



(RESEARCH ARTICLE)



## WOUNDWATCH: A Mobile Monitoring System to Enhance Diabetic Wound Care through AI-Assisted Risk Detection and Remote Medical Support at Tupi, South Cotabato

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### Abstract

The presented study is about WoundWatch, an AI-based mobile monitoring system that aims to transform diabetic wound care by the means of infection risk detection at the earliest stage, automatic care reminders, and remote medical consultation. The system employs advanced image analysis and a friendly mobile interface that allows patients to frequently check the wound status, get prompt alerts, and communicate with healthcare providers for immediate guidance. Wound Watch is equipped with features for patients having different levels of digital literacy, empowering them with self-management and better compliance with wound care protocols. The usability test involving 100 diabetic patients showed that the system was very easy to use (around 84%), users were highly involved, and they expressed their satisfaction with the system's convenient functionalities and remote support. Some users pointed out that they experienced problems with system responsiveness and navigation of advanced features, thus, these are the areas where development is planned. The main findings demonstrate that Wound Watch is instrumental in building patient confidence, facilitating early interventions, and leading to better wound care results. This study serves as a bridge between AI technologies and human-centered design with the aim to improve chronic disease management in low-resource settings, thus, it has substantial potential for helping patients manage wounds better.

**Keywords:** Diabetic Wound Care; Mobile Health; Ai Risk Detection; Remote Consultation; Human-Computer Interaction; Automated Reminders; User-Centered Design

### 1. Introduction

Human-computer interaction techniques are gradually being integrated into healthcare, particularly in the area of chronic condition management, such as diabetic wounds, which diagnostic and treatment difficulties have been increasing (Wu et al., 2020; Stefanelli et al., 2025). Chronic wounds which are those that take more than four weeks to heal constitute a major problem of health worldwide. In fact, they are frequently aggravated by such illnesses as diabetes, venous insufficiency, arterial diseases, and pressure ulcers (Jiménez et al., 2025). These persistent sores not only cause a lot of pain in patients, but also make their quality of life worse, and put a great deal of financial pressure on healthcare systems all over the world (Jiménez et al., 2025). The long healing times of such wounds require the development of new and affordable methods for remote monitoring, so as to decrease the necessity of frequent clinical visits especially for old or sick people (Yee et al., 2019; Jiménez et al., 2025).

According to (Ferreira et al., 2021; Reefs et al., 2024) in pattern recognition methods through advanced artificial intelligence to the telemedicine application enables better assessment of the medical condition remotely as well as it increases diagnostic accuracy. The invention of intelligent monitoring systems for diabetic wound care usually involves

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AI, powered risk detection and also medical guidance from a distance. The main factor in these types of systems is the implementation of good human, computer interaction principles to facilitate patient self, management, provide clinical decision support, and solve the problem of healthcare accessibility due to the patient's location. Moreover, it is expected that this strategy will facilitate the healing process of the wound and at the same time, it will help to decrease the demand for healthcare resources (Søndergaard et al., 2022; Zhang et al., 2021). The integration of ubiquitous computing with medical diagnostics provides an alternative healthcare model that can notably improve patient access and health status, especially in deprived areas (Reefs et al., 2024).

### **1.1. Research Problem**

This study introduces Wound Watch, a mobile monitoring system that facilitates diabetic patients in managing their daily wound care by detecting the infection risk at an early stage and providing remote medical guidance. The main goal of this paper is to enhance wound care adherence and the resulting patient outcomes by delivering a convenient platform that supports patients in wound monitoring and helps them get medical advice on time. Several diabetics have challenges in constantly monitoring their wounds and getting an immediate solution to their problem, most of the times, because of the limited access to specialized care and the lack of technological skills. The current solutions for wound care do not pose fewer problems to these patients, especially those with low digital literacy who live in areas that are poorly served by the health sector. Wound Watch is intended to close these gaps through the use of AI, powered infection detection, automated care reminders, and a crisis alert system, all of which were created with the user, centered design approach in order to make them accessible and attractive to users. This research is about building and testing a real, life, practical, and empowering wound care system that can lead to increased patient self, care, lowered anxiety levels, and effective communication between patients and healthcare providers, thus resulting in better management of chronic wounds and improved health conditions in diabetic populations.

### **1.2. Research Questions and Objectives**

- How does the use of Wound Watch's AI-driven infection risk detection improve early identification and management of diabetic wounds?
- How does the user-interface design of Wound Watch affect the usability and engagement of diabetic patients with varying levels of technological ability?
- How do Wound Watch's automated reminders, remote consultation platform, and emergency alert features impact patient adherence to wound care protocols and healthcare outcomes?

#### *Objectives*

- To develop Wound Watch as an AI-powered mobile system that facilitates early infection detection and continuous wound monitoring for diabetic patients.
- To design a user-friendly interface for Wound Watch that is accessible and engaging for patients with different technological backgrounds.
- To implement features such as automated care reminders, remote healthcare provider consultations, and emergency alerts to improve wound care adherence and timely medical intervention.

