White paper on -- "Digital Transformation Of Medicare Health Foundation (Pakistan) to help propel its organic growth"

written by

Bilal Mahmood

Contents

1. Background

It all started in the year 2000 with a bunch of inspirational business individuals - motivated to help underprivileged of the community by setting up a diagnostic center in a slum area of Lahore (second largest metropolis in Pakistan), namely Badami Bagh. Gradually in the next four years the facility converted into a 50 bedded secondary hospital focused on mother and child health care, thus attaining the name of **Medicare Trust Hospital.**

Unfortunately, over the past one decade Pakistan performed very low on mother and child health care, while in 2015 Pakistan hit the rock bottom and as per UN's report stood number one in the world in still births (Ranked 186th of the 186 countries under review). This prompted the trustees to further reinvigorate their efforts and create a vision for the organization to work on a larger canvas.

1.1 New Mission for Medicare Health Foundation

Thus a new mission for Medicare Health Foundation was crafted - which is as follows;

Medicare Health Foundation – Mission 2040
1 Specialty Hospital
20 Fifty Bedded Community Hospitals
200 Small Scale Community based Mother & Child Health Care Units (2 bedded facilities)

1.2 Challenges faced for this mission to be realized

Challenges
No documented business processes
Scalability of Standard facilities
Centralized organization management

Medicare Health Foundation engaged Agilitize Private Limited at this stage to help consult/construct/create the required capacity for the organization to achieve its mission spanning over next two decades.

2. Agilitize's Approach

Although the first hospital at Badami Bagh had been operationally running for over a decade and adhering to certain protocols (which at most times were very loosely defined) but properly documented protocols and processes were non-existent.
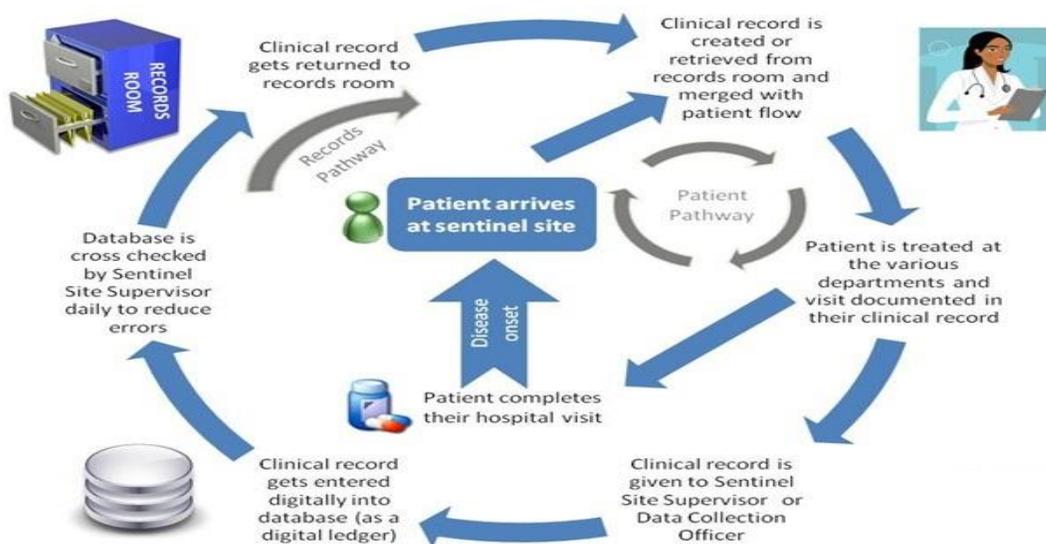
For this Agilitize broke the project up in two parts;

2.1 Conducting an exercise to lay down processes and protocols based on Lean Management principles

120 business processes were eventually drafted. NHS in UK restructured the hospital management processes based on Lean management, consulting "Making Hospital Work". Thus Agilitize used the same work book while working on the business processes of Medicare Health Foundation where the overriding approach was patient centric.

2.1.1 Patient's Pathway

Hence at both the times while postulating the business processes and at the time of building an automated system, the work was started from the patient pathway.

