



# Discharge Prioritization Scoring Report:

## AI-driven Framework for Length of Stay Management

The Discharge Prioritization Scoring (DPS) Report is part of the Predictive DRG (pDRG) package available as a supplementary feature set for CORTEX®, XSOLIS' Precision Utilization Management platform. The CORTEX platform utilizes artificial intelligence and machine learning models, fed by a broad spectrum of patient data and clinical information, to provide insights and predictions that drive workflow efficiency and reduce administrative burden. The DPS Report furthers the value of the CORTEX platform by bringing forth data and insights targeted toward helping prioritize and inform discharge planning workflows and manage LOS.

The DPS Report was designed to provide an additional layer of LOS management support through predictive analytics that help:

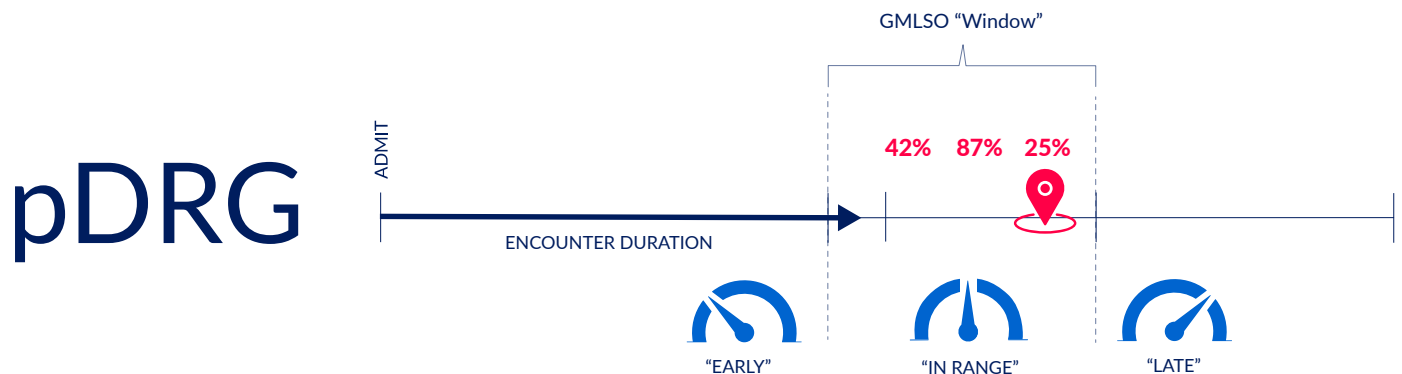
- Establish a context for comparing current LOS against a likely GMLOS range, based on predicted DRG, and
- Offer a method of prioritizing discharge planning tasks by predicting likelihood of near-term discharge.

## Predicting DRG

XSOLIS' Predictive DRG (pDRG) model pioneered the use of clinical data to predict the DRG codes and GMLOS data most likely to be associated with an encounter-in-process. Powered by CORTEX artificial intelligence, the pDRG model begins to generate predictions for the most likely billed DRG codes within 24 hours of admission – not days after the patient has left the hospital. The AI engine behind pDRG continually assesses and updates predictions throughout the visit as the amount of available information and clinical documentation increases.