### **1.3. Justification and Significance**

This study addresses the HCI issues in the development of a mobile monitoring system, "Wound Watch," a project that aims to empower diabetic patients to self, manage chronic wound care. Wound Watch is an AI, driven infection risk detection, automated care reminders, and remote consultation tool that, when combined with a user, friendly platform, patients and healthcare providers are connected. The application interface is designed to be a tool for different levels of digital skills users, thus even people with minimum digital literacy can use the app effectively. Through its online and offline features, Wound Watch provides continuous wound monitoring and immediate medical advice, thereby solving the problems of limited healthcare access and making it easier for patients to follow their wound care instructions. This research extends HCI theory by creating new methods of healthcare technology development that are not only viable and inclusive but also sensitive to the needs of disease patients. The deliverables of this project will be a template for the creation of patient, centered digital health solutions that make self, care convenient, reduce the risk of complications, and enhance the quality of life of diabetic patients.

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## 2. Literature Review

### 2.1. AI-Driven Mobile Solutions for Chronic Wound Management: Enhancing Early Detection and Patient Engagement

AI, powered mobile devices are changing the way chronic wounds are handled by making it easier to detect the problem at an early stage and involve the patient. These solutions combine AI with mobile technology to provide more efficient, accurate, and personalized wound care for diabetic foot ulcers, for example (Ganesan et al., 2024; Jiménez et al., 2025; Kasel mi et al., 2022). While the sections before this one talked about the general effects of AI on the healthcare system, this part of the paper concentrates on particular AI, driven mobile technologies that have proven their effectiveness in the management of chronic wounds, especially in the area of early detection devices and methods for patient engagement. AI, powered tools for wound assessment which are usually part of a mobile application, facilitate the work of health care professionals in diagnosis, observation, and decision, making in the clinic (Stefanelli et al., 2025). The software rarely but when they do employ the state of art image processing and machine learning algorithms to extract wound features from the pictures submitted, therefore they are able to give the objective data of wound size, tissue composition, and the stages of the wound healing (Xia et al., 2024). Such mobile health (mHealth) applications enhance accessibility to specialized wound care, especially in remote areas, and empower patients through self, monitoring features (Kabir et al., 2024). Moreover, these devices generally enroll predictive models in their system to locate the regions where wounds can develop at the earliest stage, thus giving the opportunity for timely intervention and lessening the risk of complications accruing (Stefanelli et al., 2025). However, while a number of beneficial advancements in the area have been made, there still prevail issues such as effort to keep transparency of AI algorithms, the need for diversified datasets for algorithm training, and the problem of privacy and data security in the healthcare sector (Ganesan et al., 2024; Kasel mi et al., 2022).

### 2.2. User-Centered Design in Healthcare Systems: Bridging Technology and Patient Needs

Human, centered design principles play an essential role in the process of creating digital health solutions. The incorporation of these principles ensures that the tech advances are in line with the needs and capabilities of different user groups e.g., patients and healthcare providers (Timocrat, 2025). A characteristic of this approach is that it focuses on the issues of usability, accessibility, and cultural relevance which matter a lot when it comes to support systems for the vulnerable or those who have certain kinds of communication challenges (Reefs et al., 2024). These approaches through design feedback facilitate the creation of easy, to, understand interfaces and features that make patient involvement and observer compliance to treatment protocol higher. User, centered design has been a major factor in the success of chronic wound management in terms of patient outcomes by simplifying the AI, powered mobile applications so they are accessible and user, friendly, thus promoting the therapeutic regimen adherence process (Bai et al., 2024). Besides, the participation of the end, users in the building of such systems provides a way for the tech to effectively tailor the clinical workflow and patient experience scenarios in real life (Zhang et al., 2021). Iterative design helps in recognizing potential practice obstacles such as digital literacy levels or cultural preferences which, in turn, enables the pinpointing of targeted solutions to uplift the overall effectiveness and acceptance of the system. The comprehensive view here not only contributes to the better system adoption but also is a great factor in the fair distribution of AI, assisted technologies as it makes them more responsive to diverse user requirements (Ganesan et al., 2024). One of the best illustrations of such a strategy can be found in AI applications in chronic wound care, where complex algorithms scrutinize the imaging data to evaluate the wound severity and make the healing process prediction, essentially providing the clinician with decision support (Reefs et al., 2024) (Liu et al., 2025).

### 2.3. The Impact of Interactive Features on User Engagement and Remote Wound Care in Wound Watch

One instrumental feature of AI, driven mobile health apps is interactivity. The AI, powered app Wound Watch enhances user engagement through interactive features like tailored feedback, educational content, and communication tools. These interactive elements enable users to have the power in their hands, which is treatment adherence and sharing the responsibility of healing (Reefs et al., 2024). For instance, smartphone, based systems like the Reduced Res Net, 18 model can help patients to be accurate in evaluating surgical wounds and tracking granulation tissue in diabetic foot ulcers (Reefs et al., 2024). Besides that, these interactive instruments allow the unproblematic interchange of data between patients and health providers, thus giving room for the timely interventions and adjustments of the care plan based on the tracks of the wound in real, time (Hassan et al., 2023). The technology of remote monitoring enables clinicians to assess wound status and also provide guidance if the patient isn't able to come for a visit (Ganesan et al., 2024). Besides that, AI, powered wound image technologies are free from device standardization and rulers, which makes them adaptable for any clinical setting, even at home (Lo et al., 2023). So, the interplay between AI and interactive features not only lifts up the diagnostic accuracy but also makes the wound management a proactive approach to avoiding complications and, in general, elevating patient quality of life (Jiménez et al., 2025).

