



# Case Study

**Sodexo's Protecta® Environmental Infection Prevention supports ECU Health with exceptional patient care by managing hospital-acquired infections**

# OVERVIEW:

## ECU Health adds Protecta® Infection Prevention program to its Sodexo system-wide Environmental Services and Food and Nutrition Services

The ECU Health (ECU Health) hospital system has eight hospitals, plus numerous outpatient facilities, home health, hospice, and wellness centers, reaching more than 1.4 million people across 29 counties. Its local hospitals are community cornerstones, and they stimulate local economies; often they are among the largest employers in their communities. With more than 1,700 beds, it aims to be the national model for rural health and wellness by creating a premier, trusted health care delivery and education system.

Sodexo—a leading provider of integrated food, facilities management and additional services that enhance organizational performance, contribute to local communities and improve quality of life—has partnered with this hospital system since 2014, providing Food and Nutrition Services along with Environmental Services. ECU Health added the Protecta Environmental Infection Prevention program from Sodexo in January 2020, enhancing its rigorous cleaning at the

hospital to help reduce hospital-acquired infection (HAI) rates. As of spring 2020, all of its affiliated hospitals have implemented the full Protecta program.

Due to nationwide CMS reporting suspensions caused by the COVID-19 pandemic, Protecta results data focuses on the ECU Health Medical Center this data was provided to Sodexo by the infection prevention team at the site.



## About the hospital

- More than 1,700 beds in eight hospitals
- Includes seven community hospitals and ECU Health Medical Center
- 64,333 admissions in FY2019
- Mission: To improve the health and well-being of its region

# CHALLENGE:

## Further reducing HAI cases at ECU Health

HAIs, like MRSA and *Clostridioides difficile* (*C. diff*), can be one of the biggest challenges for healthcare organizations. Not only can HAIs negatively affect patient health as well as re-admission rates and associated costs, they also can impact Medicare reimbursements, patient satisfaction scores, and a hospital's reputation through grades and reviews easily available to the public.

One of the culprits—a bacterium called *C. diff*—is particularly dangerous because it can live on surfaces for five months and spread easily from person to person through direct contact or indirect contact with a contaminated environment or equipment. Determined to reduce *C. diff* HAI cases along with related costs—ECU Health turned to its trusted partner, Sodexo, for help.







## **SOLUTION:**

**Drive a decrease in HAIs with a standardized, multi-layer approach to infection prevention to ensure a safe environment for patients and employees**


A safe, clean hospital environment is critical to quality of care, patient experience, and employee morale. Sodexo's comprehensive, proprietary environmental infection prevention solution, called Protecta, supports excellence in patient care and adds value to the healthcare system's daily operations. Protecta is an integrated, bundled approach, incorporating effective training, proven protocols, and state-of-the-art standardized disinfecting chemicals and cleaning products.

Additionally, Protecta includes analytics, infection preventionist support, and technology.

**When fully implemented, Protecta® can have a statistically significant impact in reducing infections as well as decreasing costs associated with HAIs.**

Patients with HAIs during their admission are more likely to be readmitted within 90 days due to complications from the infections. Patients with HAIs also have longer lengths of stays, resulting in increased levels of care, medications, labor, and supplies—all of which Protecta aims to reduce.

Sodexo began implementing Protecta at ECU Health in January 2020. This timing just ahead of the COVID-19 pandemic was fortuitous as it put it ahead of the curve in having best-in-class—and



Environmental Protective Agency (EPA) listed or registered—tools and processes in place to provide the strongest defense against the virus, while decreasing the healthcare system’s variable HAI rates.


To get started, Sodexo’s Environmental Services team worked with the hospital infection prevention team to develop a specific risk profile for individual areas within the hospital’s. Then, Sodexo and the hospital agreed to a cleanliness and infection prevention policy to ensure clarity on areas of responsibility, frequency of reporting systems, as well as audit and quality protocols.

Standard Operating Procedures (SOPs) support the risk framework, covering each type of location and asset, as well as current infection status. The work of Sodexo’s team is dictated by SOPs for a given level of activity and risk, enabling predictable outcomes and the flexibility to adjust quickly in a controlled way when the need arises. Leveraging data from its 3,000 healthcare sites across the globe, Sodexo has established a comprehensive knowledge base, geared to the effective management of healthcare environments.

