



Case Study

Advancing Efficiencies in Throughput:
Advanced Practice Clinician (APC) and
Physician Collaboration Improves Early
Discharges in a High-Volume Hospitalist
Service

Hospital Information

A 360-bed medical facility in Myrtle Beach, South Carolina and its sister facility, a 466-bed hospital in Richmond, Virginia

TeamHealth Services

Emergency Medicine (EM)
Hospital Medicine (HM)

Results

- Advanced Practice Clinicians (APCs) at a Richmond, Virginia medical center successfully improved early discharge rates.

TEAMHealth

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Challenge

Discharging patients earlier, when clinically appropriate, can significantly improve patient flow and hospital throughput (prior to 9 a.m. and 11 a.m. in hospital medicine patients). Poorly timed discharges result in bottlenecks, causing a block of access to inpatient beds which leads to patient boarding, hospital congestion, poor patient experience scores and – in some cases – higher mortality rates. The correlation between early morning inpatient discharges and improved throughput is well known but often underachieved.

One Richmond-area medical center sought to improve early discharge times to help speed improvement in board times of emergency department (ED) patients. Inpatient admission times were generally shorter if the patient was admitted earlier in the day.

Hospital leadership turned to TeamHealth, looking for guidance in the form of a sister facility in Myrtle Beach, South Carolina, and the adoption of best practices and improvements made in early discharges.

Solution

Over a 12-month period, the Myrtle Beach hospital analyzed discharges of hospital medicine patients. Prior to the launch of the initiative, the hospitalist group averaged 7% of discharge orders placed by 9 a.m. and 29% by 11 a.m.

These low discharge percentages prompted the facility's decision to partner with TeamHealth to make substantial improvements in early discharges. They implemented a staffing model change of an APC acting as a designated discharge APC for each calendar day.

Working collaboratively, HM physicians identified patients for potential discharge, and on discharge day, the APC assessed each patient, determining if barriers to discharge were overcome. The final steps occurred when patients were determined to be ready for discharge, at which point the patients were reported to the physician, the physician saw the patient and finalized the plan of care with the APC before entering the discharge order into the EHR.

The final steps occurred when patients were determined safe for discharge, at which point the patients were reported to the physician (where the plan of care was finalized) and the discharge order was submitted to the EHR.

Studying a total of 12,909 patients over a one-year period, the Myrtle Beach facility's goal was to achieve 25% of discharge orders placed by 9 a.m., and 40% by 11 a.m. on the hospitalist medicine service.

Myrtle Beach results after one year:

- The average rate of discharges prior to 9 a.m. increased from 8.2 % to 22.6% following the implementation of the intervention, coming close to the desired 25% goal.
- The average rate of discharges prior to 11 a.m. increased from 29.2 % to 42.5% following the intervention, surpassing the 40% goal.

Encouraged by the Myrtle Beach results and working with TeamHealth's HM performance improvement specialists, in July 2020 the Richmond area hospital began adopting the APC/HM model in hopes of replicating its sister hospital's positive results.



Results

In July 2020, encouraged by the Myrtle Beach results and in collaboration with TeamHealth's HM performance improvement specialists, the Richmond area hospital began adopting the APC/HM model.

One month prior to implementation in June 2020, Richmond's percentages were as follows:

- Discharge orders by 9 a.m.: 7%
- Discharge orders by 11 a.m.: 36%
- Discharge orders from hospital by 1 p.m.: 25%

In just over one month, the comparative percentages showed significant increases:

- Discharge orders by 9 a.m.: 18%
- Discharge orders by 11 a.m.: 47%
- Discharge orders by 1 p.m.: 36%

These improved averages at the Richmond hospital surpassed even the parent system's division averages. Team Health's Hospital Medicine Performance Director said the positive results were highlighted at goals progress meetings and multiple venues in the following weeks.

Designed to standardize the discharge process, FMDs believe the consistent use of the APC is a "best practice" model to improve hospital throughput and overcome challenges associated with the timely discharge of medicine patients.

The South Carolina study demonstrated the effectiveness of implementing an APC and physician discharge team as the primary intervention to achieving expedited inpatient discharges from a high-volume inpatient hospital medicine program. The results from the Virginia hospital, which successfully replicated that success, continue to demonstrate the value of the APC role in hospital medicine to streamline hospital throughput and improve overall metrics.