

Chronic Illness & Disability Payment System (CDPS)

CDPS+Rx is a logarithmic regression diagnostic (ICD-10 codes) and pharmacy (NDC codes) based predictive model grouper that was developed by University of California Department of Family and Preventive Medicine to predict medical cost consumption for the next one year. The higher the cost the higher the predicted severity. CDPS+Rx was built using Medicaid claims data and therefore predicts most accurately the cost for Medicaid patients. The grouper has sub-models available for prospective and concurrent predictions although for the purposes of future risk we exclusively use the prospective model. Amongst both the prospective as well as concurrent categories separate models are available for Adults, Children and Disabled Adults and Children.

CDPS includes 20 major categories of diagnoses, which correspond to body systems or type of diagnosis. Most of the major categories are further divided into several subcategories according to the degree of the increased expenditures associated with the diagnoses. For example, diagnoses of the nervous system are divided into three subcategories for high-cost, medium-cost, and low-cost conditions. Rx includes 15 major categories that can be used to calculate more precise risk in the absence of a diagnostic category existing in the medical claims record but existing in the pharmacy claim record.

CDPS+Rx is fully integrated into GuidingCare to be used alone or in combination with other risk measures to calculate a risk score representing the risk for future healthcare cost. The CDPS algorithm is run on a regular cadence, usually monthly, on the target population using the medical claims data as well as the pharmacy claims data already loaded into the GuidingCare database. A risk score is tabulated on each member and then the members are rank ordered based on the calculated risk score. GuidingCare has configuration available which assigns a stratification grouping to each member according to their score: critical, high, medium, or low risk.

There is also functionality in GuidingCare that allows the health plan to “fine tune” the CDPS risk score by also considering additional risk elements such as Health Risk Assessment (HRA) scoring, counts of identified gaps in care, or other external risk elements such as CMS HCC scores or other commercial risk scores (ImpactPro, Johns Hopkins ACG). These factors can be blended with the CDPS score with user defined weightings to tailor a risk score specific to that health plans population.