



**PHILIPS**

**BlueJay**  
CONSULTING

Case study

# Improving ED operations and inpatient throughput at Winchester Medical Center

## Who/where

Winchester Medical Center (WMC) is a 445-bed non-profit regional referral center providing acute level II trauma to medical, surgical, and rehabilitative care services. Winchester, VA.

## Challenge

WMC was looking to address issues with ED crowding, boarding, and critical care diversion which stemmed from hospital-wide throughput.

## Solution

Philips provided a phased approach to support ED performance improvement, then helped implement changes for hospital-wide throughput improvement.

## Results

The WMC team was pleased to achieve the below results:

- Left without being seen (**LWBS**) decreased **39%**
- **Arrival-to-triage improved 84%**
- **Patient satisfaction increased 477%** to the 75<sup>th</sup> percentile
- **Improved patient throughput metrics**

Winchester Medical Center (WMC) had been providing quality medical care to their constituents for decades but needed to address issues with ED crowding, boarding, and critical care diversion as well as hospital-wide throughput. WMC had implemented unsuccessful change management strategies and looked to Philips Blue Jay Consulting to help them deliver improvements in ED performance, the transition to inpatient care, and overall patient throughput.

Philips provided a collaborative approach to teach, mentor, and guide cultural and operational change for ED performance improvement and then prioritized and helped implement change for hospital-wide throughput improvement.

### **Phase I: Focus on ED performance**

Our consultants began the client engagement with a focus on ED performance. They completed a comprehensive ED assessment including data analytics, onsite observations, and staff interviews. Inconsistent practices and processes were identified.

WMC had issues with ED crowding as well as less than desirable arrival-to-triage times. Our consultants identified several areas where best practices with the patient experience could be applied and processes could be more efficient.

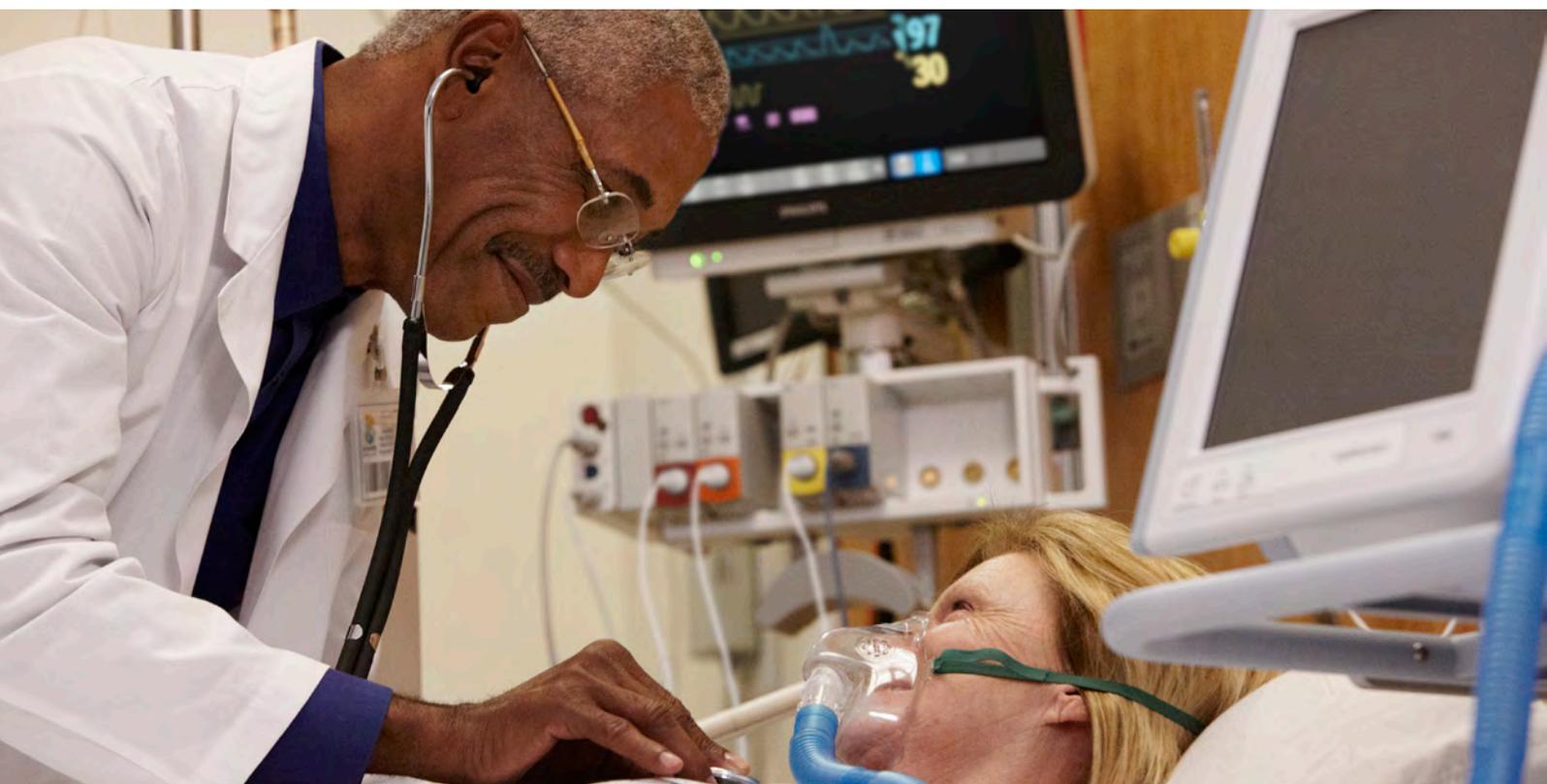
Opportunities for improvement were prioritized including front-end intake processes, facility layout for improved patient flow, new standard practices, education and competency validation in the use of the Emergency Severity Index (ESI) triage program, and revisions to the charge nurse role to focus on patient throughput.

