

HealthStream™

## Capacity & Resource Advisor

**Accurately  
Predict Demand  
to Precisely Align  
Resources**



# Inspiring a Better Healthcare System

By accurately predicting patient volume, hospitals and health systems can precisely align staffing and other resources to help ensure efficient patient flow and high-quality, cost effective patient care. Good forecasting is essential for achieving efficient patient flow on a day-to-day basis. It also allows organizations to better plan for unexpected volume surges.

The COVID-19 crisis has highlighted the challenges involved in predicting demand spikes and has underscored the life-and-death situations that can arise if an organization is unprepared. Although the pandemic caused an unprecedented surge, there are other, more frequently occurring emergent events—such as natural disasters, large accidents, or active shooter situations—which can also cause a precipitous increase in demand. To realize effective capacity management, your organization should be able to plan for and respond to these situations just as easily as you anticipate daily resource needs.

## **Inaccurate Forecasting Can Introduce Risk**

The inability to correctly anticipate demand can result in clinical and financial ramifications. Understaffing impacts quality of care and can result in a rise in hospital-acquired conditions, as well as decreased patient and staff satisfaction. It can also cause delayed transfers, misdirected resources, and other situations that negatively impact care quality. Conversely, overstaffing can increase waste and drive up the cost of care.

Most providers forecast capacity manually, using historical averages as a guide. However, as hospital volumes fluctuate, long-term historical averages become less influential in short-term anomaly detection. The declining volumes also mean that surges can be more disruptive if you don't have the right staff in place at the right time.

## **Leverage Technology to Increase Reliability**

Sophisticated data models that adjust in real time can ensure more accurate forecasting. The Capacity & Resource Advisor solution is a cloud-based forecasting tool that automatically takes current data from your existing solutions, such as workforce management, patient flow, and admission-discharge-transfer (ADT) systems, and uses machine learning to transform the data into actionable information. The system feeds insights into your staffing and scheduling workflow, allowing you to precisely align resources for optimal use.

Capacity & Resource Advisor also uses machine learning and artificial intelligence (AI)-driven predictive analytics to build forecasts that help you prepare for unforeseen events. While no system can predict the future, these forecasts allow you to consider possible scenarios, understand the resource needs to address potential demand, and plan accordingly.

# Prepare for Daily and Unexpected Capacity Issues With Actionable Forecasts

## Address Issues in Real Time

Capacity & Resource Advisor presents meaningful information to users where, when, and how they need it. Color-coded, traffic-light visuals displayed in user-friendly dashboards alert nurses and patient access teams to pressing issues, helping them quickly evaluate and address urgent situations.

In addition, the Nurse Optimization Tool prescribes specific staffing actions based on current volumes and available skill sets/certifications, allowing your organization to align staff accordingly.

## Predict the Unpredictable

AI-driven what-if modeling helps you prepare for possible volume surges, including unexpected events. The modeling also accounts for more familiar events that occur on an annual or biannual basis, such as large festivals, parades, and sporting events that impact patient volume.

As events take place, our solution automatically updates its forecasts based on what actually happened. This cumulative intelligence increases the accuracy of predictions going forward.

To help plan for large-scale disruptions, the tool also provides a multi-facility, regional view so you can balance capacity across all your care sites.

## Enjoy a Fast Implementation

You'll be solving capacity-related problems within a few months due to our straightforward cloud-based and consultant-led implementation. Our experts help you identify key objectives quickly and configure the system to drive results.

Plus, our consultants help your team understand best practices for smoother operations. Consultants stay engaged throughout the term of the agreement, making recommendations and providing change management guidance,

We use near real-time data from your existing solutions and transform it into actionable information fed directly into your staffing and scheduling workflow

to ensure that you receive the maximum value from your investment.

Make sure your organization accurately anticipates demand, precisely aligns resources and optimizes flow. See how our AI-enabled Capacity & Resource Advisor solution can help you rapidly respond to day-to-day capacity issues and better prepare for the unexpected.

To learn more about Capacity & Resource Advisor, visit:

[www.hs.healthstream.com/capacity-and-resource-advisor](http://www.hs.healthstream.com/capacity-and-resource-advisor)

## About HealthStream

HealthStream (Nasdaq: HSTM) is dedicated to improving patient outcomes through the development of healthcare organizations' greatest asset: their people. Our unified suite of solutions is contracted by healthcare organizations across the U.S. for workforce development, training & learning management, talent management, credentialing, privileging, provider enrollment, performance assessment, and managing simulation-based education programs. Based in Nashville, Tennessee, HealthStream has additional offices in Jericho, New York; Boulder, Colorado; Denver, Colorado; San Diego, California; Chicago, Illinois; Portland, Oregon; and Raleigh, North Carolina.

