PROJECT INFORMATION

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Measuring the Effects of Social Risks on Patient Health Outcomes -- A PCORnet® Study

Principal investigators

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Organization

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What was the project about?

Quality measures assess how well healthcare providers deliver care. Examples of these measures include patient health outcomes like blood sugar control or how often patients go to the emergency room, or ER. These measures usually take into account how sick patients are by looking at how many health conditions a patient has and how severe they are.

Social risks also affect patient health outcomes. These risks may include unstable housing, income, or food. But quality measures don't currently account for social risks.

In this study, the research team wanted to learn how health problems and level of social risk affect quality measures. To do this, the team combined patients' health data with social risk data about their neighborhoods.

What did the research team do?

The research team used patient health data from community health centers. The data included health records and insurance claims for 73,328 patients with diabetes and 988,106 patients with Medicaid. Using these data, the team looked at the number and severity of patients' health problems; they also looked at blood sugar levels and ER visits.

Then the research team linked the patient health data to data about social risks in the patients' neighborhoods. Using data on seven social risks, such

as unemployment, poverty, and overcrowded housing, the team calculated a social deprivation index, or SDI, score. Patients who lived in an area with more social risks had higher SDI scores.

Next, the research team looked at how patients' health problems and SDI affected their blood sugar control and number of ER visits.

Clinicians, healthcare staff, and patients helped design the study.

What were the results?

Patients who had multiple or severe health problems were likely to have more ER visits but not poor blood sugar control.

After accounting for the number and severity of health problems, patients who lived in neighborhoods with more social risks were more likely to have poor blood sugar control. They were also more likely to have ER visits.

What were the limits of the project?

Patient health data came from community health centers. Social risk data were from the neighborhoods where patients lived and not from individual patients. Results may differ with other types of data.

Future studies could look at how including patients' own social risk affects assessments of quality of care.

How can people use the results?

Health systems can include data on social risks to improve how well measures assess quality of care.

To learn more about this project, visit www.pcori.org/SearsCottrell371.

The PCORnet® Study reported in this results summary was conducted using PCORnet®, the National Patient-Centered Clinical Research Network. PCORnet® is intended to improve the nation's capacity to conduct health research, particularly comparative effectiveness research (CER), efficiently by creating a large, highly representative network for conducting clinical outcomes research. PCORnet® has been developed with funding from the Patient-Centered Outcomes Research Institute® (PCORI®).