### **ED workgroups and change initiatives**

The Philips team embedded themselves in the department and worked closely with leaders, physicians, and staff as success depends on strong engagement of staff members. 111 opportunities for improvement were identified and divided between eight multidisciplinary, staff-led workgroups. A common mission and vision was agreed as well as goals for each workgroup.

The workgroups met weekly for 26 weeks and our consultants helped WMC to develop, test, and implement the following ED performance change initiatives.

- Rapid RN triage process with streamlined documentation
- Rapid Assessment Unit (RAU) with physician, nurse, and tech care team
- Reinforced immediate bedding
- Flow coordinator role with a focus on back-end movement for admitted patients and strategic placement of EMS arrivals
- Standardization of charge nurse role and responsibilities with clear expectations for performance
- Radio head-set communication with rapid triage, RAU, charge nurse, and flow coordinator to facilitate effective communication for patient flow
- Staff education on the ESI triage system with validation, interrater reliability, and development of a core group of super trainers
- Established culture of accountability with leadership holding staff accountable and staff holding peers accountable
- Joint ED nursing and medical leadership weekly meetings
- Communication of departmental performance metrics with staff



## ED performance improvement

With the changes made to patient care and flow, the department realized significant improvements including:

- **39% decrease** in left without being seen (LWBS)
- **84% improvement** in arrival-to-triage
- **55% improvement** in arrival-to-room
- **23% improvement** in arrival-to-provider
- **477% improvement** in patient satisfaction (75<sup>th</sup> percentile)

At the end of the project, the pride in the department was profound. The WMC staff felt empowered and appreciated and ‘a culture of 200% accountability’ was shared between nursing and physicians alike.

