

## **COMEMR App Workflows**

### **Patient Journey**

The COMEMR application enables a seamless patient journey as a patient interacts with a variety of health system users.

The following is a typical patient journey for a sample patient named Mary:

1. A community health worker (CHW) visits Mary's home to complete a household registration. Mary is registered in the application along with her other household members.
2. At the time of the household registration, Mary is assessed using the integrated community case management (ICCM) module within the COMEMR application. Mary reports having a Fever for the last 4 days with fatigue. The application refers Mary for further assessment and the CHW selects the nearest facility to refer Mary.
3. Mary receives a SMS reminder 1 day after her community assessment to remind her to visit the facility for a medical review.
4. Mary visits the facility where she is seen by a provider who completes a RDT test and confirms her diagnosis of Malaria.
5. Mary receives a customized treatment plan (pending confirmation from a provider) which includes community-based follow-up assessments and facility visits for medical reviews (as needed).
6. Mary returns home and is visited by a CHW the next week for her assessment. The CHW follows up with her to ensure she is taking her medication and recovering well.
7. Steps 2-6 repeat continuously by seamlessly linking the community and facility activities.

### **Application Workflows**

#### **Household Registration**

The Household Registration feature empowers Community Health Workers (CHWs) to conduct comprehensive household registration using a mobile application that is specifically designed to function in low-connectivity environments. The process begins with CHWs visiting households within their assigned communities and using the app to assign a unique household identifier (ID) to each family. This unique ID acts as a digital anchor, ensuring that each household's data is easily trackable and accessible for future follow-ups.

CHWs are then guided through a structured workflow to collect detailed demographic information for all household members, including names, ages, gender, relationships, and any existing health conditions. This data is crucial for building a robust health profile of the community and identifying potential health risks. To enhance accuracy and geographical tracking, CHWs also use the app to capture the precise geospatial location of each household. This mapping feature allows for better resource planning and helps healthcare providers target services more effectively, particularly in hard-to-reach areas.

### **Community-Based Assessment**

The COMEMR platform is designed to transform primary care delivery in resource-constrained settings. It empowers community health workers by equipping them with the necessary tools to conduct assessments for various health conditions, including non-communicable diseases (NCDs), malaria, maternal and child health, among others. The assessment process utilizes a risk algorithm to determine whether patients need further medical attention based on their diagnosed conditions. Assessment can occur online and offline, providing flexibility and accessibility for health screeners and community health workers.

### **Community-Based Follow-up**

The community-based follow-up feature within the COMEMR 2.0 platform is designed to ensure that both Community Health Workers (CHWs) and clinicians are consistently informed and reminded about critical health interventions for patients, thereby promoting continuity of care. The feature includes task prioritization features, which organize follow-up tasks based on patient risk levels. Patients identified as high-risk—such as those with uncontrolled chronic diseases, pregnant women, or children with missed vaccinations—are flagged within the app, ensuring that health workers focus on the most critical cases first. The app provides real-time status updates on the progress of follow-ups, showing whether tasks have been completed, rescheduled, or are still pending. This functionality helps health workers stay organized and accountable, reducing the likelihood of missed care opportunities.

### **My Patients Feature**

The 'My Patients' feature within the COMEMR platform is a valuable resource that enables healthcare professionals to efficiently manage and monitor their assigned patients. This feature provides convenience and organization by offering a centralized hub for accessing, tracking, referring, and managing patient information. It significantly enhances coordination of patient care and improves communication among healthcare providers. Most importantly, it instills a sense of competence and confidence in healthcare professionals, empowering them and enhancing their capability in making informed healthcare decisions.

## **Medical Review**

The Medical Review feature in COMEMR is an essential tool designed for healthcare professionals. It enhances the ability to assess, monitor, provide preventive care, achieve early diagnosis, and facilitate continuous treatment and decision-making, particularly for patients with chronic conditions like hypertension, diabetes, malaria, HIV, and tuberculosis. It also addresses other health services such as maternal and child health, mental health, and immunization.

This feature enables healthcare providers to conduct medical reviews seamlessly, prescribe treatment plans and medications, recommend lab tests, and maintain comprehensive documentation of patients' health profiles. Moreover, it empowers primary care providers to deliver thorough, long-term solutions, ultimately optimizing healthcare delivery in underserved communities and making healthcare practices more efficient and effective.

## **Pharmacy**

The Pharmacy features within the COMEMR platform play a crucial role in delivering prescribed medications to patients. Pharmacists can access detailed information about each prescribed medication, including the name, code, URL, classification, brand name, dosage form (liquid or pills), frequency, duration of the prescription, and any additional comments from the physician. This functionality enhances adherence to treatment plans by allowing pharmacists to provide clear instructions for medication intake. Furthermore, it keeps track of the dispensation history, enabling pharmacists to document any discrepancies, which improves transparency and accountability in the medication dispensation process and fosters a more open practice.