### **3. Methodology**

#### **3.1. Research Design**

This research aims to employ descriptive quantitative methods to assess the user engagement and satisfaction of the Wound Watch system, as well as to study the impact of its AI, powered features, user, friendliness, and remote communication functionalities on wound care adherence and patient confidence. The design features of the system, for example, infection risk detection, automated reminders, and teleconsultation capabilities, are considered as independent variables, whereas user engagement, perceived ease of use, and wound care outcomes are the dependent variables. The methodology here gives room for evaluation of users' views, usability, and the functioning of the system.

#### **3.2. Participants**

The participants will be diabetic patients with chronic wounds that need frequent wound monitoring and care. A sample of 100 participants will be chosen via purposive sampling, among which patients with different levels of technological literacy will be included. Equal consideration will be given to participants' demographics to ensure representative data.

#### **3.3. Data Collection**

Structured quantitative questionnaires with Likert-scale items will be used to collect data to measure user engagement, satisfaction, perceived usability, and confidence in wound care management using WoundWatch. Moreover, clinical data on wound status and care adherence will be gathered with proper consent. Data collection will be conducted in both clinical settings and patients' homes to be representative of real-world use.

#### **3.4. Data Analysis**

Descriptive statistics including mean scores, standard deviations, and frequency distributions will provide insight into overall user satisfaction and engagement trends. Comparative analysis might evaluate differences based on user demographics and prior experience with technology. Also, correlations between system usage and improvements in wound care adherence and health outcomes will be analyzed to indicate system effectiveness.

#### **3.5. Ethical Considerations**

The study promises to be very ethical in its research work and it will definitely follow all the rules related to human research. The participants will be given the information about the research, their decision to take part, and the privacy of their data. Consent in writing from the participant will be taken prior to the performance of data collection. To guarantee anonymity, the personal identifier will be replaced by a code. The research will also adhere to data protection rules and will take care of patients' privacy and freedom of choice during the study.

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### **4. Advanced HI Design**

#### **4.1. System Architecture**

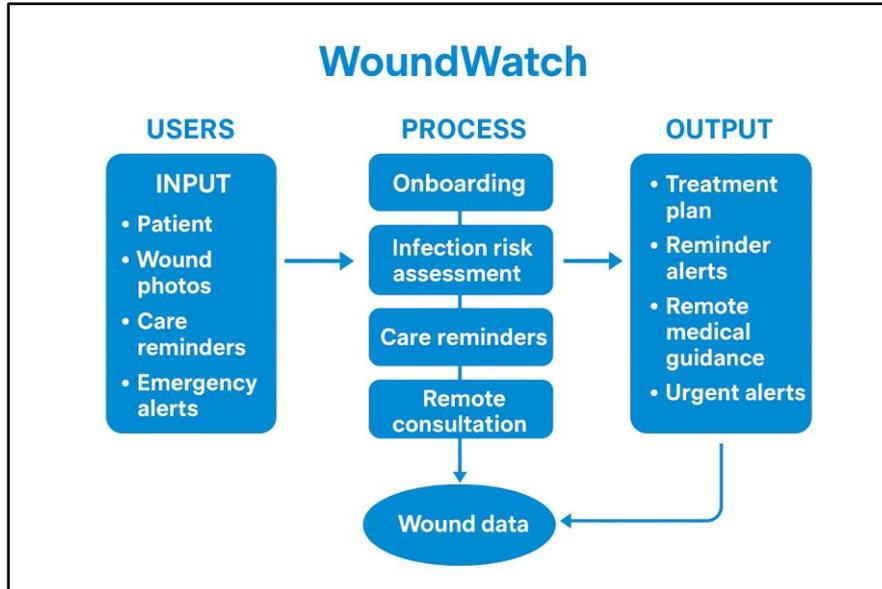
Wound Watch's advanced HCI design aims to empower diabetic patients in managing chronic wounds through an intuitive, accessible mobile platform that integrates AI-driven infection detection, automated care reminders, and remote healthcare provider consultations. The system addresses challenges in wound monitoring by simplifying complex clinical evaluations into user-friendly interactions and promoting timely medical interventions.

#### **4.2. Key Components Include**

Client Side (User Interface): The front-end application accessible via smartphones, designed with user-centered principles to accommodate users of varying technological skills. Features include simple navigation, clear visual cues for wound status, and interactive prompts for wound care tasks.

- **Infection Risk Detection Engine:** An AI-powered module that analyzes wound images uploaded by users to identify potential infection indicators, providing immediate feedback and alerts to patients.
- **Wound Data Database:** Secure storage for wound images, clinical notes, and care history linked to individual users, enabling continuous tracking of wound progression and personalized recommendations.
- **User Management:** This module handles patient registration, authentication, and profile management, accommodating different user roles such as patients, caregivers, and healthcare providers with distinct access permissions and communication channels.

