Project 6: Health Information Network

Technical Report Document

Phase One

29-Oct-16

Name	ID
Aya Mohammed Sayed Gad	20140088
Aya Tarek Abd Nabi	20140085
Amany Ashraf Abd Eltwab	20140068
Radwa Ali Ahmed	20140121
Sara Mahmoud Mohamed	20140139

External Events	Actor	Use Case
Access Record	Patient	Access health record
Make Appointment requests	Patient	Make appointment
Change Appointments	Patient	Change appointment
Include a list of associated caregivers.	Patient	Create caregivers list
Update the list of associated caregivers.	Patient	Update list
Pay through Insurance companies or Patient's credit cards	Patient or Insurance Company	Pay bills
Retrieve appointments that have been placed	Health Providers	Retrieve an appointment
Run intelligent reports and monitor other nation-wide trends	Government regulators	monitor HIPAA compliance

Internal Events		Use Case
Place a patient to the health provider.	Trigged by make an appointment use case	Gives priority
Check Availability of Health Providers and illness type.	Trigged by change appointment use case	Check availability and illness type
Cancel an appointment	Trigged by change app appointment use case	Cancel an appointment
Pay through the patient health insurance company	Trigged by pay bills use case	Pay through insurance company
Track Patient	Trigged by notify patient use case	Track the patient status and update health record
Fetch patients' appointment requests	Trigged by give priority use case	Match appointments
Track payments	Trigged by pay bills use case	Check payments state.
Remove caregivers list	Trigged by update caregivers list use case	Remove list
Forward patient information	Trigged by retrieve an appointment use case	Forward patient information

Temporal Events		Use Case
Notify patient for approaching appointments	Trigged by match appointment use case	Notify patient
Notify caregivers for emergency	Trigged by track patient status use case	Notify caregivers

Use Case	Brief Use Case Description
Gives priority	Gives priority to placing a patient to the health provider, with whom the patient had received treatment earlier. However, if the illness is of an emergency nature, the system places the patient with the health provider that has the closest availability.
Track the patient status and update health record	Track the status of the patient treatment records
Match appointments	Fetches patients' appointment requests and matches them with a HIN health provider.
Notify caregivers	Keep track of the care givers' providers of patients, their family, friends, etc. and they get notified in case of an emergency condition is detected and as instructed by the patient.
Check payments state	Payment status tracked by the system (Payment is done or not).
Access health record	Access Patient's country-wide health records (get the latest update of the patient record)
Make appointment	Make appointment requests with health providers
Change appointment	Change the reserved appointment for a patient.
Check availability and illness type	Change an appointment Depends on the availability of the health provider and the type and emergency nature of the illness.
Create caregivers list	Include list of associated caregivers. Each patient should have at least 2 adult caregivers with fixed phone number and address.
Update list	Update the list of associated caregivers.

Pay through insurance company	Patients who have health insurance coverage by a registered health insurance company will be charged through their health insurance company based on their health insurance package.
Monitor HIPAA compliance	To privacy purposes, a pairwise evidence of the forwarded information is tracked so that regulators can govern and monitor HIPAA compliance in case legal disputes arise, The regulators may also run other intelligent reports using report generator and report builder to monitor other nation-wide trends .
Notify patient	The patients can be notified by email and/or SMS for approaching appointments
Forward patient information	Based on the type of illness, a subset of the patients' information is forwarded to the health provider
Cancel an appointment	Patient can cancel his/her appointment.
Remove list	Patient can remove the associated caregivers list.
Pay bills	Patient / insurance company will pay for the treatment.
Retrieve an appointment	HIN health providers can then retrieve appointments that have been placed to them using a dedicated Portal.