

Economic Impact of Digital Health Solutions: Insights from Peterson Health Technology Institute Assessments

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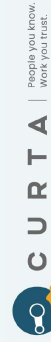
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Objective

- Digital health solutions have the potential to improve health and lower costs, but purchasers must consider the evidence of these solutions' clinical benefit and economic impact on healthcare spending.
- The Peterson Health Technology Institute (PHTI) addresses this gap through five independent, evidence-based assessments.
- We aimed to provide an overview of methods and synthesis of findings across economic analyses of five assessments.

Methods

- The analysis set included five PHTI assessments published through September 2025:
 - Diabetes (DM)
 - Musculoskeletal (MSK) disorders
 - Hypertension (HTN)
 - Anxiety & Depression (AD)
 - Opioid use disorder (OUD)
- We reviewed assessments to characterize:
 - The modeling approach used in the economic analyses
 - The use of findings from the clinical assessments
- Digital health solution pricing
- Key economic impact results and conclusions



Results

Economic Assessments at a Glance



Condition	Solution Category	Modeling Approach	Economic Impact on Net Spending
Diabetes 8 Digital Health Solutions	Remote Patient Monitoring	Indirect	Increased
	Behavior & Lifestyle Modification	Indirect	Increased
	Nutritional Ketosis	Indirect	Mixed: Long-term
Musculoskeletal Disorders 8 Digital Health Solutions	App-Based Exercise Therapy	N/A	Insufficient data
	Physical Therapy-Guided	Direct	Decreased
	Remote Therapeutic Monitoring-Augmented Physical Therapy	Direct	Increased
Hypertension 11 Digital Health Solutions	Medication Management	Indirect	Mixed: Long-term
	Blood Pressure Monitoring	Indirect	Increased
	Behavior Change	Indirect	Increased
Anxiety & Depression 15 Digital Health Solutions	Self-Guided Content	Indirect	Decreased
	Prescription Digital Therapeutics	Indirect	Decreased
	Blended-Care	Indirect	Increased
Opioid Use Disorder 16 Digital Health Solutions	Medication-Focused	Indirect	Mixed: Comparable
	Digital Wraparound	Indirect	Increased



References:
 1. PHTI. Digital Diabetes Management Solutions: Health Technology Assessment. Version 1.1.1. Published March 2024.
 2. PHTI. Virtual Musculoskeletal Solutions: Health Technology Assessment. Version 1.1. Published June 2024.
 3. PHTI. Digital Hypertension Management Solutions: Health Technology Assessment. Published October 2024.
 4. PHTI. Virtual Solutions for Depression and Anxiety: Health Technology Assessment. Version 1.1.1. Published May 2025.
 5. PHTI. Virtual Solutions for Opioid Use Disorder: Health Technology Assessment. Published September 2025.

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Modeling Approaches

- The most common approach connects digital health solutions to cost impacts by first linking the solution impact to clinical outcomes from identified clinical studies via a systematic literature review, then translating those outcomes into costs using external data on the association between the outcomes and costs.
- The second approach is used when clinical-to-cost evidence is lacking but health care resource use (HCRU) impact evidence is strong.

- This approach estimates the cost impact by modeling **direct** impacts of the solution on health care resource use, which are then multiplied by unit costs.

1) Indirect (11 of 14 categories)



2) Direct (2 of 14 categories)



Results

- 51 companies were assessed across five PHTI reports
- The majority (11/14) of analyses used the indirect modeling approach, whereas two used a direct approach
- The time horizon ranged from 1 to 3 years, with most using a 1-year time horizon.
- 7 out of 14 digital health solution categories increased net spending; three were cost-saving; two showed mixed time-dependent results; one lacked pricing data, and one showed comparable results.

Conclusion

The economic analyses supporting PHTI assessments demonstrate that the economic impact of digital health solutions varies widely by condition and solution type, with most categories increasing net spending — findings that can inform more evidence-based purchaser decision-making.