- **Reminder and Notification System:** Automates alerts and reminders for wound care activities, medication adherence, and upcoming consultations to support patient compliance and reduce risks of complications.
- **Remote Consultation Interface:** Enables secure, real-time communication between patients and healthcare professionals for timely advice and wound management support, reducing the need for frequent hospital visits.
- **Backend Database and Security:** Centralized, encrypted storage managing user data, system logs, and AI model parameters, ensuring data integrity, confidentiality, and compliance with healthcare data regulations.



**Figure 1** The diagram illustrates the Wound Watch System, enabling diabetic patients to monitor wound health and connect with healthcare support through AI-driven analysis and remote consultation modules. It includes a user interface, infection risk detection engine, wound data database, reminder and notification system, and user management, all supported by a secure backend database ensuring real-time data synchronization and continuous user experience

### 4.3. Features and Functionalities

The features and functionalities of the Wound Watch system are as follows:

#### 4.3.1. AI-Driven Infection Risk Detection

Utilizes advanced AI algorithms to analyze wound images for early signs of infection, enabling timely alerts and interventions.

#### 4.3.2. Automated Care Reminders

Sends scheduled reminders to patients for wound cleaning, dressing changes, and medication adherence to promote consistent wound management.

#### 4.3.3. Remote Consultation Platform

Allows patients to communicate directly with healthcare providers for advice, follow-ups, and treatment adjustments without needing in-person visits.

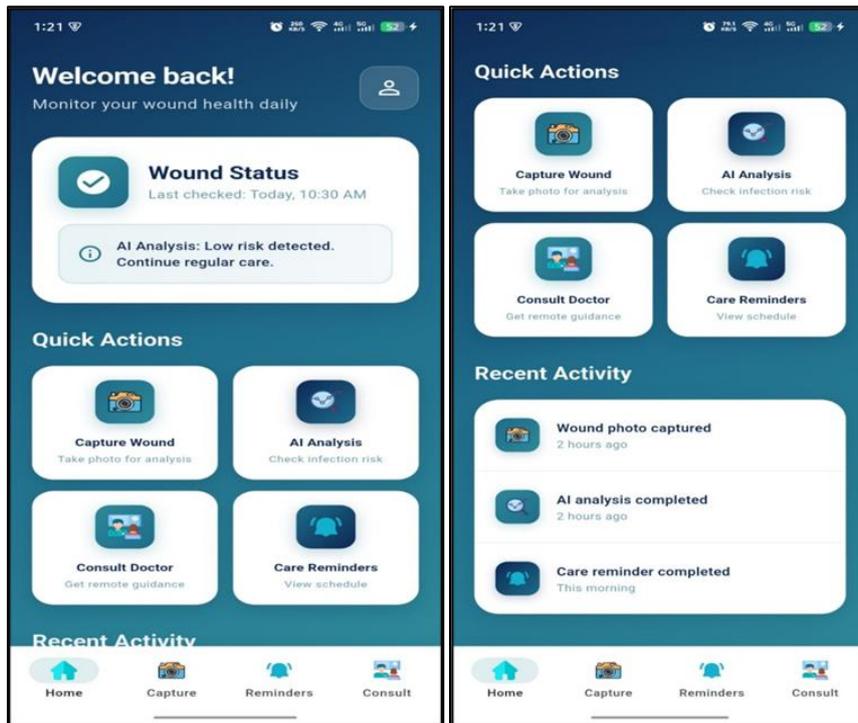
#### 4.3.4. User-Friendly Interface

Designed with simplicity and accessibility in mind, making it easy for users of all technological skill levels to navigate wound monitoring and consultation features.

