RapidSMS in the RHIE

RapidSMS connects to the RHIE to enable data captured by community health workers to be sent up to the HIE so that it may be stored within a patients record in the SHR and also for sending out alert messages to community health workers to notify them of certain events. Details of the design can be found here: RapidSMS.

Storing notifications in the SHR

For each notification that RapidSMS recieves via SMS it generates an HL7 v2.5 ORU_R01 message in the format required for saving an encounter within the HIE. This message does not contain any patient demographics as RapidSMS does not store any patient demographics. It just contains the patient NID. The HIM is responsible for enriching the message with additional patient demographics from the client registry (see Save encounter workflow).

Receiving alerts

The SHR is also able to generate alerts based on logic about patients. When a patient is referred to the district hospital they can choose to be referred as immediate, urgent or routine. In urgent cases they must visit the hospital within 3 days and for routine referrals they must visit the hospital within 7 days. The SHR is able to detect if the patient has missed their referral by checking if an encounter has been received within the time frame. If an encounter has not been received the SHR contacts the HIM to send out an slerts and the HIM in turn contacts RapidSMS to inform it to send an alert via SMS to the CHW that dealt with that patient. The workflow for this is described in Send alert workflow.