Likelihood of Avoidable Hospital Events

Frequently Asked Questions

1. What does the “Likelihood of Avoidable Hospital Events” score mean?

This score represents the probability that a particular patient will have an inpatient hospital admission or ED visit for one of eleven potentially avoidable conditions in the near future. If the score for a certain patient is 10%, this means that, based on his or her risk factors, that patient has a 10% chance of incurring an avoidable hospital event in the coming months. This score is based on the Hilltop Pre-AH Model™ developed by The Hilltop Institute at UMBC.

2. Why does a certain patient have a very high score?

The score is a function of approximately 190 risk factors based on a patient’s clinical history, demographics, and geographic factors. The relationship between each risk factor and the likelihood of having a future avoidable hospital event is estimated in historical data, and those relationships are then applied to current data. If a patient has a very high risk score, then it is likely that he or she has several risk factors that have a large contribution to risk.

3. How is this score different from the HCC tier?

The HCC tier is based on the CMS HCC risk score, which is based on a model that uses diagnosis codes and a limited set of demographic information from a base year in order to predict expenditures over the following year. In contrast, the “Likelihood of Avoidable Hospital Events” score captures the probability that an individual will incur an avoidable hospital event in the coming months, using information about each patient’s socio-demographic, biologic, diagnostic, and health care utilization history, as well as any relevant environmental risk factors.

4. What is the best way to use this risk score?

Providers can use this prioritized list in addition to their clinical judgement to direct the care team toward appropriate interventions. This score is intended to augment clinical judgement so that users can easily identify the patients at the highest risk of incurring a future avoidable hospital event.

5. How often should I check this risk score?

This score will be updated once per month, usually mid-month.

6. How should I interpret the “reasons for risk”?

The reasons for risk are the top actionable risk factors underlying each patient’s predicted risk of incurring a future avoidable hospital event. It is important to note that these are not necessarily causal; that is, just because a patient has a certain risk factor does not mean that the risk factor causes her to have increased risk of incurring an avoidable hospital event. However, these risk factors have been statistically validated as being strongly associated with increased risk of incurring an avoidable hospital event and can equip providers and care managers with a useful starting point in the delivery of advanced primary care to high-risk patients.
7. Who should I ask when I have a question?

First, please consult the documentation in the “help” tab. The risk score is addressed extensively in “Pre-AH Risk Score Specifications” and “Pre-AH Report Quick Reference.” Please submit any questions to mdh_pcmodel@maryland.gov. If you are transmitting PHI via email, please be sure to use your organization's digital encryption service.