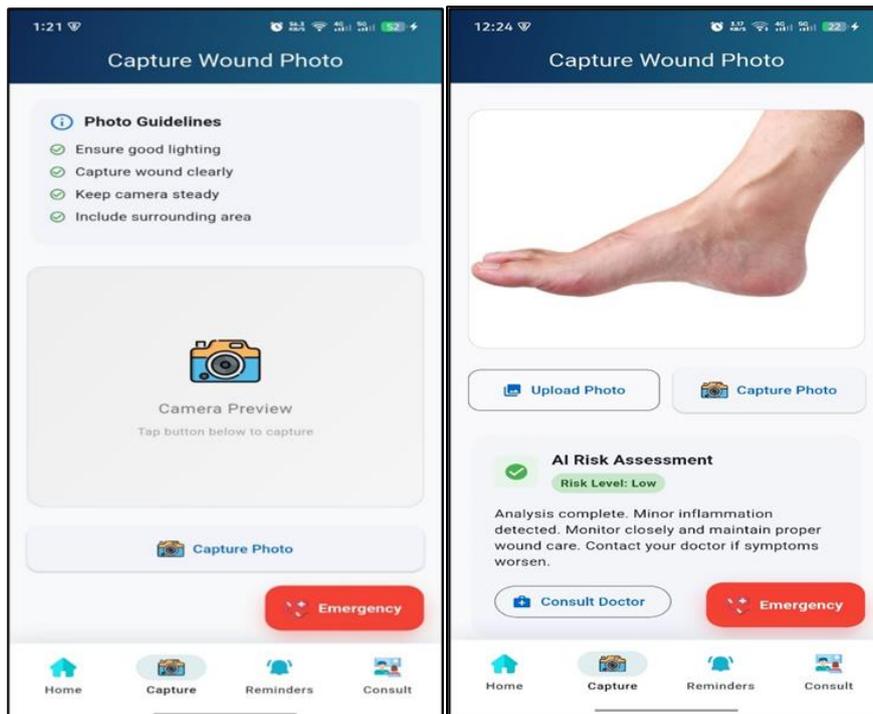
#### 4.3.5. Secure Data Management

Ensures patient data, wound images, and medical records are securely stored and synchronized in real-time for reliable access and privacy protection.

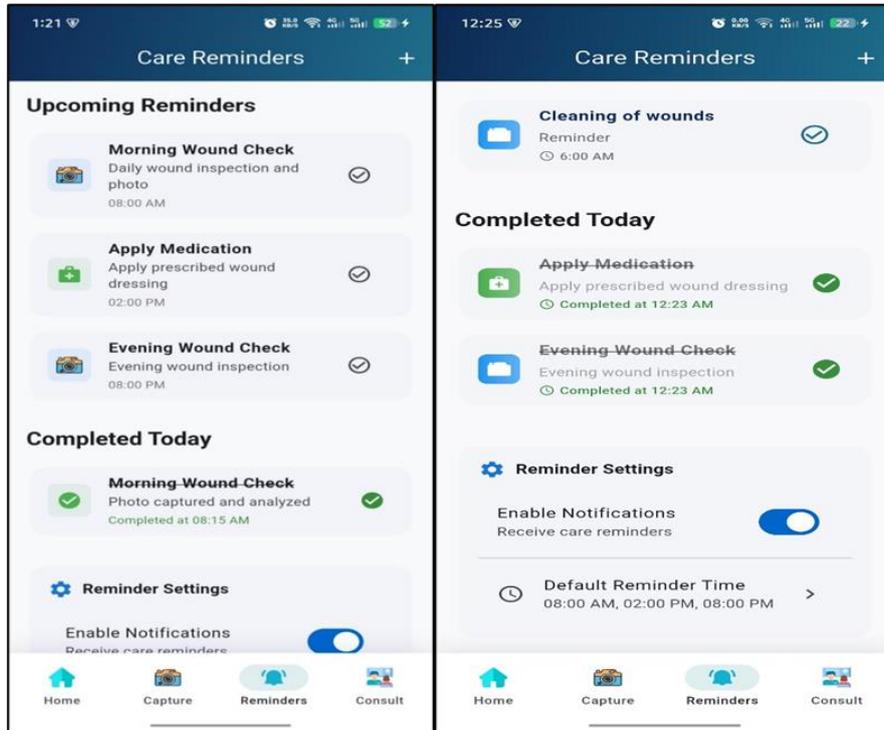
#### 4.4. User Interface Design



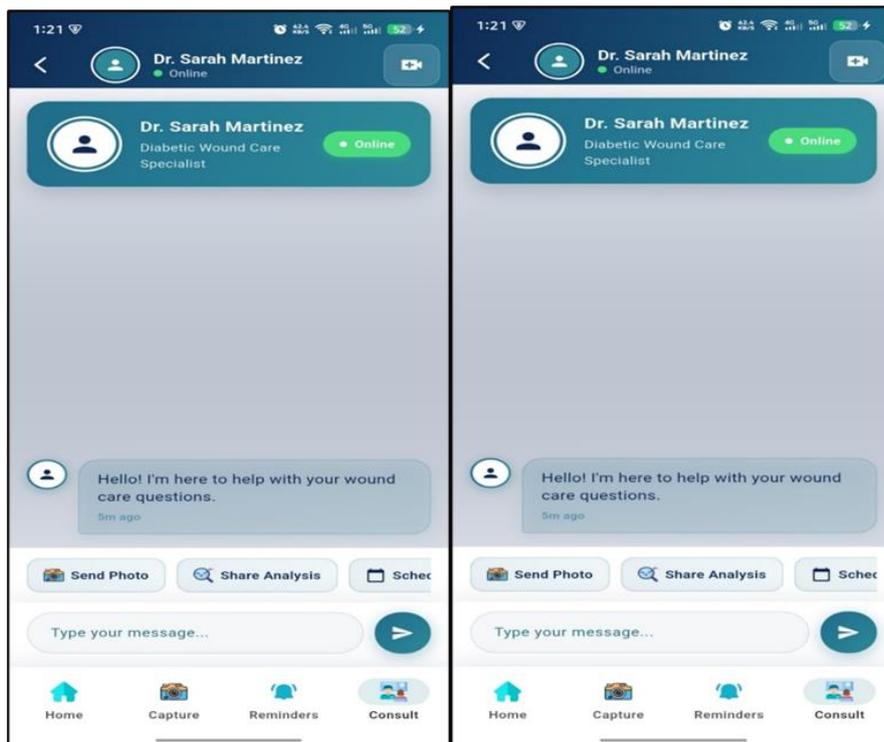
**Figure 2** Main screen showing a welcome message, current wound status with last check time, AI analysis summary, quick action cards (Capture Wound, AI Analysis, Consult Doctor, Care Reminders), and recent activity timeline