2. 2 Digital Transformation of Medicare Health Foundation

Centralization is the **Mantra** for the **Organizations to grow** from a **single unit** operations **into Infinite number** of Operations

> A centralized structure keeps decision making firmly at the top of the hierarchy (amongst the most senior management)

2.2.1 Features of a centralized system

Features
Easier to implement common policies and practices for the whole business
Prevents other parts of the business from becoming too independent
Easier to coordinate and control from the center - e.g budgets
Quicker decision making - easier to show strong leadership

Modern day branch banking is one such example

Reasons that have allowed the multinational fast food chains like Mcdonalds to have become a global

The centralized supply chain innovation gave rise to Wal-Mart. Thus enabling it to sell the same products at a cheaper price to the end consumer
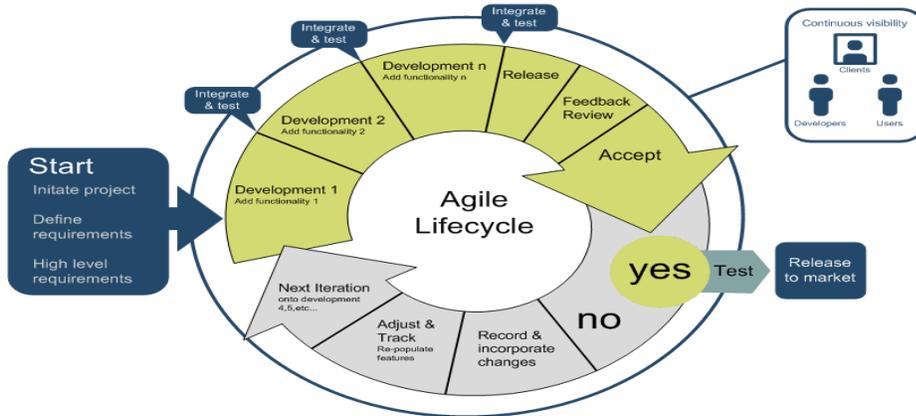
2.2.2 A snapshot of the system

