Mahila Master Health Check-up (MMHC) – Andhra Pradesh

Introduction

Andhra Pradesh is one among the top states with a high prevalence of Non-Communicable diseases. Early-stage detection and treatment became necessary to minimize the mortality and morbidity caused by NCDs. Further, in order to reduce the inequality in healthcare services for women in rural and urban areas, the state government decided to make use of technologies such as cloud and data analytics solutions for screening women above the age of 30 for non-communicable diseases.

Mahila Master Health Check-up (MMHC), a health care program for women of Andhra Pradesh was launched to improve the basic healthcare services for women. Under this program, over 6 million rural women between the age of 30 to 60 years were screened and referred for continuity of care

Key Stakeholders

Health, Medical & Family Welfare Department	• Implementing Agency • NCD Screening & Treatment covering **11,850** ANMs, **450+** doctors, **100+** Health Officials
Dell-EMC	• Technology Partner • Develop software solution for MMHC consisting of a tablet app for the health workers, web apps for the secondary level and tertiary level doctors and dashboards for the health officials
TATA Trusts	• Deployment Partner • Training & Capacity building

Implementation of the practice

Mahila Master Health check-up (MMHC), a health care program for the women of Andhra Pradesh, was inaugurated by the Health Department of Andhra Pradesh in collaboration with Dell-EMC as a technology partner and Tata Trusts as Deployment Partner.

This intervention has been implemented in more than 7000 health sub-centers across the state in the year 2016-17. Women between the age of 30 to 60 were screened for 7 health conditions, namely oral, breast and cervical cancers, hypertension, diabetes, hormonal disorders, and vision disorders.

MMHC Program Flow
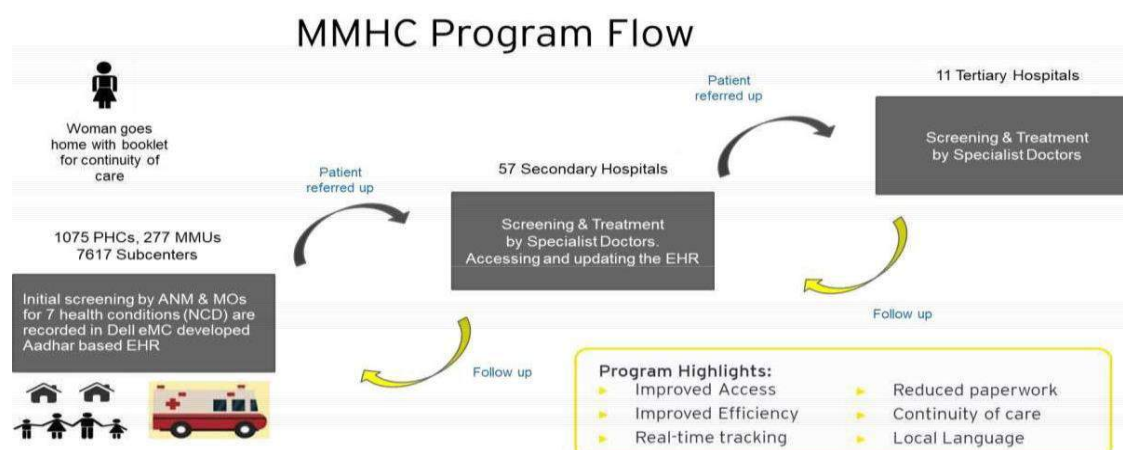
MMHC uses an integrated cloud-based software solution to improve efficiency and monitoring. 11850 Health workers, 350+ Doctors, were trained on the effective use of the application. The software technology is accessible through tablet applications for health workers, web apps for secondary and tertiary level doctors, and dashboards for health officials. Patient health records are created during screening are shared and tracked using the patients Aadhar card at primary, secondary, and tertiary levels. This ease of data sharing improves the quality of continuity care of the patient by increased the efficiency of health workers and doctors. Real-time tracking dashboards of the program enables the Health Department for improved administration and monitoring.

Image: Screenshot of Application used at PHCs

Results

Dashboard and Real-time data provided provides excellent value in the quality of services and tracking issues. User-friendly UI made in the local language made the application acceptable among the primary health care workers. Efficient screening and continuity are the major good outcome of this initiative. The initiative has led to increased value for all stakeholders:

Stakeholder	Benefits
Citizen – Improved Access	• Health records with Unique-ID
Health worker – Improved Efficiency	• NCD screening, enrolment, patient history. • Pictorial UI, Telugu, simple dashboard, help audio/video • Reduced paperwork. Intelligent Sync
Doctor – Improved Efficiency	• Comprehensive patient history • Easy management of patient info. Examination, lab tests, diagnosis, treatment and referral
Health Department – Improved Administration	• Real-time tracking of program progress with drill-down • Administrative monitoring of personnel performance
Policy Makers – Improved Coverage, Indicators	• Monitoring health indicators, performance • Improved planning, resource allocation

Lessons Learnt

Technology adaption by all health care workers is very critical. Tablets provided to ANMs had hardware, software, and connectivity related issues. Many ANMs didn't upgrade or sync the application regularly. This problem could have been rectified with additional training to ANMs.

Conclusion

Integrated data systems at all levels of healthcare services played a crucial role in improving the efficiency of health care workers, monitoring, and administration activities. Further, the data can also be used for policy creation, planning, resource allocation.

Further reading

http://www.nhmmp.gov.in/WebContent/IndoreSummit/Day%202/NCDs/MMHC%20for%20Indore.pptx