Published audit and inspection methodologies and frequencies give the hospital system confidence in Sodexo’s efforts. Quality assurance auditing with fluorescent blacklight technology is completed on a rotating set of surface types and areas within patient care environments.

To ensure day-to-day management of risk, activity, and outcomes, Sodexo uses specially adapted workforce resource management solutions. These solutions not only manage assignment of training, compliance, and other activities, but they also capture hospital reporting on both visual and microbiological standards with links to track the level, type, and location of any hospital-acquired infections.

Labor management systems and processes link to Sodexo’s dashboard and assist with the efficient deployment and utilization of monitoring solutions.



The standardized training for team members, disinfecting chemicals, disposable items, and processes included with Protecta aim to provide more consistent, reliable results, giving team members one less item to worry about while working on other preventative measures.

The combination of cleaning products includes a ready-to-use, fast-acting accelerated hydrogen peroxide disinfectant that is effective against a multitude of bacteria and viruses—including COVID-19 and fungi—as well as NaDCC, a non-bleach sporicidal. Based on evidence, this combination of chemicals is highly effective in breaking through biofilm and leaving pathogens with less surfaces to hide. Sodexo team members also use disposable wipes and mops that decrease microorganisms and reduce cross-contamination.

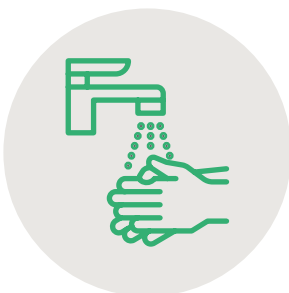
On top of the standard Protecta program, Sodexo further enhances infection prevention and addresses specialized needs with the next-level technology and service of Protecta® Plus. This additional program includes UV-C disinfection.



Disinfecting  
Chemicals



Tools and  
Processes



Employee  
Training



Technology

## Protecta® uses a holistic multi-layered approach to deliver predictable results:

- Foundational cleaning
- Best practices and training
- Standardized products
- Monitoring and analytics through our SMS (site management system)
- Infection prevention specialist support

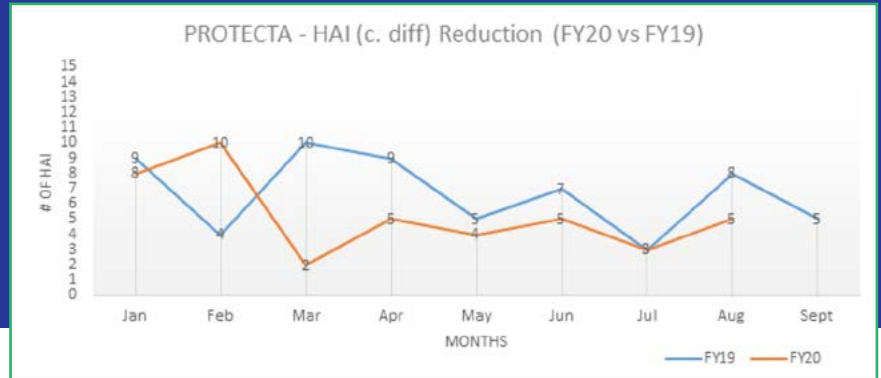


# RESULTS:

Reduction in HAIs and delivery of more predictable outcomes

**From January 2019 through August 2020, ECU Health was able to achieve a 30% decrease in *C. diff* cases.**

Prior to the implementation of Protecta®, ECU Health was experiencing a fluctuation in monthly *C. diff* HAI cases. The standardized disinfecting chemicals, disposable items, training, and processes included with Protecta aim to provide more consistent and reliable results.



