

# Healthcare

## *Essential Consideration for Solution Development*

How might we leverage AI to revolutionise healthcare delivery, bridging critical gaps in accessibility, affordability, and quality while ensuring inclusive care across diverse geographic and socioeconomic barriers?

### **Current Challenges**

#### **Maternal and Child Health**

- 33% of children under 5 are underweight, and 60% suffer from anemia
- Delayed detection of high-risk pregnancies leads to complications
- Dietary recommendations fail to consider locally available, culturally accepted foods, limiting adoption

#### **Lack of Awareness & Access to Healthcare Schemes**

- State and Central governments have provided 15+ schemes for reducing healthcare costs/burden
- As of 2017-2018, only 14.1% of the rural population had health insurance coverage
- Lack of awareness of schemes, applicability, and application process is the major hurdle in using these benefits

#### **Infrastructure Gaps**

- Doctor-patient ratio of ~1:1456 and ~1:25,000 in rural areas
- Delayed diagnosis and treatment leading to preventable complications
- Rural doctors lack instant access to best practices and on-time government guidelines

### **What Success would mean for the above challenges**

#### **Maternal and Child Health**

- Enabling ASHA workers and ANMs to optimise local knowledge to provide personalised dietary advice
- Early detection of high-risk pregnancies based on the health of the mother

- Support in data collection and data management in terms of patient history

### **Lack of Awareness & Access to Healthcare Schemes**

- Increased awareness to State and Central government schemes
- Automated mapping to schemes based on eligibility
- Simplified application processes
- Interoperability across DPIs for simplified access

### **Infrastructure Gaps**

- Access to medical guidelines, treatment recommendations, and best practices
- Shorter timelines in preliminary diagnostic and administrative tasks
- Increased doctor bandwidth to serve more patients

### **Examples of Solutions**

- Assists Asha workers and ANMs in assessing high-risk pregnancies based on symptoms, diet, and medical history effectively and flag potential risks
- Provides anemia prevention and pregnancy care info in local languages through voice and/or text assistants directly to the non-literate patient/frontline worker
- Enables real-time doctor-patient consultations even with poor connectivity
- Educates and assists rural populations in enrolling in healthcare schemes
- Provides offline access to medical guidelines and treatment recommendations and sync data when connectivity is available
- Tool that organises past health data into a structured reports for doctors and nurses for quick analysis and maintaining patient history
- A question based approach via voice and text to determine and suggest scheme applicability based on their state, income group, age, gender, concern, etc.

The solution should work toward augmenting the frontline healthcare workers in low-income areas while respecting local cultural contexts and needs.