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Demonstration of InsureEZ: An AI-Powered Solution to Address Health Insurance Literacy Disparities

Introduction

Health insurance literacy remains a significant barrier for millions of Americans, particularly among vulnerable populations. Many individuals struggle to navigate the complexities of insurance policies, leading to poor health outcomes and financial strain. Traditional resources often fail to cater to diverse demographic needs, exacerbating disparities in health insurance literacy. InsureEZ, an AI-driven platform, addresses this critical issue by simplifying health insurance policies and empowering users to make informed decisions. By bridging gaps in understanding, InsureEZ aims to reduce barriers, improve health outcomes, and promote financial equity

nationwide. This paper outlines the technology, impact, and future goals of InsureEZ, demonstrating its potential to transform health insurance literacy across the United States.

Technology

InsureEZ is a web-based application. The system is built on a foundation of Python and large-language AI models, such as ChatGPT-4, to streamline data collection, processing, and user interaction. The core features of InsureEZ include a Browse Plans Tool (Figure 1), which allows users to compare various health insurance plans based on personalized criteria, ensuring they find the best fit for their needs. Additionally, the Learn About Insurance module provides simplified explanations of insurance terms, coverage options, and policy comparisons. The Resources Page offers a curated library of articles, FAQs, and interactive tools designed to enhance user understanding of health insurance. These features are designed to address the diverse needs of users, from those new to health insurance to those seeking more advanced guidance.

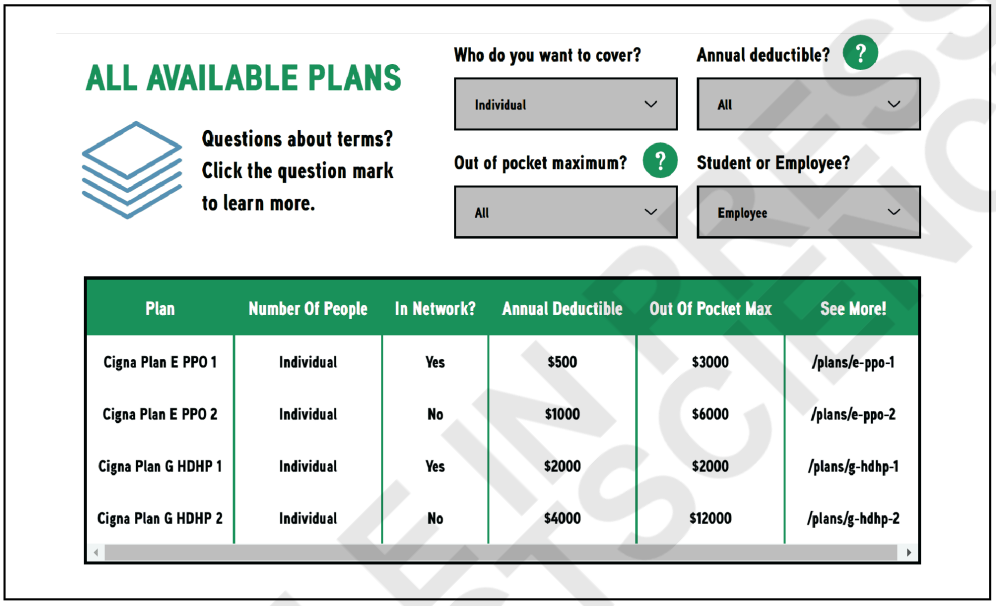

Figure 1. An example of the compare plans functionality in the 'Browse Plans' tool.

Figure 1 Browse Plans Tool

The technical framework of InsureEZ is built upon several key components. Python processes and integrates insurance data from multiple sources, keeping information comprehensive and up to date. The combination of Python and ChatGPT4 ensures the platform can efficiently gather, analyze, and present health insurance data without needing manual work. The platform's user interface is designed for ease of use for individuals with varying levels of technical proficiency. Currently, InsureEZ is available as a website, with plans to expand into mobile app platforms to further increase accessibility.

User Impact and Validation

To assess the efficacy of InsureEZ, a preliminary study was conducted with students and faculty at Rocky Vista University. Survey results indicated that a majority of participants rated the website positively, citing improved understanding of health insurance. The Browse Plans tool, Learn About Insurance module, and Resources page were all deemed effective in enhancing user knowledge. Users expressed greater confidence in making informed insurance decisions after interacting with the platform.

Additionally, InsureEZ was presented at the Rocky Vista University Shark Tank Microgrant Competition, where it was awarded funding for further development. It later won first place at the OMED 24' student poster competition, validating its significance and potential for national impact.

Future Ambitions

The InsureEZ team is dedicated to constantly improving and expanding the platform. Current efforts focus on streamlining the user interface, augmenting the health insurance database, and improving educational tools. In the long run, the team plans to develop a mobile app for easier access and to reach underserved demographic groups. Additionally, the team acknowledges that non-English speakers make up a significant portion of the underserved population and plans to incorporate multiple languages into future iterations of their website to accommodate non-English speakers. They also aim to partner with healthcare providers and insurers to integrate InsureEZ into their services. These efforts will help InsureEZ become a leading tool for health insurance education, making it easier for patients and providers to understand and navigate the healthcare system.

Acknowledgement

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References

1. InsureEZ Website. HOME | My Site. Available from: https://www.insureez.org/
2. InsureEZ Team. OMED 24' Poster. 2025. Available from: https://amsafoundation.org/wp-content/uploads/gravity_forms/10-064f01fce81edffc73cd6f84d381f529/2025/01/OMED24Poster.pdf
3. InsureEZ Team. Shark Tank Presentation. 2025. Available from: https://amsafoundation.org/wp-content/uploads/gravity_forms/10-064f01fce81edffc73cd6f84d381f529/2025/01/Shark-Tank-Presentation.pdf
4. InsureEZ Team. InsureEZ Tech Demo Video. 2025. Available from: https://amsafoundation.org/wp-content/uploads/gravity_forms/10-064f01fce81edffc73cd6f84d381f529/2025/01/Insure-EZ-tech-demo__94pct_smaller.mp4