# Use Case Title

Challenge summary

Upon surveying many problems of the current healthcare system, we found that many of them exist due to the root cause of hospitals having a rigid, insecure health medical record that are built on technologies decades old. By solving this root problem, we hope to alleviate many other problems as well.

They are hacked often, are not transparent, and don't keep a record of all changes to the patient record.

For the health care industry, blockchain technology stands to revolutionize the interoperability, security, and accountability of electronic health records (EHR) and health information technology (HIT), medical supply chains, payment methodologies, research capabilities, and data ownership.

As blockchain technology continues to develop, it is important that surgeons and other stakeholders understand both its capabilities and its limitations.

Actors

Two primary actors are identified as below

* Patients
* Doctors

Feature list

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| --- | --- |
|  | Blockchain Application |
| 1 | Once registration is done. Data is permanently stored in blockchain and a unique id is generated for each participant |
| 2 | If data gets updated in blockchain it will be transparent to all other members in a chain |
| 3 | Avoids repetitive testing of patients usually done in separate hospitals. Thus saves patients money and time too. |
| 4 | Health record systems lack interoperability and are exceedingly costly. Because EHRs are unable to effectively communicate with each other, physicians and surgeons often treat acutely ill patients without access to Medical histories, current medications, and prior imaging studies that could influence patient care. Blockchain provides Interoperability between surgeons, physicians and even patients. |
|  | Patients Records |
| 1 | Patients can access their own medical data through the unique id. |
| 2 | Patient can view their billings done by respective hospital and cross check it |
|  | Doctors Records |
| 1 | Doctor can review patient previous medical history data which is stored in blockchain |
| 2 | Doctors Educational or career information can also be stored in blockchain which can be referred by patients. |
| 3 | Doctors continuously update patients’ information which will be seen by patients. |

Outcome

The final solution should provide a blockchain based application platform to store health records of patients as well as Doctors details which will view by anyone. The solution can be developed either using Web technologies (Responsive Web Design) or Mobile apps.