

HOSPITAL PREVENTS UNPLANNED DOWNTIME AND COSTLY DEVICE FAILURE WITH PREDICTIVE WORK SYSTEMS

OVERVIEW

This case study is based on a critical access hospital with 44 beds and an emergency room serving a rural mid-Atlantic region. The hospital is part of a regional health system that includes six hospitals, 70+ outpatient facilities, and over 20K clinical assets. The health system is a current TRIMEDX Clinical Engineering client.

BUSINESS ISSUE

The hospital needed a way to better monitor device performance to detect problematic events and predict potential failures to avoid equipment downtime and costly emergency repairs.

PROBLEM

- The radiography and fluoroscopy room in a busy ER appeared to be functioning normally, however occasional tube spits were occurring.
- Tube spits cause image artifacts and can lead to future device failure and costly tube replacements.
- Inability to predict device failures leads to unplanned downtime and disruptions to patient care.

SOLUTION



TRIMEDX's Predictive Work System (PWS) event detector identified the tube spit problem and automatically generated a work order for the clinical engineering team.



The TRIMEDX clinical engineering technician was able to assess and repair the device outside of patient-use hours, preventing clinical care disruptions.



The TRIMEDX clinical engineering technician and strategic modality manager were able to assess and troubleshoot the problem to determine there was a generator issue, not a tube replacement.

VALUE

- ✓ TRIMEDX's PWS technology that is consistently able to identify and predict equipment failures.
- ✓ Detecting the tube spit issue early prevented an unnecessary high-impact tube replacement.
- ✓ Proactively predicting device failure avoided three to five days of unplanned repair downtime.
- ✓ Being able to perform the device assessment and repair outside of patient use enabled continuous device uptime in a busy emergency room department.