

SURVEY AND DATA COLLECTION

I. Inputs from Medical Intern at KIMS Medical College:



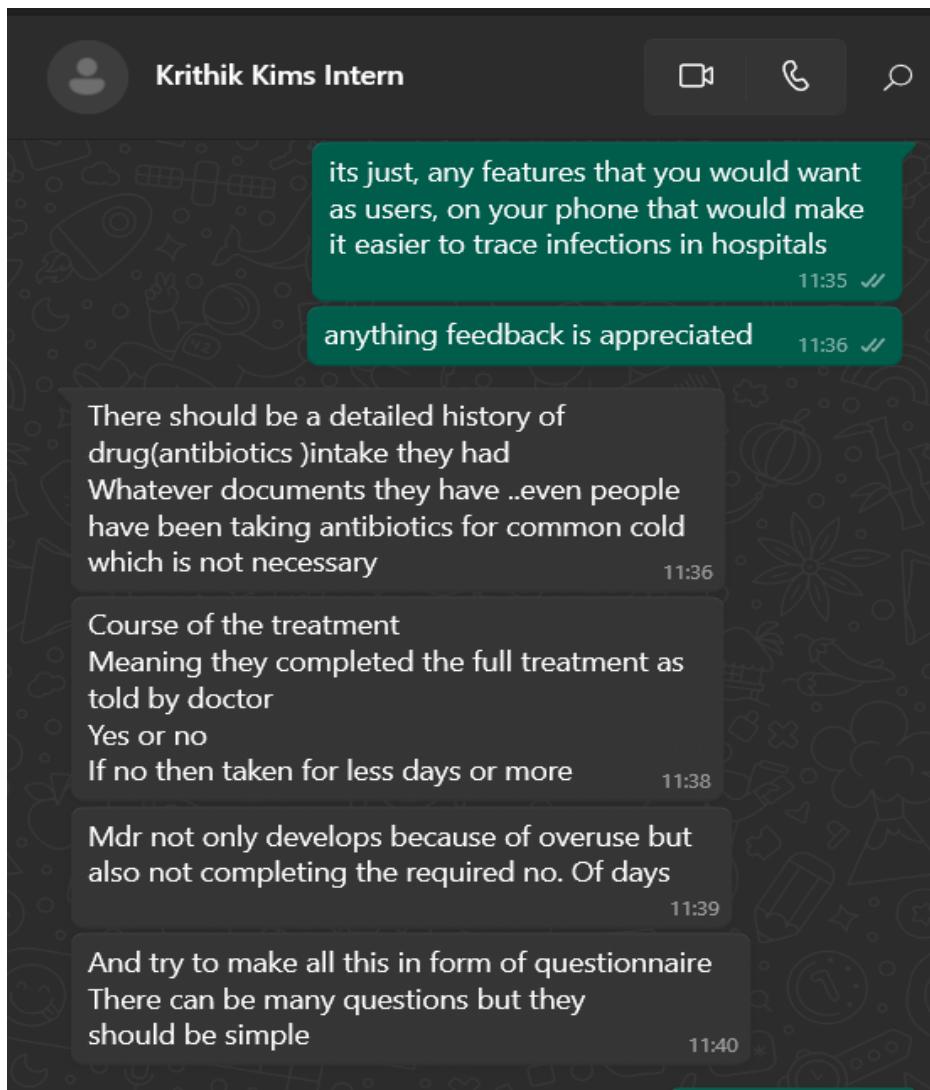
1. **Intern :** "There should be a detailed history of drug (antibiotics) intake they had whatever documents they have...even people have been taking antibiotics for common cold which is not necessary"

Learning: patient's clinical data and history is important, It might make them more vulnerable to getting affected by MDR

2. **Intern :** "Course of the treatment - Meaning they completed the full treatment as told by doctor -> Yes or no -> If no then taken for less days or more."

Learning: Patient's should neither overuse antibiotics/ drugs nor under-do the treatment prescribed and they should stick to the number of days the treatment is meant to last.

"Mdr not only develops because of overuse of drugs that becomes less resistant to diseases but also for going through the treatment for the required number of days as per the prescription"



3. Addressing Gap in the existing system:

Us: "Why do people still use manual methods instead of digitalising patient data?"

Intern : "It's mainly due to lack of resources in hospital or any health care centre.

The money they get is not even sufficient enough for the proper treatment so such digitalization never stands a chance".

Lack of automated system with less human intervention

"I think what we lack is a safe and secure common platform were we can put all the data"

Learning: "Building a mobile Application makes it accessible to nurses/medical professionals and makes it more convenient to keep a track of all hospital data securely"

And a screen for Digital Twin in the corridors of the hospital that creates awareness among people.

4. Input on Digital Twin solution by Users :

Us: "what if there was a screen in the hospital that displays risks by tracking MDR patients so even the people in the hospital can take precautions at high risk areas"

Medical professional : "It would be really helpful,
Because we are the first one to get infected even after all the precautions we take"

II. ICMR Guidelines:

Data is collected and models are trained based on ICMR (Indian Council Medical Records) Guidelines- based identified pathogens and their possible disease types.