**From January-August 2019 versus January-August 2020, reductions in *C. diff* cases resulted in more than \$314,000 in cost avoidance.**



## HAI Reduction and Cost Avoidance Comparison Between Jan-Aug 2019 and Jan-Aug 2020

Month	FY19	FY20	Diff	Cost Avoidance
Jan	9	8	-1	-\$24,206.00
Feb	4	10	6	\$145,236.00
Mar	10	2	-8	-\$193,648.00
Apr	9	5	-4	-\$96,824.00
May	5	4	-1	-\$24,206.00
Jun	7	5	-2	-\$48,412.00
Jul	3	3	0	\$0.00
Aug	8	5	-3	-\$72,618.00
<b>Total</b>	<b>55</b>	<b>42</b>	<b>-13</b>	<b>-\$314,678.00</b>

# \$24,206

The hospital's *C. diff* HAI cost per case for FY2019

With a track record of excellence in Food Services and Environmental Services, the hospital system asked Sodexo to expand its services to include the Protecta Infection Prevention program.

**“When a patient visits our hospital, they expect to receive high-quality care in a safe and loving environment. By partnering with Sodexo in the Protecta program, we have further enhanced the safety of our clinical environments and developed proven disinfection solutions that will serve us well now and into the future.”**

- Chief Experience Officer

## **Protecta® Achieved:**

- From January 2019 through August 2020, ECU Health was able to achieve a 30% decrease in *C. diff* cases
- From January-August 2019 versus January-August 2020, reductions in *C. diff* cases resulted in more than \$314,000 in cost avoidance
- Improvement in employee job satisfaction resulting from the implementation of an efficient cleaning process
- Increased confidence among employees that they are working in a safe environment

## **Sodexo’s standardized infection prevention in conjunction with ECU Health’s protocols helped further reduce *C. diff* cases.**

Factors in addition to the Protecta Environmental Infection Prevention program that contributed to the *C. diff* reduction at ECU Health:

- Lower census
- Decreased visitation due to visitor restrictions
- Lower discharge/transfer volume
- Increased awareness of PPE donning/doffing
- Heightened awareness of hand hygiene
- Clinical team’s active disinfection of high-touch surfaces in conjunction with Sodexo Environmental Services team



Sodexo's Environmental Services and Infection Prevention team members appreciate the efficiency of Protecta®, leading to job satisfaction and team member confidence in safety and cleanliness. The standardized process and predetermined set of products allow team members to put everything they need on their carts, creating a routine that makes it easier for them to do their jobs.

For example, disposable mops eliminate the need to drag a wet mop through the unit and disposable wipes decrease washing, thereby eliminating laundry challenges and reducing water usage. The accelerated hydrogen peroxide disinfectant provides a reduced wet contact time, which often saves team members a second wipe to maintain the wet surface to achieve minimum dwell time.

Armed with their own confidence in Protecta, Sodexo team members are able to help alleviate patients' heightened sensitivity about cleanliness due to the pandemic by showing and communicating what they are doing to create a safe environment.

**“Continuing to see *C. diff* HAI reduction year-over-year, especially in the midst of an on-going pandemic, validates that the Protecta program helps us provide the highest quality of service for the hospital system and its patients. Our team members also appreciate Protecta’s efficiency and effectiveness.”**

- Sodexo General Manager  
of Environmental Services

**“Protecting our environment is one of the most important things we can do for our patients, their families, and our team members. Creating a truly safe environment takes collaboration from nurses, infection control, and environmental services all working towards the common goal. Through our partnership with Sodexo in the Protecta program, we’ve enhanced our *C. diff* safety protocols and discovered solutions that ensure the safety of those we serve.”**

