



Peterson Health Technology Institute (PHTI): Assessment Area Brief Diabetes Remote Patient Monitoring

Summary

The Peterson Health Technology Institute (PHTI) is conducting an assessment of diabetes remote patient monitoring (RPM) solutions that use or include non-continuous glucometers.

PHTI Overview

PHTI provides independent evaluations of innovative healthcare technologies to improve health and lower costs. Through its rigorous, evidence-based research, PHTI analyzes the clinical benefits and economic impact of digital health solutions, as well as their effects on health equity, privacy, and security. These evaluations inform decisions for providers, patients, payers, and investors, accelerating the adoption of high-value technology in healthcare.

PHTI Assessment Process and Topic Selection

PHTI will evaluate evidence about the clinical and economic impact of these technologies using its [assessment framework](#) that was custom designed for digital health tools. PHTI's goal is to provide information to guide healthcare purchasers' decision making about coverage and payment of these innovative products. The assessment report will be released publicly and freely available online early next year.

PHTI solely determines its selection of assessment areas. PHTI focuses on health technologies designed to replace or augment traditional care delivery, including digital therapeutics, chronic care management apps, and remote patient monitoring.

PHTI identifies topic areas by evaluating four key areas:

- Burden of disease to the healthcare system
- Investment and innovation in digital health technology
- Body of evidence
- Stakeholder interest (purchasers, providers, and patients)

Why Assess Diabetes Remote Patient Monitoring (RPM) That Use or Include a Non-Continuous Glucose Monitor?

Diabetes care requires significant self-management and support to monitor and control one's blood glucose—measured through A1C levels.

In recent years, many digital health companies have been launched to support the self-management of diabetes through RPM using blood glucose measurement and patient engagement. These digital health solutions aim to improve blood glucose control, as well as secondary benefits that may include weight loss, changes in prescription drug use, and improved mental health, cardiac health, and joint pain.

PHTI will assess diabetes RPM solutions that use or include non-continuous/ intermittent glucometers, as this is the most prevalent type of glucose monitoring method today.

Burden of Disease

In the U.S., approximately 11.3% of the population or 37.3 million people have diabetes.¹ Diabetes is the eighth leading cause of death and is more common among people with lower socioeconomic status or people who belong to certain racial and ethnic minority groups.² Prevalence of type 2 diabetes among adults is expected to nearly double by the year 2030, and the number of US adults with diagnosed diabetes is expected to triple by the year 2060.³ Diabetes is the most expensive chronic condition in the United States, costing \$327 billion each year.

Investment and Innovation in Digital Health Technology

There are a number of digital health technology companies offering diabetes-related treatment or management, with over 33 companies having at least \$10 million in funding.⁴ A sub-set of identified companies have a range of integrated product offerings that meet the goals of the PHTI evaluation criteria.

Body of Evidence

Diabetes RPM technologies intended to deliver clinical benefits and produce financial savings. In addition, there is a large evidence base consisting of hundreds of studies on the efficacy and impact of these products. More information about the systematic literature review for this assessment area can be found [here](#).

Stakeholder Interest

Given the burden of the disease, payers, providers, and patients are eager to find innovative opportunities to provide high quality diabetes care at a lower cost. There are multiple technologies, including wireless connected blood glucose meters (BGM) with mobile or web applications, available in the US market.⁵ These BGMs differ in accuracy, ease of use, cost, accessibility, and features.⁶

Next Steps

Over the next few months, PHTI will be engaging with subject matter experts, developers, health economists, and other partners to complete assessments for release in Q1 2024.

¹ Centers for Disease Control and Prevention. National Diabetes Statistics Report. Accessed August 12, 2023. <https://www.cdc.gov/diabetes/health-equity/diabetes-by-the-numbers.html>

² Centers for Disease Control and Prevention. Advancing Health Equity. Accessed August 12, 2023. <https://www.cdc.gov/diabetes/health-equity/index.html>

³ Lin J, Thompson TJ, Cheng YJ, et al. Projection of the Future Diabetes Burden in the United States Through 2060. *Popul Health Metr.* 2018;16(1):9.

⁴ Rock Health Digital Health Funding Database.

⁵ U.S. Food and Drug Administration. Recently-Approved Devices. Accessed August 12, 2023. <https://www.fda.gov/medical-devices/device-approvals-denials-and-clearances/recently-approved-devices>.

⁶ U.S. Food and Drug Administration. Blood Glucose Monitoring Devices. Accessed August 12, 2023. <https://www.fda.gov/medical-devices/in-vitro-diagnostics/blood-glucose-monitoring-devices>.