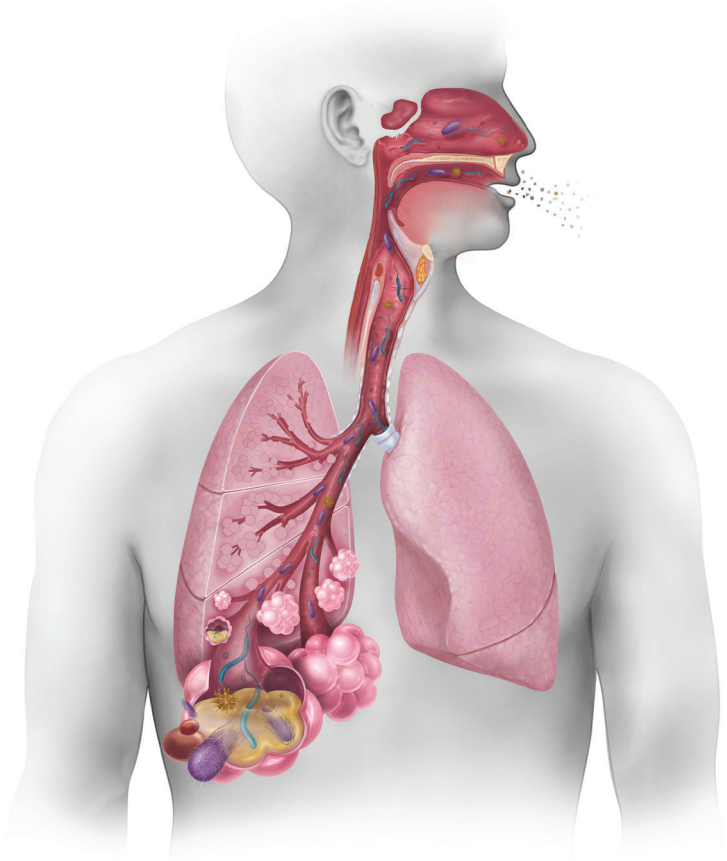
Pneumonia is the number one hospital-acquired infection, according to a survey published in 2018.[17] The risk is real – and not just for ventilated or elderly patients in the ICU. In a multistate prevalence study published in 2014, 65% of hospital-acquired pneumonia was non-ventilator associated pneumonia (NV-HAP).[17] A 2020 best practice document indicates that effective oral care helps address risk factors associated with NV-HAP,[19] a leading cause of sepsis that can increase length of stay and mortality. Yet, in a 2015 book published by the ANA, patients identified oral care as the most missed aspect of nursing care.[20]

Data-driven partnership

To help understand your facility's current practice, we work with you to round on units and observe the present oral care tools being used, compliance to protocol and staff satisfaction. We look at product variation, oral care workflow and decision trees that help staff determine which products to use per patient. From there, in partnership with our CustomerOne data team, we can help mine through ICD-10 codes to understand the human and financial impact of NV-HAP and correlated sepsis, length of stay and mortality.

Stryker's Sage Self Oral Care

The Self Oral Care system was created to make it easy for clinicians to deliver care, to drive higher compliance to your oral care protocol. For non-ventilated patients, pull just one product whether a patient is dependent (needs assistance to perform oral care) or independent. The product includes a suction tool for dependent patients, and a disposable pouch that eliminates the need for basins.



Outcomes*

Study published in American Journal of Infection Control in 2018[21]

- 70% reduction in NV-HAP
- 31 lives saved
- $5.9M cost avoidance

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Catheter associated urinary tract infection