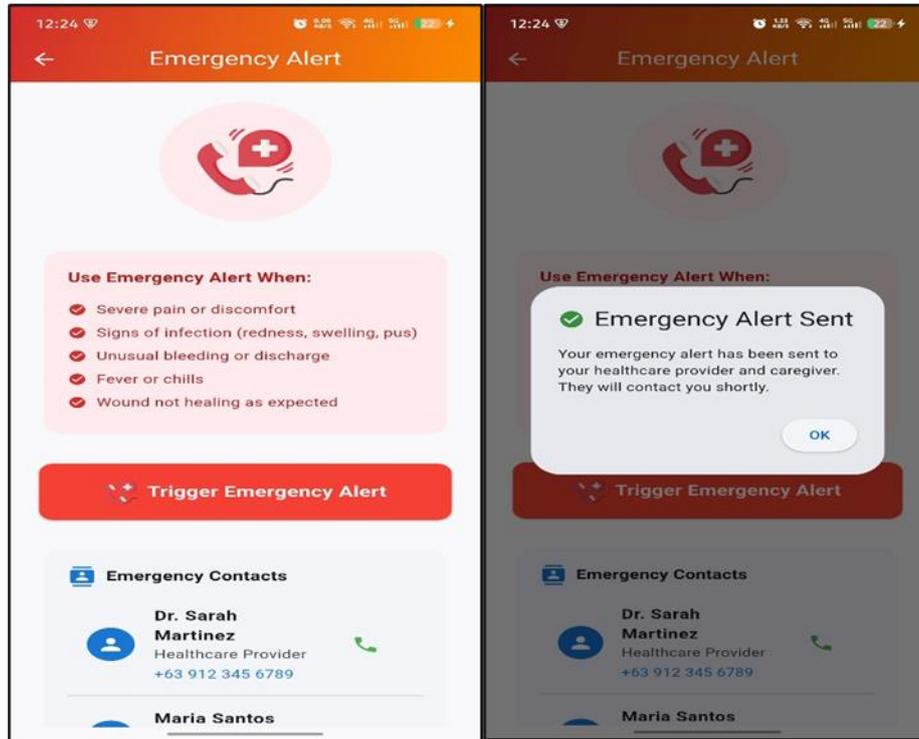
**Figure 3** Screen for capturing or uploading wound photos with guidelines, image preview, and AI analysis that provides risk assessment (Low/Medium/High) and recommendations based on the captured image



**Figure 4** Screen for managing wound care reminders, including upcoming reminders, completed reminders for today, and settings to enable/disable notifications and configure default reminder times



**Figure 5** Real-time chat interface for remote consultation with healthcare providers, allowing text messaging, photo sharing, quick action buttons for sending photos and sharing analysis results, and doctor profile information with online status



**Figure 6** Emergency alert interface for urgent situations, displaying when to use emergency alerts, a trigger button with countdown confirmation, and emergency contact information for healthcare providers and caregivers

## 5. Evaluation And Results

### 5.1. Usability Testing

The results of the usability testing of the Wound Watch system showed positive feedback from diabetic patients suffering from chronic wounds. It shows that the system is highly compliant with the principles of usability. As the first point, the patients considered Wound Watch as a very simple tool to use and they gave it an average score of 4.25 (85%). Also, the confidence in using the system was quite high as it had an average score of 4.20 (84%). These findings are an indication of strong user engagement and the intention of users to keep using the system. The patients, in particular, appreciated the AI-driven infection risk alerts and the automated care reminders for the daily wound management.

**Table 1** Usability Result Table

Questions	Patients Mean
1. I thought the system was easy to use.	4.40
2. I found the system unnecessarily complex.	1.85
3. I needed to learn a lot before I could use the system.	2.00
4. I would imagine that most people would learn to use this system quickly.	4.30
5. I think I would need the support of a technical person to use this system.	1.75
6. I found the tool cumbersome to use.	1.95
7. I felt confident using the tool.	4.35
8. I thought there was too much inconsistency in this system.	2.10
9. I think I would like to use this tool frequently.	4.25
10. I found the overall experience of using the system satisfying.	4.20
TOTAL MEAN	3.12

**5.2. Performance Metrics**

Performance metrics have been set up to measure the impact of WoundWatch on the users' engagement, confidence, and satisfaction. Such metrics were recorded from diabetic patients who use the system to monitor and manage their chronic wounds. In general, users stated that WoundWatch was a convenient tool, readily available, and a source of support for their daily wound care routines. A great number of users liked the AI-powered infection alerts and the care reminders; hence, they pointed out that their confidence in wound management had increased. However, a few comments indicated that the provision of introductory guidance and the help feature could be better so that users can learn and use it more frequently.