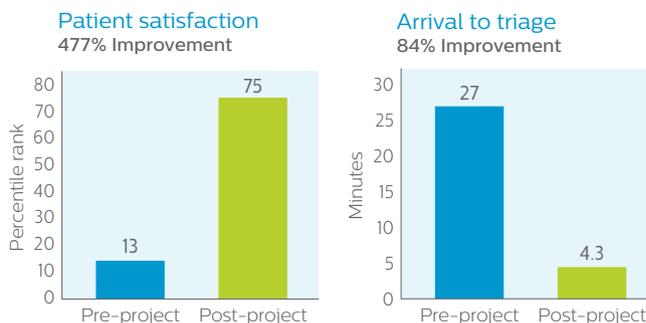
## Phase II: Focus on inpatient throughput

As ED performance improved, arrival-to-admit and inpatient bed requests/delays continued to rise. Back-end flow for admitted patients contributed to ED crowding. Although ‘throughput’ was a common term in the ED, the urgency of moving patients through effectively was not common practice across the hospital.

This triggered an increased urgency to improve the efficiency of all patient throughput processes. Educating the staff on the importance of such dedicated efforts and their impact on long-term success was also identified as an urgent next step.

The Philips team completed interviews, observations, and data collection and identified common themes throughout the organization:

- No unified understanding regarding hospital throughput or agreed reason for change
- Support departments focused on metrics that didn’t consistently support effective patient movement
- Timely discharges were not a priority or effectively managed
- No prioritization of testing as radiology and laboratory did not know which pending tests were needed for discharge decisions
- Disjointed care coordination for effective patient care management
- Provider practices led to improper placement of inpatients and inappropriate use of resources



## Increasing patient throughput

Hospital throughput is a dynamic undertaking with many varied nuances. Philips facilitated, guided, and mentored WMC leaders and staff members from EVS, transport, bedside nursing, care management, data analytics as well as nursing, physician, and executive team members through a change process to promote a cultural paradigm shift encouraging employee engagement and patient-centered care delivery.

They helped create and worked with an oversight team, steering committee, and six multi-disciplinary, employee-led work-groups over a second 26-week program. They collaborated to develop, test, and implement solutions which focused on patient touch points that effected length of stay (LOS) including patient access, patient placement, patient care, patient support, patient discharge, and a performance scorecard.

Implemented initiatives included:

- Interactive performance dashboard
- Daily operational capacity and demand plan based on a new algorithm
- Streamlined processes for patient handoffs
- Creation of a pull culture to acute care from the ED
- Telemetry utilization management process
- Transport staffing plan
- Daily multidisciplinary, patient care coordination unit team huddles

“Philips helped us reduce our wait times, improve throughput across our facility, and increase patient satisfaction.”

Anne Whiteside

Chief Nursing Officer

Winchester Medical Center

“Philips Blue Jay Consulting helped us improve patient throughput and satisfaction. They became part of our team and an agent of change.”

Anne Whiteside  
 Chief Nursing Officer  
 Winchester Medical Center



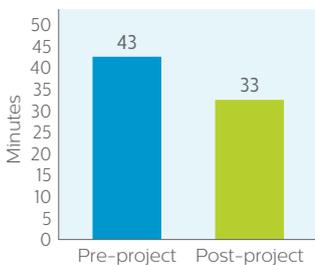
### Patient throughput improvements

As a result of this engagement and the implemented initiatives, the WMC staff across the hospital is focused and aligned on the urgency of patient throughput. They have taken ownership and have a positive patient- and staff-centered environment. They have a strong understanding of the importance of throughput processes and their impact on the patient experience.

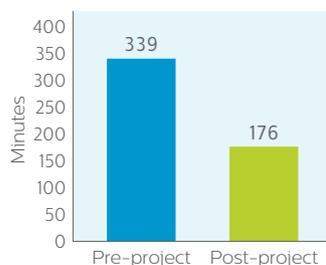
Winchester Medical Center has yielded strong performance metrics including:\*

- **23% improvement** in bed assignment to patient in bed (ED to acute care transfers)
- **48% improvement** in discharge order to critical care discharge
- **16%-21% improvement** in patient discharges before 11am in medical/surgical, step down, and critical care units

Bed assigned to patient in bed – ED to acute care transfers  
 23% Improvement



Discharge order to critical care discharge  
 48% Improvement



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