

Problem Definition

The problem list in EPIC provides a centralized source of patient medical conditions that informs medical decision making. This is especially important for COVID-19 patients where risk scores such as the “4C score” inform care.

Aims For Improvement

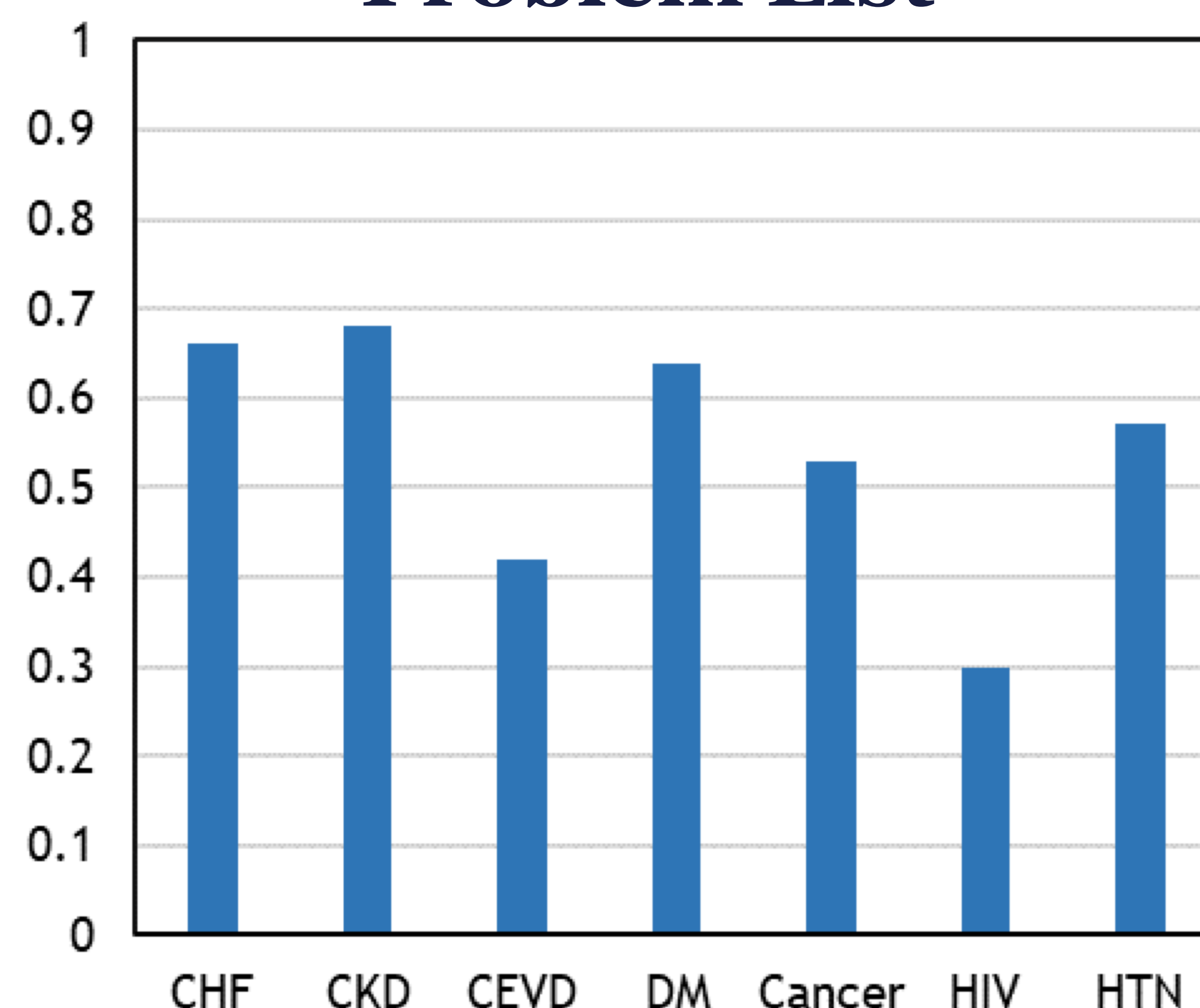
The goal of this study was to identify the accuracy of the problem list and identify areas for future improvement.

Intervention

In a cohort of 426 patients with COVID-19, the problem list was filtered for entries that were recorded on or before the day of admission. The filtered list was compared to a manual chart review of patient H&Ps, discharge summaries, and problem list.

Measurements/Results

Figure 1: Sensitivity of the Problem List



The problem list on day of admission had an average sensitivity of 0.58 for the following major comorbidities: heart failure (CHF), cerebral vascular disease (CEVD), chronic kidney disease (CKD), diabetes mellitus (DM), cancer, HIV, and hypertension (HTN). HIV had the lowest sensitivity (0.30), and chronic kidney disease had the highest (0.68).

Next Steps and Lessons Learned

In the short-term, the problem list is insufficient to inform comorbidity, and providers should read H&Ps and progress notes for more complete patient information.

Future investigations should identify the inadequacies of the problem list and whether it affects patient outcomes. Assessing time on task for providers to obtain adequate past medical history may also be of benefit.

Steps to improve the reliability of the problem list include securing provider “buy-in” to updating the problem list and/or exploring “smart” solutions in EPIC to link patient notes to the problem list so as to not further burden clinicians with clerical tasks.