

## Tutorial-1: Data types and Interoperability Timeline

### Case Study -2: Appendicitis

Ismail, 28 years old man, lives in Shoqba, small town in Ramallah, experienced some pain in his lower abdomen area. The pain was very sharp and he has to go to local Shoba clinic to see a physician. After having arrived at the local clinic, Ismail's personal information and medical history were recorded. Dr Rami examined Ismail, recorded Ismail's symptoms. Based on the examination, Dr Rami decided to give Ismail pain killer, Paracetamol, and to send him to Al-Reya hospital in Ramallah.

At Al-Reya hospital, Ismail was seen by Dr Ahmad, who admitted to the internal medicine department.

Based on the information received from Shoqba clinic, Dr Ahmad has planned a CT-scan and a blood test done for Ismail. Ismail was sent to the radiology department to have a CT-scan done. A small of blood was taken and was sent to the medical lab for blood testing. After receiving results from the radiology department and the medical Lab, Dr Ahmad diagnosed that Ismail has appendicitis and needs surgery to remove his inflamed appendix. Dr Ahmad decided to send him to Ramallah Hospital for the operation.

On the same day, Ismail was moved to Ramallah hospital, and was admitted in the surgery department under the care of Dr Mustafa. Based on the information received from Al-Reya hospital, Dr Mustafa scheduled an appendectomy for Ismail in the evening on the same day. Ismail had his appendectomy (appendix removal operation) done successfully. Ismail stayed in the hospital three days and was discharged with medications (antibiotics: Amoxicillin) and instructions (how to care for his wound). Ismail was asked to consult his local doctor at Shoqba clinic to change his bandages every two days, to avoid infection of the operation. Ismail was followed for two weeks at the local clinic and then fully discharged after he has fully recovered

In groups, to follow up the above patient case between different health care provides, discuss the following:

- 1- What are the **patient data needs** required to follow up the above patient case?
- 2- What **healthcare providers** and what patient data needs to be exchanged between different healthcare providers?
- 3- Over the life-time of the above patient case, what patient data and **when** (or **at what points**) the data need to be exchanged? –

Draw this as a timeline (as shown in the lecture), tracing the process or the follow of care points or steps (the patient/Ahmad has to go through) for his healthcare, showing at each point, the different healthcare organisation/provider the patient had to visit, the data that have to be transferred between healthcare organisations, over the timeline of Ahmad's healthcare episode of care.