HEALTHCARE INNOVATION TECHNOLOGY LAB (HITLAB)

Usability and Effectiveness Study of HelixVM Healthcare Market-place Platform

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ABSTRACT

Currently, there is a huge burden on the healthcare system to increase capacity and this is plagued with challenges owing to the limited number of providers and resources. The issues are made worse by inconsistencies in procedures before and after appointments, manual processes for bringing patients onboard and providing treatment, and communication barriers that hinder patient care and compliance. Notwithstanding these obstacles, there exist prospects for enhancement, augment healthcare accessibility, standardize protocols, and optimize workflows.

HelixVM has developed the medical marketplace platform that makes it convenient for patients to access quick prescription and medical opinion from anywhere irrespective of the patients' insurance status. Using the platform, patients can receive a prescription in minutes with or without video visit with a healthcare provider.

HITLAB conducted a usability and effectiveness study to dive deeper into this advancing area of healthcare and understand the nuances from the perspective of patients and providers. This will aid further refinement of the platform and provide valuable insights into the world of asynchronous medicine and healthcare delivery.

OBJECTIVE

Evaluate the usability and effectiveness of the HelixVM 's medical marketplace platform from the perspective of patients and providers.

STUDY METHODS

Study Design:

- Mixed-method study design involving surveys of patients and providers followed by in-depth, one-on-one structured interviews of providers.
- All patients and providers who are registered, and active users of the platform were recruited in the study.
- Total of 102 patients, 12 providers were recruited for the survey phase of the study, and 10 providers were recruited for in-depth one-on-one structured interviews that lasted between 60 and 90 minutes per provider.
- A total of 15 questions covering over-arching themes were asked by HITLAB research staff in the interview.
- These questions covered aspects of HelixVM's value propositions and important considerations of asynchronous medicine in general.

Data Analysis:

- Survey data was analyzed using descriptive statistics and exploratory factor analysis.
- Interview data was analyzed using methods of narrative, thematic and quantitative analysis. All data was analyzed for qualitative and quantitative responses - where the responses can be categorized as a Yes or No or Not sure were represented as percentages.
- Thematic analysis revealed key take-aways from the qualitative responses.





RESULTS

Providers Responses

• 90% of providers agreed that HelixVM's triage SOAP notes were crucial in saving time.



Challenges and Improvements Suggested by the Providers



Provider responses from the qualitative interviews





Patient Responses

- 86% of patients are satisfied with HelixVM, and 89% plan to use the services again.
- way to receive care.





- The HelixVM triage input should remove differential ICD codes to reduce professional liability exposure Would you like to have accurate ICD coding and treatment plan suggestions? If you could create your own library of triage and treatment otocols, would you be more comfortable with using AI diagnose and treat patients? Would you like to have a drop-down function to insert HelixVM soap note into EMR? Would you like a smartphone-based app for consultations integrated in EMR? Would you like the HelixVM video technology linked into EMR? Is there anything missing in the patient questionnaire presented by the software to the patient during intake? Is accurate (objective) pharmacy information from a bona fide clearinghouse missing from HelixVM SOAP notes? Is there anything missing in HelixMM SOAP notes that you would like to be added?
- Will you like something improved to enhance efficiency of treating/interacting with patients?

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• More than 90% of patients agreed that HelixVM enhances healthcare access, reduces time, and is an acceptable



CONCLUSIONS

- Overall, HelixVM was found to significantly improve healthcare accessibility, efficiency in patient management and collaboration, transcending geographical boundaries.
- Overall, 86% of patients are satisfied with HelixVM and 89% will use the services again.
- More than 90% of patients agreed that HelixVM improves access to healthcare, saves time and that the platform is an acceptable way to receive healthcare.
- P-values for differences in responses for all patient survey questions met statistical significance.
- Results from factor analysis show a higher propensity of female gender in middle age groups whose encounter type is fast-track, self-report medium level of tech-savviness and residing in the South regions of US rate the platform more positively.
- 90% of providers agreed that HelixVM's triage SOAP notes were instrumental in saving time.
- 50% providers expressed full confidence in leveraging AI decision support for improving patient-provider interactions and medical triage.
- Providers gave suggestions to further optimize HelixVM's capabilities. These included improving triage with AI for better clearing, addressing patient concerns, optimizing orders, and preventing incomplete patient charts.