

# Princeton HealthCare System Reduces Inpatient Admissions 15% using Care Management

As healthcare reimbursement moves towards value-based models, Princeton has deployed new technology to reduce unnecessary spending and improve patient outcomes. Since implementing Lightbeam’s Population Health Management Platform, Princeton has found success by introducing new workflows that align operational strategies with high quality care.

In 2016, Princeton entered the era of accountable care. Comprised of a Medicare Shared Savings Program (MSSP) Accountable Care Organization (ACO) and a Commercial Clinically Integrated Network (CIN), Princeton’s main facility operates out of a 355-bed hospital in Plainsboro, New Jersey. Throughout the health system, patients have access to the full continuum of care including:

- Acute hospital services
- Behavioral healthcare
- Acute rehabilitation
- Skilled nursing
- Home care
- Hospice care
- Ambulatory surgery
- Fitness and wellness services

Eleven Princeton HealthCare outpatient practices also participate in the Medicare Innovation CPC+ program, which provides monthly payments for care management and higher fee-for-service reimbursement for deploying non-traditional methods of care.

## Challenges: Multiple contracts, data disparities

Moving to value-based environments presents many challenges for provider groups. Most obstacles come from the gap in reimbursement when moving away from fee-for-service. While providers are traditionally paid for the volume of services they provide, a percentage of value-based reimbursement is tied to patient outcomes. This requires a cultural and operational shift in the way healthcare is delivered. While there are a variety of value-based care models from different payer initiatives, the core system (often referred to as the triple aim) of rewarding value over volume remains the same. These new models require a high level of care coordination, data transparency and operational alignment across the healthcare organization.

## Solution: Lightbeam Population Health Management

Princeton needed a solution to manage multiple value-based contracts with a growing patient population. Since their facilities use different EHR vendors to collect patient data, they also needed a solution with the ability to combine data from across the health system to enhance care coordination efforts and data sharing. Princeton chose to partner with Lightbeam to provide key solutions to help meet their goals.



*“We use Lightbeam to help us get the insights needed to deliver quality care management.”*

Tobe Fisch, MD, PhD, MMM

## Princeton HealthCare System

<https://www.princetonhcs.org/> - Princeton, NJ

## Outcomes

- Reduced inpatient admissions 15%
- Reduced inpatient spend 4%
- Reduced readmissions 6%
- Achieved highest quality tier in a commercial contract

## Solution

Lightbeam’s Population Health Management Platform



## Goals

- Identify cost drivers
- Care manage targeted groups
- Close gaps in care

## Requirements

- Identify patients or patient groups who are high resource utilizers
- Workflow engine integrated with patient identification solution
- Workflow engine integrated with quality measure care gap identification solution
- Integration with hospital system

Lightbeam helps drive quality care, shared savings and revenue while reducing unnecessary spending and utilization. The Platform enables providers to take proactive steps at the point of care by bringing data together from various sources including payer claims, practice EHRs and hospital ADT feeds. Lightbeam helps decrease utilization while providing the capabilities required to expand into CMS Alternative Payment Models including Comprehensive Primary Care Plus (CPC+).

## Goal 1 – Identify Cost Drivers

Lightbeam helps Princeton manage their high cost patients by providing a two-method approach for organizing patients into categories of risk. Lightbeam's Risk Stratification Engine uses several risk algorithms (powered by Johns Hopkins ACG®) and a proprietary Lightbeam ATI ("Ability to Impact") score to distinguish patients with similar levels of concurrent and prospective risk. This distinguishing score helps Princeton prioritize patient outreach and optimize care management efforts based on patient conditions or situations where there is a high chance that care intervention will improve health outcomes and reduce utilization.

Lightbeam's Cohort Builder helps Princeton automatically identify any group of patients with a few clicks. This solution quickly isolates a patient population with check boxes and drop-down lists rather than programming queries, generating highly refined patient lists for care initiatives. These lists are either static or dynamic. If static, the Cohort Builder runs one time to find patients who fit the criteria at the current moment. If dynamic, the list can change daily as patients' clinical and financial flags qualify them to be added to or removed from the criteria within a defined cohort. Princeton uses the following daily cohorts to manage transition of care:

- Patients who have visited the ED
- Patients admitted to the hospital
- Patients discharged from the hospital

## Goal 2 – Care Manage Targeted Groups

Once patient lists are identified, Lightbeam's Care Management Platform helps Princeton act by providing a workflow engine for care managers. As patients qualify for enrollment in cohorts, they are automatically assigned to a care manager. Depending on the cohort, Lightbeam provides care managers step by step, patient-specific evidence-based care plans to help them work with their patients. Tracking patient care and following care guidelines have helped Princeton reduce unnecessary costs, close care gaps, improve quality outcomes and foster personal care. Whether the steps include making a direct patient call, filling out an assessment or scheduling a transition of care appointment, each step is tracked, documented and shared through Lightbeam's Care Management application. Additionally, Princeton uses this module to meet its reporting needs for CPC+ for Transition of Care management.

## Goal 3 – Close Gaps in Care

Lastly, Princeton leverages Lightbeam's Quality Measure Optimization Analytics to manage quality measures for both commercial and government contracts. Each contract has a variety of measures used as performance indicators which tie reimbursement to outcomes. By integrating feeds from multiple EHRs, Princeton has an enterprise view of quality measure performance throughout the year to identify which providers and patients have low compliance percentages for each measure. Lightbeam's drill down capability helps Princeton categorize payer contracts and their measures by an enterprise level, facilities, providers and patients. By analyzing each level, Princeton can pinpoint sources of poor compliance. Princeton used Lightbeam's GPRO quality measure tool to successfully report performance on all ACO measures in 2016, and achieved the highest tier in quality in a commercial contract with Horizon Blue Cross, Blue Shield of New Jersey.

## Results

To date, Princeton has had its greatest success in reducing inpatient admission rates and spend. For the 2016 performance year, Princeton reduced inpatient admission rates by 15% in both the MSSP and commercial insurance programs. Readmissions rates also decreased by 6% over the same time period. This resulted in a 4% reduction in inpatient spend for the MSSP program and in overall spend for patients insured with Horizon Blue Cross, Blue Shield of New Jersey.

## Conclusion

As accountable care and the quality payment program gains steam, Princeton has taken a progressive approach to managing their value-based contracts. Lightbeam Health Solutions supports the improvement of clinical measure scores, shared savings opportunities and identifying areas to drive revenue. As a result, Princeton has been able to meet their organizational goals while seeing value-based success through improved quality outcomes and reduced utilization.