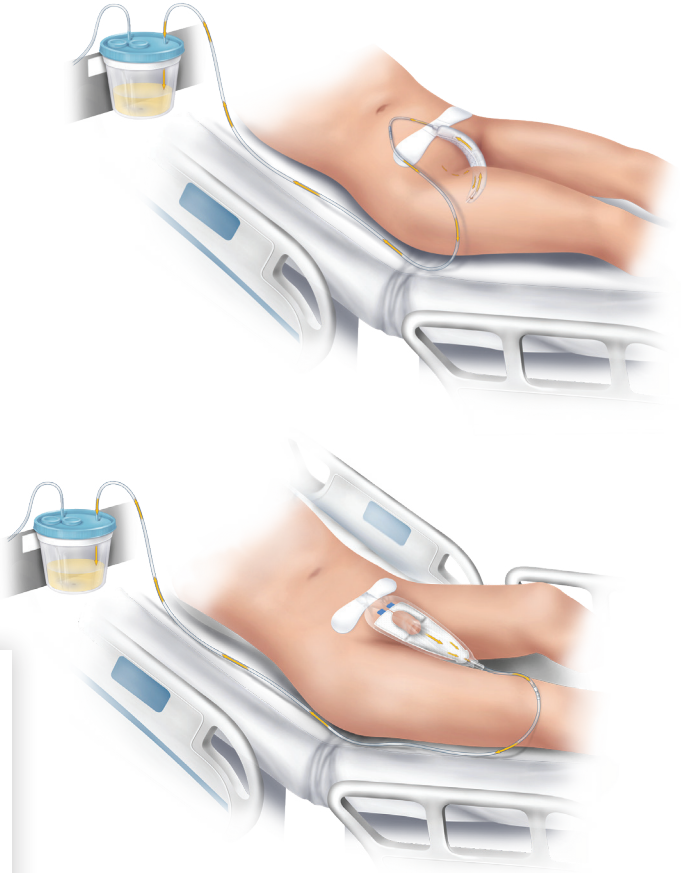
Catheter-associated urinary tract infections (CAUTIs) remain a leading hospital-acquired condition, a 2023 study found.[7] To address this issue, hospitals are implementing rigorous protocols for catheter care, including timely removal and appropriate usage. While guidelines from Healthcare Infection Control Practices Advisory Committee (HICPAC) note that indwelling catheters are necessary in some situations, they recommend using alternatives in selected patients when appropriate.[18] External urine collection devices that are designed to address fit, securement and performance may provide comfort and reduce the need for extra steps and supplies.

Data-driven partnership

We can partner with you to help you get a clear understanding of CAUTI rates and catheter usage in your facility. Through urine management assessment, we can help you determine if internal and external catheters are being used on the intended patient populations according to your protocol. We can also help you see what you're truly spending on external urine management devices and the potential for cost savings by tracking device usage per patient, including additional supplies.

Stryker's Sage PrimaFit and PrimoFit+ external urine management systems

PrimaFit and PrimoFit+ external urine management systems effectively manage urinary incontinence and help address the risk factors associated with infection and skin injury. Our devices help your patients with male or female anatomy to transition from indwelling catheters to independent continence. Both devices provide a customizable fit that stays in place and diverts urine away from the skin to keep your patients comfortable.



Outcomes*

- 73% standard infection ratio reduction with PrimaFit (394-bed acute care facility) in a 2018 QI study[22]
- 63% CAUTI reduction (923-bed system) in a 2023 QI study[23]
- 40% decrease in catheter standard utilization ratio (234-bed facility) in a 2023 QI study[24]

