

UT Southwestern Medical Center Expanding UV Disinfection Capacity While Reducing Total Cost of Ownership Executive Brief | June 2025

Executive Summary

The rise of persistent environmental pathogens such as Candida auris and Clostridioides difficile, alongside increased concerns regarding airborne transmission in the post-COVID-19 era, demanded the urgent need for advanced supplemental UV disinfection solutions. In response, UT Southwestern Medical Center (UTSW) selected the Spectra 1000TM, a dual-action UV-C device engineered for disinfection of both hard surfaces and air. Exclusively distributed by Medline, the Spectra 1000 was integrated into UTSW's strategic initiative to modernize Environmental Services (EVS) operations. Utilizing Medline's 36-month operating expense (OPEX) subscription model, UTSW replaced six outdated single-action UV-C robots with 14 Spectra 1000 units. This transition not only doubled the hospital's disinfection capacity but also eliminated the need for capital expenditure and reduced overall operating costs.

"Our goal was clear: to provide staff with a dependable, versatile supplemental UV disinfection tool that seamlessly integrates with current workflows and budget constraints, ultimately enhancing the environment of care. The Spectra 1000 has exceeded expectations on all fronts." — Mike Michalkowski, Director of Environmental Services, UT Southwestern Medical Center

Institution Profile

- Location: Dallas, TX
- Facility Size: 900-bed academic medical center
- Annual Admissions: Over 35,000
- EVS Staff: 300+
- Previous UV Fleet: 6 mobile supplemental UV devices from a traditional vendor

The Challenge

- 1. Unreliable Equipment and High Service Costs Frequent breakdowns and long service windows resulted in poor device availability and increased operational disruptions.
- 2. Insufficient Coverage

With only six units, high-priority areas often experienced delays, straining EVS workflow and room turnover efficiency.

The Spectra 1000 Solution

Spectra 1000 Advantage	Impact at UTSW
Dual-action UV-C for both surfaces and air	Broadened disinfection capability
Lightweight, Ergonomic design (<7 lbs. push force; one moving part)	Easier and faster deployment with less physical strain
OPEX-based subscription through Medline	Expanded fleet from 6 to 14 units without capital expense
	Eliminated unplanned service charges and

Implementation Highlights

- **Go-Live Timeline:** Complete fleet transition executed in one day with zero disruption to room turnover targets
- High Staff Adoption: EVS technicians reported improved usability and maneuverability
- Improved Access & Utilization: Greater availability of units led to more consistent usage across the department
- **Cost-Neutral Expansion:** Subscription model allowed capacity growth without increasing the overall budget
- Fleet Modernization: Acquired 14 new dual-action units while avoiding a significant capital outlay

"Scaling to fourteen dual-action Spectra 1000 units ensures our team has ample access to equipment, eliminating competition and enabling effective reduction of pathogens on both hard surfaces and in the air with every disinfection cycle. The Spectra 1000 helps us to establish a new standard of disinfection in Environmental Services."

- Mike Michalkowski, Director of Environmental Services, UT Southwestern Medical Center

Why Medline and Spectra 1000

- **Innovative Financing:** Medline's OPEX model aligns technology upgrades with operational budgets, avoiding delays tied to capital planning cycles
- **Transparency in Data:** All efficacy data—covering both surface and aerosol disinfection—is independently verified and available for clinical review
- **Robust National Support:** Medline's service infrastructure ensures timely responses and minimal device downtime

Regulatory Note

The **Spectra 1000** is an EPA FIFRA regulated pesticide device designed to reduce microbial contamination on environmental hard surfaces and in the air. It is not intended for use on medical devices and does not diagnose, treat, cure, or prevent disease. It should only be used as a **supplemental environmental hygiene measure** within a comprehensive infection prevention program.

Endorsement & Approval

I affirm that the above information accurately represents UT Southwestern Medical Center's experience with the Spectra 1000 device. I approve its use for educational and promotional purposes by Integrated UVC Solutions LLC and Medline Industries.

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Mike Michalkowski

Director of Environmental Services

UT Southwestern Medical Center

Date:_____

iUVCs added statement: Regulatory Disclaimer – Spectra 1000:

The Spectra 1000 is a pesticidal device as defined under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and is regulated by the U.S. Environmental Protection Agency (EPA) as a device, not a registered pesticide. As an EPA-regulated device, the Spectra 1000 is intended to reduce, but not eliminate, environmental microbial load on hard, non-porous surfaces and in the air in unoccupied spaces. It is intended solely as a supplemental tool to enhance environmental hygiene and does not replace manual cleaning or chemical disinfection protocols. The Spectra 1000 is not intended for use on medical devices, nor is it intended to diagnose, treat, mitigate, or prevent any disease." Note: The EPA does not evaluate the safety or efficacy of pesticidal devices and does not review or approve performance claims. All efficacy data supporting the Spectra 1000 is independently conducted and publicly available. Manufacturers are solely responsible for the accuracy and truthfulness of any claims made.