Accessibility (Patients): 3.34 (66.8%) – Patients found the system intuitive and accessible. Approximately 80% of users stated that navigation was easy and 78% felt confident using the system regularly. Areas for improvement include clearer instructions (53%) and system responsiveness during image uploads and consultations (55%).

**Table 2** Accessibility Result Table

Questions	Patients Mean
1. The interface icons, buttons, and labels are clear and easy to use.	4.05
2. Wound Watch is easy to use on mobile devices.	3.90
3. I can easily access different features such as infection alerts and reminders.	3.85
4. The system supports both new and experienced users effectively.	4.10
5. Wound Watch is accessible and usable regardless of device or location.	4.00
6. The system sometimes responds slowly or lags during use.	2.85
7. Instructions and help features are difficult to find and understand.	2.75
8. The system occasionally crashes or freezes unexpectedly.	2.50
9. I find it confusing to navigate some of the advanced features.	2.65
10. The system does not always process wound images and data promptly without errors.	2.70
TOTAL MEAN	3.34

**Functionality (Patients): 3.59 (71.8%)** — Patients generally appreciated the key features of the WoundWatch system. Users particularly valued the accuracy of the AI-driven infection risk detection (4.10 or 82%), the smooth integration of monitoring and reminder functions (3.95 or 79%), and the confidence it gave them in managing their wound care (3.85 or 77%). Some moderate scores were observed in system responsiveness (3.20 or 64%) and clarity of advanced features (3.10 or 62%), indicating opportunities for technical improvements and enhanced user guidance to improve the overall user experience.

**Table 3** Functionality Result Table

Questions	Patients Mean
1. The infection risk detection feature worked as expected.	4.10
2. It is easy to understand how the system functions.	3.20
3. The system responded quickly to my inputs (e.g., wound photos).	3.40
4. I felt confident using the wound monitoring and reminder features.	3.85
5. The integration of different features (AI detection, reminders, consultation) is smooth.	3.95
6. I did not experience significant technical issues while using Wound Watch.	3.70
7. All major features worked as I expected.	3.80
8. It is easy to navigate through the different functions of the system.	3.25
9. The feedback provided by the system helped me use it effectively.	3.75
10. I encountered obstacles or complications while using Wound Watch's features.	2.85
TOTAL MEAN	3.59

### 5.3. Comparative Analysis

The research evaluated Wound Watch against other diabetic wound monitoring and management platforms. Patient responses depict Wound Watch as a patient-focused, AI-driven, and easy-to-use mobile health system. Infection risk detection accuracy, helpful reminders, and the availability of remote consultation, which together facilitated wound care in the user's daily routine and made them feel safe, were the aspects most appreciated by the users. A large number of existing apps are usually too clinical or complicated for the average user, whereas Wound Watch has reached a compromise by integrating advanced technology with a user-friendly interface designed for patients. A few minor issues such as the occasional delay in image processing and the need for more detailed onboarding were identified but did not have a significant impact on the level of satisfaction. Compared to other tools, patients considered Wound Watch to be more intuitive, responsive, and encouraging of their self-care practices.

### 5.4. Results and Findings

The combined results from usability, accessibility, and functionality evaluations align with WoundWatch’s successful achievement of its goals

- Usability – 3.12
- Accessibility – 3.34
- Functionality – 3.59

The System Usability Scale (SUS) survey along with the detailed user feedback, reveals that patients are generally in a positive state of mind like feeling confident, satisfied, and motivated when using WoundWatch. Patients made the system available to them in an efficient manner and thought it to be very easy which is why they followed wound care protocols more closely and became more involved in their own health management. It was mentioned that the AI-driven alerts and the remote consultation features were the main reasons that the patients' trust and engagement deepened. In addition, the user-friendly design and the reminder systems were said to be the factors that kept the patients interested and their use consistent.

## 6. Discussion

### 6.1. Interpretation of Findings

This study is about the effect of Wound Watch on patient engagement, usability, and user experience in diabetic wound care management. Results show that the AI-based infection risk detection, easy-to-use interface, and reminder systems are the main factors that increase patient confidence, patient adherence, and patient satisfaction. Also, the remote consultation feature, which is successfully integrated, provides the necessary medical intervention in time and thus, the continuity of care gets better.

**Table 4** Descriptive Survey Result Table

Questions	Mean	Standard Deviation
1. How effective is Wound Watch in supporting early infection detection and wound monitoring?	4.10	0.45
2. How helpful are the automated reminders in maintaining wound care routines?	4.00	0.50
3. How engaging do you find Wound Watch’s interface and features?	3.85	0.52
4. To what extent does Wound Watch increase your motivation to adhere to wound care?	3.90	0.48
5. How satisfied are you with your overall experience using Wound Watch?	4.05	0.44
TOTAL MEAN	3.98	0.48

- **RQ1:** How does Wound Watch's AI-driven infection risk detection and reminders improve patients' wound care practices?

As per feedback, the infection detection and reminders got a score of 4.10, which shows that they had a considerable positive impact on the prompt identification of problems and following the daily care routine. Patients were made to feel that they had control over their health due to the fact that they were given timely alerts that helped them take the initiative in managing their health.