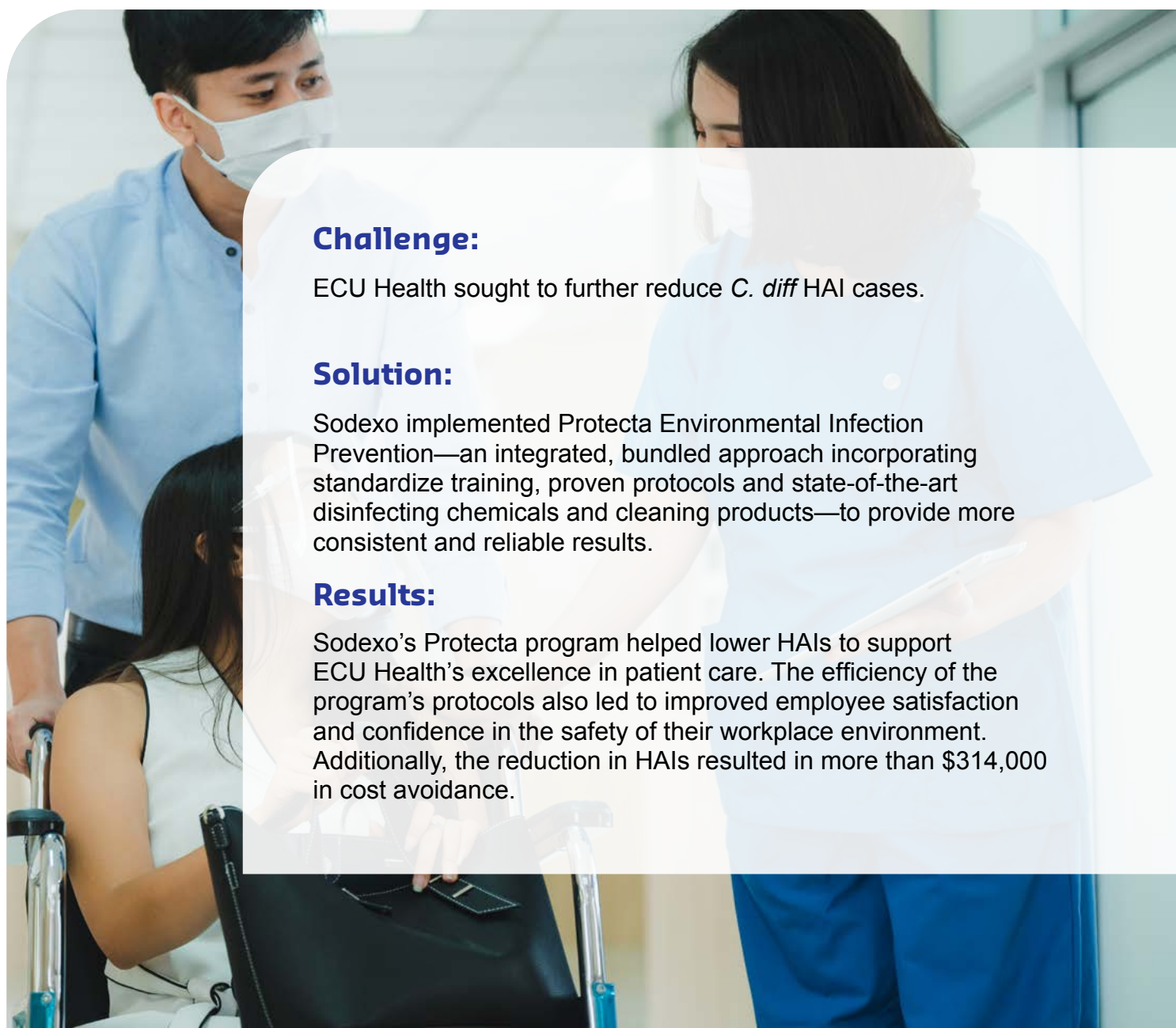
- VP, Office of Experience

**“Having used many different disinfectants in my career, I appreciate the reduced dwell time of our fast-acting accelerated hydrogen peroxide disinfectant as well as our non-bleach sporicidal—particularly as we continue to see a fluctuation in COVID-19 cases and increased patient volume at our facility. I hear positive feedback from our patients, as they are impressed with our infection control protocols and have comfort knowing that our team is working to keep them safe every day.”**

- Sodexo Operations  
Manager of Environmental Services

# CONCLUSION:

Sodexo partnered with the hospital system to tackle the challenge of unstable HAI rates by enhancing its rigorous cleaning with the Protecta® program's proven disinfection solution. The result was a sizeable decrease in HAIs in just one year and, overall, more consistent outcomes.



## Challenge:

ECU Health sought to further reduce *C. diff* HAI cases.

## Solution:

Sodexo implemented Protecta Environmental Infection Prevention—an integrated, bundled approach incorporating standardize training, proven protocols and state-of-the-art disinfecting chemicals and cleaning products—to provide more consistent and reliable results.

## Results:

Sodexo's Protecta program helped lower HAIs to support ECU Health's excellence in patient care. The efficiency of the program's protocols also led to improved employee satisfaction and confidence in the safety of their workplace environment. Additionally, the reduction in HAIs resulted in more than \$314,000 in cost avoidance.