

Product Constraints

1. The purpose of the product

The Teleservices and Remote Medical Care System (TRMCS) is a system to offer or guarantee remote assistance services to online users who can be at home or use mobile devices.

2. The client, customer and other stakeholder

individual patients get assistance through internet rather than going to healthcare organization.

some healthcare professionals who input and maintain patient data, make treatment judgments in emergency situations.

some other healthcare professionals offer diagnosis and treatment.

patient family members provide assistance.

quality assurance professionals provide initial testing and runtime monitoring for the system to make sure it continues to meet its goals.

3. Users of the products

Users are those who have ever seen a doctor and has the approval of the medical care provider. The approval is based on the patient's health status from relative medical personnel and department.

4. Requirements constraints

There are some constraints:

1. The user has been approved by the medical department based on his/her health status.
2. The medical service provider has stored the medical record and data of the user.
3. The local law support this kind of medical service.
4. There are necessary infrastructure to support the system operation.
5. The service provider must be a legal medical service institution with the approval from FDA.
6. The delivered system must meet medical information standards and regulations, including privacy and industry standards.

5. Naming conventions and definitions

[PRD] + TRMCS + Ver.0.1

6. Relevant facts

The transition of service location from hospital to home of patient is a new trend. The requirement of online medical service should be offered to patients. The patients who do not need continuous assistance can call service provider in emergency. Either, the medical service provider can monitor the health status of patients and give assistance to them.

7.Assumptions

The patient will be at home, accessing the service through reliable Internet connection. The user-side terminal can be PC or mobile devices.

Functional requirements

8. The scope of the product

The system provide services to approved and registered users. The service is available when the service provider receive users' calls or when the internet-based medical monitors detect certain situations and give alerts.

9. Functional and data requirements

Users registered to the system under the approval of doctors. The medical record and relative data is kept in the system. Other sensitive personal information of users will not be uploaded to the system for privacy concern.

The system provide persistent repository of data and history log.

Non-functional requirements

10. Look and feel requirements

The user interface should be user-friendly to patients to encourage them. The entry point of critical feature should be as obvious as possible to ensure that users can quickly find and use relevant features in an emergency.

11. Usability requirements

The system should provide a user-friendly interactive interface to make it easy to use, and provide a quick entry to ensure availability in an emergency situation.

12. Performance requirements

The system enable user or monitoring software sending asynchronous help requests to assistance center. The system can handle several requests overlapping in time and space concurrently and resolve conflict according resolution policies to minimize user damage.

13. Operational requirements

The system will operate on near-future network and computing infrastructure and can be scaled with new technologies and provide continuous and uninterrupted service and be open to new service installation.

14. Maintainability and portability requirements

The system offers homogeneous service costs to geographically distributed users and handle dynamic change to the number and location of users.

15. Security requirements

The system should provide guarantee of secrecy of user data and communications. The privacy of users should not be violated.

16. Cultural and political requirements Legal requirements

The system should comply with medical information standards and regulations.

Legal requirements