## Contextualizing LOS

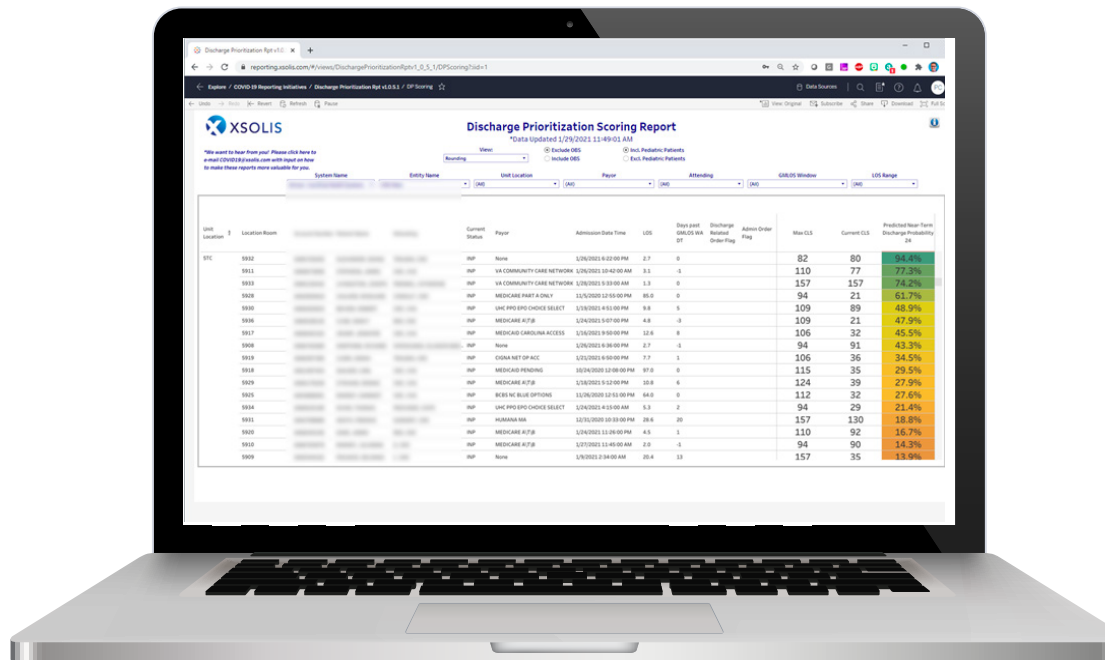
XSOLIS clients indicated a primary interest in the pDRG model as a means of insight into the potential GMLOS, which creates an administrative context for comparison to the expected LOS for an active encounter. To provide this type of context, XSOLIS developed a GMLOS range based on the top three mostly likely DRGs as indicated by the pDRG model. These three points in the GMLOS range act as predictive windows against which the current encounter can be evaluated. This kind of comparative context for LOS can help highlight unusual cases or can be useful in driving conversations about discharge readiness.



## Prioritizing Near-Term Discharges

Alongside the administrative GMLOS range offered by the pDRG, the DPS Report also employs a predictive model to identify patients that are likely to discharge within the next 24 hours, the p24 model. An AI and machine learning model that utilizes available clinical documentation and orders, the p24 model generates predictions about each patient's likelihood of discharge within the next 24 hours and allows the census to be prioritized based on that probability.

XSOLIS has measured the accuracy of that prediction by using encounter data and comparing predictions to actual discharge date and time. This accuracy analysis resulted in the grouping of p24 model predictions into color coded categories of likelihood, to improve the ease of implementing and operationalizing this report.



## Linking Analytics to Action

Powered by CORTEX data and analytics, and similarly designed to put data to work in ways that help alleviate administrative burdens and allow clinicians to focus on true clinical analysis, the DPS Report offers a flexible presentation of the patient census and relevant data that can be viewed electronically, downloaded to be shared across teams, or printed and taken on rounds. Viewing the report within the CORTEX Reporting Suite allows for access to up-to-date data and offers a variety of options for how to view the report: by unit or room, by attending, or by GMLOS window – to support different workflows.

In the census view of the report, users have access to the patient dashboard page in CORTEX.UR as well as the drilldown page within the Reporting Suite with more data about the patient that may be relevant to discharge planning and prioritization. The features, formatting, and data insights offered within the DPS Report come together to blend operational and clinical elements that can add both efficiency and deeper insight into discharge planning workflows and LOS management initiatives.



 xsolis.com

 Nashville, Tn

Use the DPS Report to help prioritize your discharge planning census, focus on key data points to support your decision making, and explore using new and unique ways to utilize clinical information in CORTEX to increase workflow efficiency. Please visit [xsolis.com](https://xsolis.com) to learn more or schedule your demo.