- **RQ2:** How does the interface design affect patient engagement and ease of use?

The interface and general features were rated 3.85, which is a reflection of patients valuing the ease of use and the clear navigation that assists them in being consistent with their wound care routines.

- **RQ3:** What are patients' perspectives on the remote consultation and overall system functionality?

Users were generally satisfied with remote consultation and system integration, but a few individuals mentioned possible enhancements for onboarding and technical responsiveness, which means there are still ways to deepen the system's usability.

## 6.2. Contributions and Innovation

This research exemplifies the effective combining of AI technology with human design principles in chronic wound care. Wound Watch unites smart infection risk evaluation, personalized prompts, and remote healthcare support access, thereby offering an easily approachable and handy device to diabetic patients, the results of which are not only clinical outcome improvement but also better quality of life.

## 6.3. Limitations and Future Work

Among the limitations are the relatively small sample size with demographic restrictions and a short-term evaluation period. Subsequent studies must consider the inclusion of bigger and more diverse patient groups as well as the monitoring of outcomes over a longer period. Moreover, additional improvements to the system, which are targeted at increasing the responsiveness, onboarding, and personalized coaching functionalities, will facilitate the wider uptake and effectiveness.

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## 7. Conclusion

### *Summary of Key Findings*

Patients which were using Wound Watch, considered it as an excellent and perfect tool in terms of its usability, accessibility and functional impact in wound care management. Some of the major strengths of this include the accurate AI-driven infection alerts, the useful reminders and the effective remote consultations. Although there are still some technical issues that need to be resolved, the overall feeling and involvement of patients were on a high level.

### *Final Remarks*

Wound Watch is a significant, patient-focused digital health tool that connects advanced AI with a simple design to enhance diabetic wound care. It is important to note that ongoing enhancements, driven by user feedback, will be crucial in realizing its full healthcare and every day-use potential for the diabetic communities

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## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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## APENDICES

### *Appendix A: System Usability Scale (SUS) Likert Scale Survey Questionnaire*

#### Functionality

Questions	Ratings			
1. The infection risk detection feature worked as expected.	1	2	3	4
2. It is easy to understand how the system functions.	1	2	3	4
3. The system responded quickly to my inputs (e.g., wound photos).	1	2	3	4
4. I felt confident using the wound monitoring and reminder features.	1	2	3	4
5. The integration of different features (AI detection, reminders, consultation) is smooth.	1	2	3	4
6. I did not experience significant technical issues while using Wound Watch.	1	2	3	4
7. All major features worked as I expected.	1	2	3	4
8. It is easy to navigate through the different functions of the system.	1	2	3	4
9. The feedback provided by the system helped me use it effectively.	1	2	3	4
10. I encountered obstacles or complications while using Wound Watch's features.	1	2	3	4

Accuracy

Questions				
1. I thought the system was easy to use.	1	2	3	4
2. I found the system unnecessarily complex.	1	2	3	4
3. I needed to learn a lot before I could use the system.	1	2	3	4
4. I would imagine that most people would learn to use this system quickly.	1	2	3	4
5. I think I would need the support of a technical person to use this system.	1	2	3	4
6. I found the tool cumbersome to use.	1	2	3	4
7. I felt confident using the tool.	1	2	3	4
8. I thought there was too much inconsistency in this system.	1	2	3	4
9. I think I would like to use this tool frequently.	1	2	3	4
10. I found the overall experience of using the system satisfying.	1	2	3	4

Accessibility

Questions				
1. The interface icons, buttons, and labels are clear and easy to use.	1	2	3	4
2. Wound Watch is easy to use on mobile devices.	1	2	3	4
3. I can easily access different features such as infection alerts and reminders.	1	2	3	4
4. The system supports both new and experienced users effectively.	1	2	3	4
5. Wound Watch is accessible and usable regardless of device or location.	1	2	3	4
6. The system sometimes responds slowly or lags during use.	1	2	3	4
7. Instructions and help features are difficult to find and understand.	1	2	3	4
8. The system occasionally crashes or freezes unexpectedly.	1	2	3	4
9. I find it confusing to navigate some of the advanced features.	1	2	3	4
10. The system does not always process wound images and data promptly without errors.	1	2	3	4

Appendix B: Descriptive Survey Questionnaire

WOUNDWATCH: A Mobile Monitoring System to Enhance Diabetic Wound Care through AI-Assisted Risk Detection and Remote Medical Support at Tupi, South Cotabato

- How effective Wound Watch in supporting early infection detection and wound monitoring?
  - Not at All     Slightly     Very Much     Extremely
- How helpful are the automated reminders in maintaining wound care routines?
  - Never    Rarely     Often     Always
- How engaging do you find Wound Watch’s interface and features?
  - Very Poor     Poor    Good    Excellent

- To what extent does Wound Watch increase your motivation to adhere to wound care?

Strongly Disagree     Disagree     Agree     Strongly Agree

- How satisfied are you with your overall experience using Wound Watch?

Very Dissatisfied     Dissatisfied     Satisfied     Very Satisfied