The Challenge

Risk stratification, as a component among broader population health initiatives, is very important… but generally lacking. Vivify Health has partnered with Lightbeam Health Solutions to help focus your limited resources on patients with the highest predicted resource utilization (i.e., cost)

Lightbeam
Health Solutions

The Solution

The Lightbeam PHM Platform uses a two-method approach for organizing patients into different categories of risk.

The first method assigns a Risk Score to each patient using the Johns Hopkins Adjusted Clinical Groups® (ACG®) System for Predictive Modeling.

The second method utilizes the Lightbeam ATI ("Ability to Impact") Score to distinguish patients with like Risk Scores. In the Lightbeam application, both the Risk and ATI Score are relative to the patient population being analyzed.
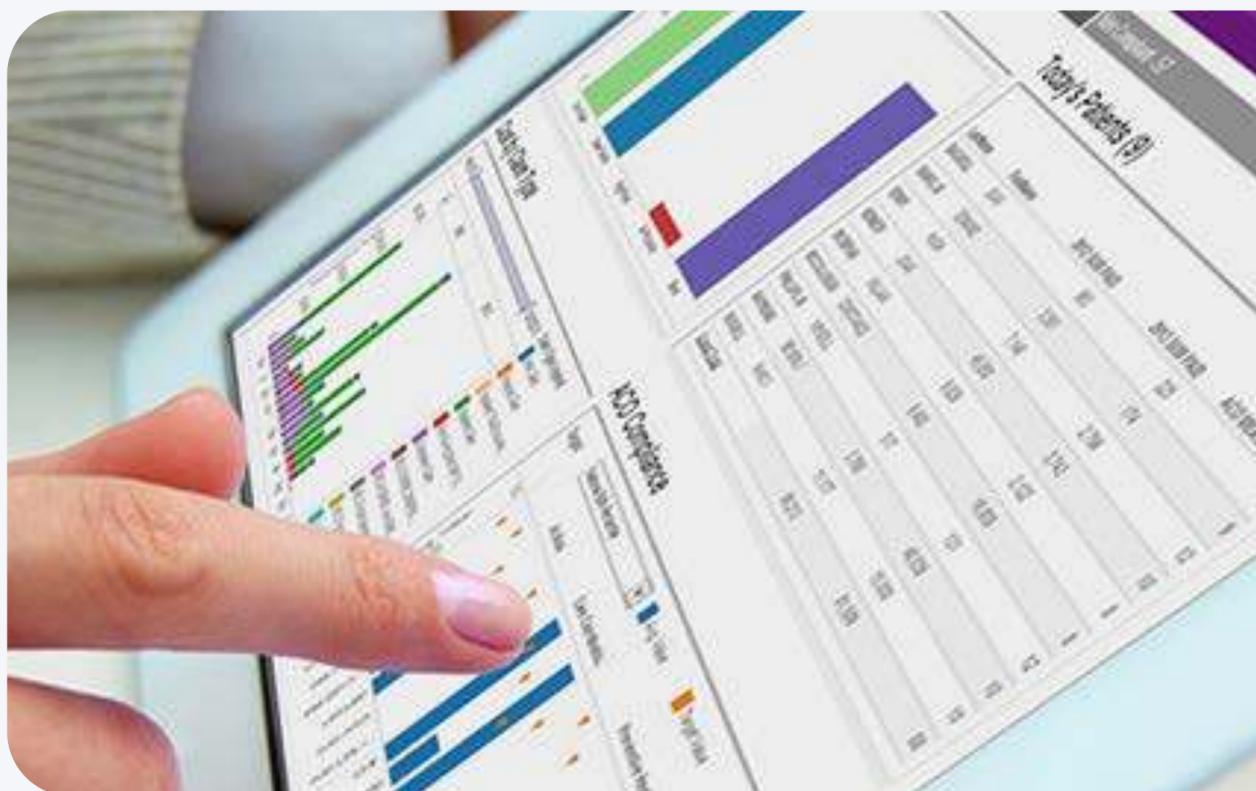
Risk Scoring

The Johns Hopkins Adjusted Clinical Groups® (ACG®) System offers a unique approach to measuring morbidity and stratifying risk that improves accuracy and fairness in identifying patients at high risk, forecasting healthcare utilization, assessing provider performance, and evaluating payment contracts. The unique value of the ACG® System derives from the measurement of the morbidity burden of patient populations based on disease patterns, age, and gender. It relies on age, sex, and diagnostic codes, but can be supplemented with costs and pharmaceutical code information, all found in insurance claims and electronic medical records. This approach provides the user with a more accurate representation of the morbidity burden of populations, subgroups, or individual patients – as a constellation of morbidities, rather than a reflection of individual diseases.

The Johns Hopkins ACG® System has a uniquely clinical perspective on health that emphasizes the inter relationship of multiple diseases or comorbidity burden to explain healthcare utilization both retrospectively and prospectively. Each individual in the population is assigned an actuarial risk prediction, which is the Adjusted Clinical Group based on their unique morbidity burden. Using this ACG® assignment as a point of reference the individual patient can be compared to the local population or to an age appropriate reference population producing a set of valuable risk scores, both concurrent and predictive. In addition to this core capability, the ACG® System delivers tools and model reports for:

- ✔ **Evaluating and representing the weight and distribution of morbidity and risk across entire populations**

- ✔ **Grouping clinically related conditions into meaningful clusters in order to understand the prevalence of these conditions in the population and for identifying specific patients or patient cohorts that might benefit from more intense clinical intervention or care management activities**

- ✔ **Generating valuable insights into trends within a population including, but not limited to, patients with emerging risk, patient at risk for high pharmacy spend, and patients with significant care coordination risk**

ATI Score

The Lightbeam ATI or "Ability to Impact" is a patent-pending Score based on a proprietary Lightbeam algorithm. The ATI technology considers social factors that include marital, employment, transportation status and many more.

Lightbeam developed this method considering extensive studies linking social and behavioral health conditions to unprecedented rises in resource utilization and costs. With the ATI Score, Lightbeam aims to identify those patients where the ability to impact outcomes is greatest. The algorithm applies data which is not typically contained in claims including the data elements listed below. The ATI Score also uses data such as variability of spend for given or similar conditions. The higher the variability of spend, the higher the ATI score. Over time, Lightbeam will continue to test and refine the ATI algorithm. In a world of limited Care Management resources, the ATI capability enables providers to maximize their tools by focusing care coordinators on the best candidates for outcome improvements.