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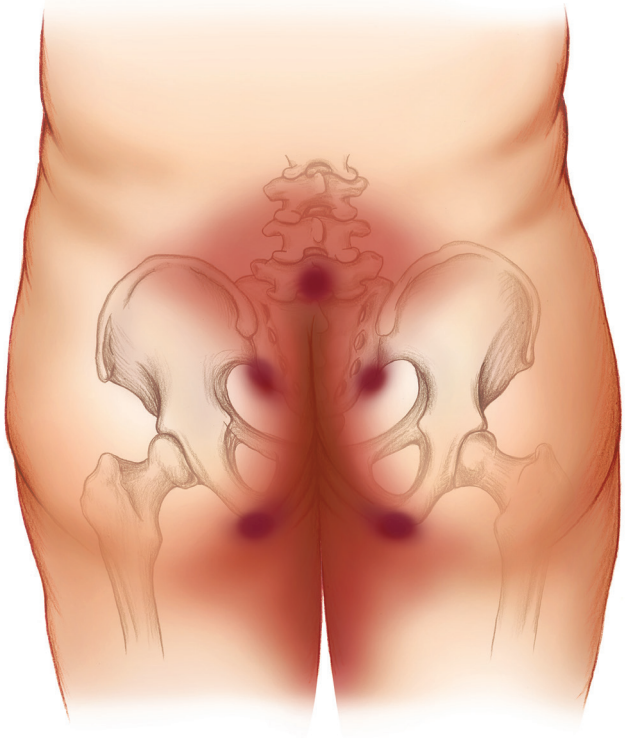
Incontinence-associated dermatitis

Incontinence is a major risk factor in the development of pressure injuries, according to a 2004 study.[10] This is why a patient's skin should be effectively cleaned and protected every time they have an incontinent episode. The IAD Global Expert Panel has created guidelines for an incontinence care protocol that includes using a cleanser, a moisturizer and a barrier. If a facility has a different product for each of those requirements, process variation and workflow complexity can make it hard to ensure protocol compliance for every patient, every time. What's more, using an opaque ointment like zinc oxide can make it difficult to check skin for deterioration.

Data-driven partnership

We can partner with you to analyze your IAD rates and how you're tracking compliance and identify where process variation is occurring within your incontinence care protocol. We can help you standardize your incontinence care and clean-up process to ensure that a barrier is being applied to the skin after each incontinent episode in a way that fits seamlessly within your workflow.



Stryker's Sage Comfort Shield Barrier Cream Cloths

Comfort Shield Barrier Cream Cloths help you apply an effective barrier every time. Each cloth delivers all-in-one skin cleansing, moisturizing, deodorizing, treatment and barrier protection through a breathable, transparent 3% dimethicone formula.** Our free barrier cloth station can be wall-mounted bedside to help simplify workflow.

Outcomes*

- 0% IAD or HAPI
- A two-phase evaluation of 86 patients at a 703-bed Level I Trauma Center in Southwest Virginia who were at high risk for developing IAD and hospital-acquired pressure injuries (HAPI) in 2015 found that no IAD or HAPI occurred in those who received an intervention that standardized cleanup with a barrier-impregnated cloth following each incontinent episode.[25]

*These results reflect the policies, protocols, technology and training implemented by this hospital and the results are not necessarily representative of what another hospital may experience.
**Treatment claim is applicable in the U.S. market

