**HEALTH INFO STANDARDS AND TERMS**

**Project sprint 4**

**Team Name- The Avengers**

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**Rationale behind selection of specific sections for the receiving system (System B - OpenEMR)**:

The specific sections that can be extracted from the CCD document and sent to the receiving system (System B) are:

* Medications - To ensure effective administration of medication by avoiding drug interactions and maintaining consistent care coordination across systems.
* Patient demographics - To accurately determine the patient's identification and link them to the proper medical records, while considering aspects such as age and gender that may influence clinical decisions.
* Problems/Diagnoses - To provide healthcare practitioners with the patient's complete medical history, allowing for appropriate treatment, monitoring, and detection of probable issues or problems.
* Vital signs - To assess the patient's general health, monitor response to treatments, and make necessary changes to care plans based on the most recent vital sign values.

The aim in selecting these areas is to ensure that System B, an additional instance of OpenEMR (EHR), has access to comprehensive and updated patient information essential for providing healthcare services. These sections encompass critical aspects of a patient's medical history, current condition, and treatments. By extracting and transmitting these sections, System B can uphold precise and standardized patient records, enabling healthcare practitioners to make educated decisions about diagnosis, treatment, and follow-up care. Moreover, having access to this information can help prevent mistakes, such as providing contradictory prescriptions or neglecting significant allergies or medical issues.

**Defining System A and System B according to use case:**

Based on our use case both System A and System B are instances of OpenEMR (Open Electronic Medical Records).

**System A:** The physician uses System A, an instance of the OpenEMR (EHR) system, to input and edit the patient's information, which includes the diagnosis, prescription medicine, and other details. System A serves as the primary electronic health records system, with the physician/ Healthcare professional recording the information.

• Patient demographic details (age, primary concerns)

• Diagnostic information (hypertension, hypertensive urgency)

• Patient medical history (chronic smoking, family history of diabetes mellitus and hypertension)

• Findings from physical examination

• Record of vital signs (blood pressure)

• Prescribed medication (clonidine 0.2 mg)

**System B:** System B, which is an additional instance of the OpenEMR (EHR) system, is used by the nursing staff to access the patient's information, follow the clinician's orders, and log observations during the patient's hospitalization. In this scenario, System B serves as the nursing staff's electronic health records system, supporting duties such as:

• Access the patient's information documented in System A

• Follow the clinician's instructions to measure the patient's blood pressure every 4 hours

• Record the nursing observations, including the patient's vital signs (blood pressure readings)

• Update the nursing notes with the recorded observations.

The use case comprises bidirectional communication and data sharing between System A and System B in the OpenEMR ecosystem. Initially, a medical expert enters patient information, diagnosis, and treatment plan into system A. Nursing professionals obtain this data from System B (data is transferred from system A to B), record patient observations and vital signs, and send any changes back to System A. This interoperability guarantees that patient records are complete and up to date, allowing healthcare practitioners to communicate effectively and deliver better care.