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## IMPLEMENTING PATIENT REPORTED OUTCOMES (PROS) FOR MENTAL HEALTH SCREENING THROUGHOUT A HEALTHCARE SYSTEM

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**Objective:** The use of Patient Reported Outcomes (PROs) to screen for mental health has traditionally been implemented through a manual process of paper and pencil with little standardization throughout a Healthcare System. Patients are typically screened when the provider identifies them as having a need; many patients are not screened. As we move forward into an era of health technology we can leverage this capability to provide a standardized health outcomes assessment using PROs for mental health screening to all patients. We investigate the rate of identification of depressive symptoms in patients before and after deployment of a standard technology-based screening.

**Methods:** The University of Utah has over 1 million ambulatory visits per year with over 400,000 unique patients. We currently administer the PROMIS Depression v1.0 instrument as part of a standard PRO assessment to all patients. We customize the time between consecutive repeated PRO assessments based on specialty preference to minimize patient burden, while maximizing relevant data for clinicians. Collected data resides within the electronic health record and is displayed in tabular and normalized graphical forms. We used ICD-10 codes to identify patients diagnosed with depression and anti-depressant prescription to identify treated patients. Summary statistics were generated using R (Version 3.3.2).

**Results:** At the end of year one, 48,926 patients were seen in practices that used the automated PROs and 16,046 unique patients were screened using an automated PRO platform. These patients generated 22,042 observed scores. A concurrent manual process of screening using the PHQ-2 or PHQ-9 was also used during this timeframe. In these practices, XXXX patients were seen. The PHQ-2 screened 2,543 unique patients with 2,904 scores and the PHQ-9 screened 7,289 patients generating 11,814 scores. There were 911 unique patients who received the automated PRO platform using PROMIS Depression and the PHQ-2 or PHQ-9. Of the patients screened, 1,297 were identified as at risk using the automated PRO platform, which accounts for 1.37% of the 94,488 eligible patient visits. With the manual process, 2,926 were identified as at risk, but this accounts for just 0.7% of the 408,926 eligible patient visits. When comparing the automated platform (PROMIS Depression) to the manual process (PHQ-9), the instruments agreed on the screening results 78% of the time. 66.4% of the patients identified as at risk for depression using the PROMIS Depression or using the PHQ-9 did not previously have a diagnosis of depression or prescription for an antidepressant.

**Conclusions:** The use of an automated PRO platform for mental health screening enables a clinician to identify patients at risk that may have otherwise gone undetected. Our automated platform was able to screen more unique patients in the same time frame as compared to a manual process even with implementation of the automated process in just under 50% of our total clinics' appointments. By implementing PROs in all clinics, we hope to identify our total population of patients at risk for mental health issues.

### Biography

Jenny works as a project implementation lead for the University of Utah Health Professional Data and Analytics team. She oversees the training and implementation of the patient-reported outcomes project throughout the University's health care system. Jenny has a strong interest in community health, improving patient quality of life, and serving Utah's vulnerable populations through improved access to health care. Her master's thesis focused on health care accessibility for low income women in Utah and improvements needed from the health care system and state. Jenny holds a bachelor's degree in public health from Brigham Young University and a dual master's degree in health care administration and public administration from the University of Utah.

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