Hospital-acquired infections from bacteria in basins and tap water

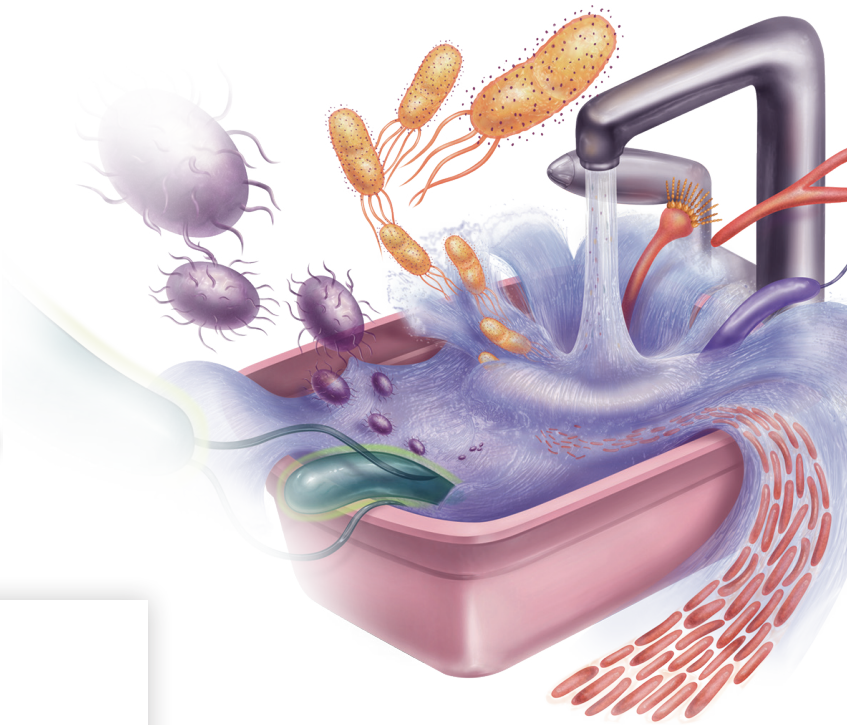
Several factors can combine to increase the risk of catheter-associated urinary tract infections (CAUTI), including catheter use, basin bathing and contaminated water. A 2002 literature search found that hospital water systems have been identified in 29 studies as the source of serious waterborne HAIs.[26] One 2025 study of 5,498 basins from 345 unique healthcare facilities in North America found 58% of basins were contaminated with pathogens associated with CAUTI and other HAIs.[27] A 2006 literature review found that basin water can become heavily contaminated with skin flora during bathing;[28] and, using basins requires multiple products and steps, which can lead to variation in clinical process.

Data-driven partnership

We can partner with you to look at your current bathing protocol, supply costs and CAUTI rates – and help you determine costs associated with the basin and multi-step process, processes variation and basin contamination.

Stryker's Sage Comfort Bath full-body hygienic washcloths

As an alternative to basin bathing, Comfort Bath offers a consistent, convenient and waterless cleansing option that supports standardized protocols while addressing the challenges of multi-step basin use. The single-use, prepackaged cloths are designed to provide patients with a comfortable, efficient cleansing experience, reducing reliance on water, basins and multiple products.



Outcomes*

Replacing multi-step basin bathing with Sage patient cleansing washcloths:

- 12-minute reduction in patient bathing time in a 2022 time trial[29]
- CAUTI rates reduced to near zero within one month, sustained for five months, in a 2010 study[30]
- 59% CAUTI reduction and $33,234 ROI over a 12-month period, in a 2016 study[31]

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Products that help address infection risk factors, backed by extra-mile service

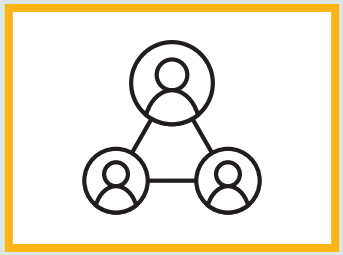
Infection prevention is a complex discipline that involves driving protocol compliance and sustainable change.
Here's how we can help you address the administrative and clinical challenges across infection risk factors.

Review your protocols and current practice

We listen to understand your priorities, protocols and goals, and consult with bedside care providers and patients to understand what's happening in your facility with respect to the challenges and outcomes you're targeting.

Identify outcome trends and hidden costs

Making sense of your data can take a lot of time and specialized skills. Our CustomerOne team is your expert resource for customized measurement and data analysis. We can help you prepare to make the clinical and financial case for change.



Align products to workflows

When it comes to protocol compliance, it can be hard to ensure no step is skipped. Our products are designed to fit seamlessly with your bedside workflow, minimizing steps and helping to standardize care.

Support staff education and competency

We can support your efforts to educate bedside care providers on how to use our products and help ensure continued competency. Our MedEd team can also deliver onsite education sessions to help your staff better understand specific infection prevention strategies.

Quantify outcomes

To help you secure support from executive leadership and communicate performance, our CustomerOne team can create compliance and outcomes reports tailored to your requirements.

Simple interventions.
Extraordinary outcomes.

Discover more

We offer a broad portfolio of interventions to address the risk of infection and injury and drive extraordinary outcomes.

Learn more at https://www.stryker.com/us/en/sage.html.

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