Medicare Health Foundation has primarily four different business streams - as follows;
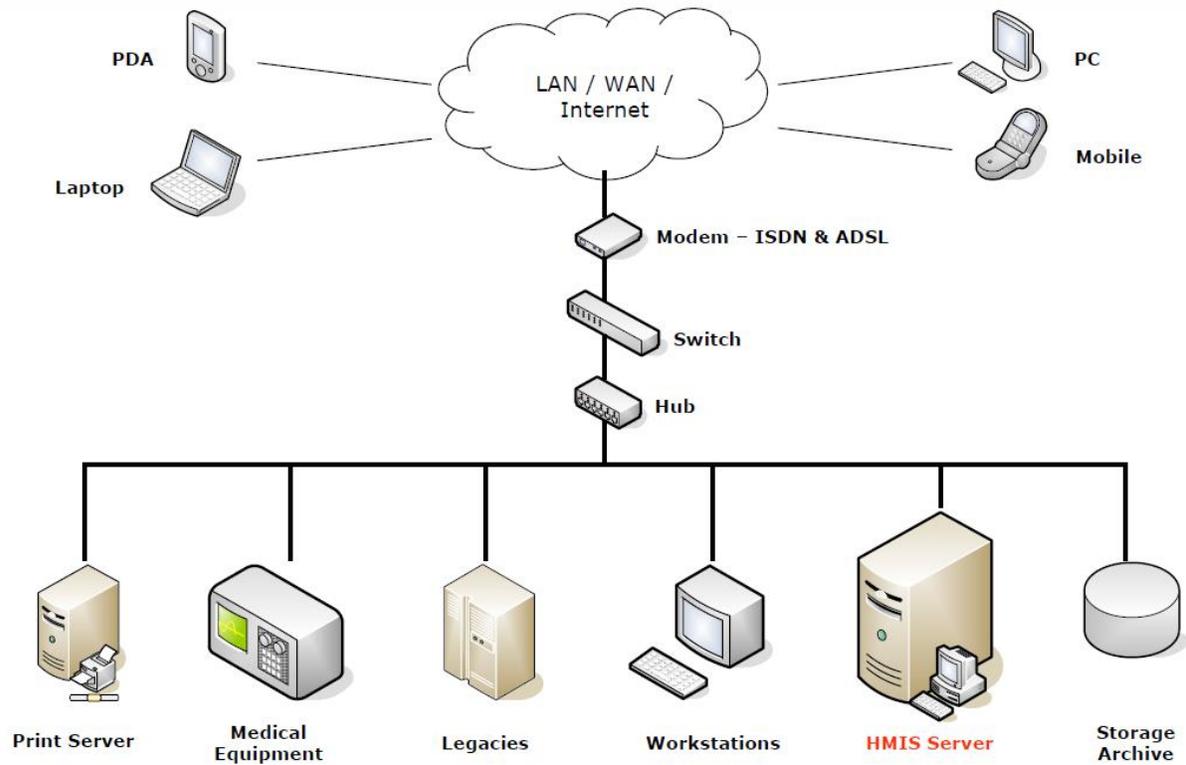
Business streams under Medicare Health Foundation
1. Secondary care hospital
2. Pharmacy
3. Diagnostic Lab (FQ Lab)
4. Mother and Child Health care unit (MCH)
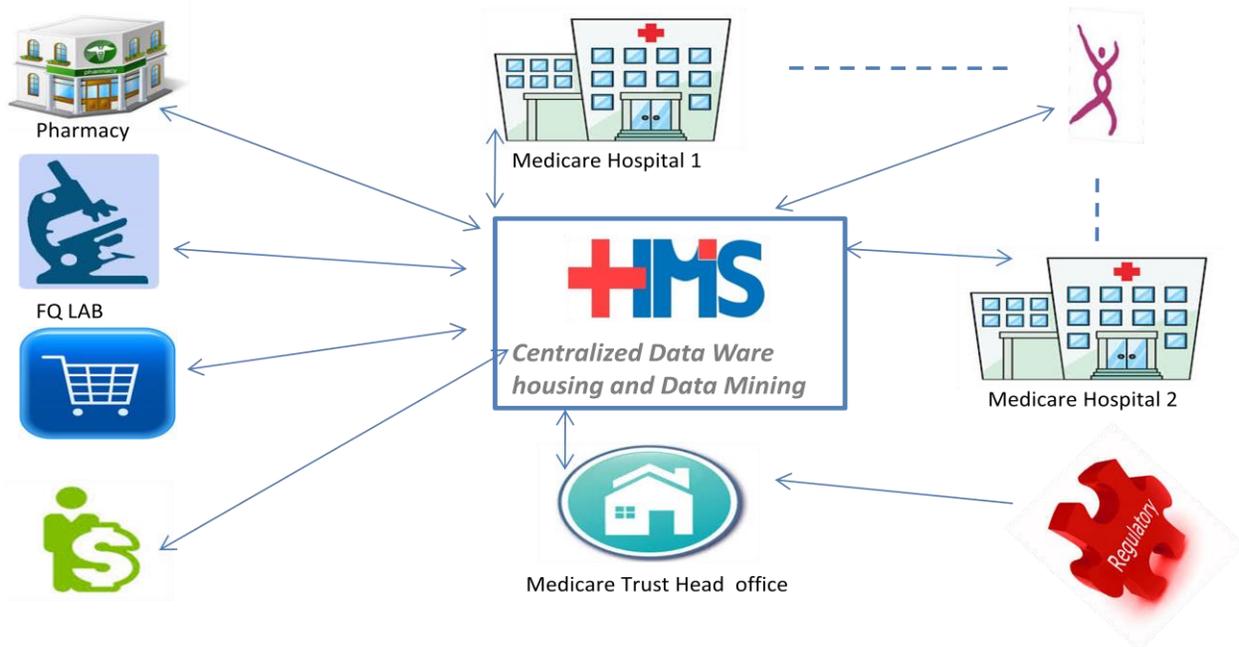
3. Software Development

3.1 Network Configuration

3.2 HMIS

Web based portal which allows the flexibility of the system being used from anywhere in the world with reports being accessible through the mobile app adds immense value to its diverse stake holder audience -

Stake Holders	Usefulness
Patients	Pull lab reports online
Nurses and Doctors	Online patient record, appointment schedules
Management Staff	Pending activities and appointments
Board of Trustees	KPIs for the entire organization on their cell phones
Government Regulatory Authorities	Availability of data online
Local and international Donors (Large Donors beyond a set thresh hold)	Through dedicated logins can view how every single Dollar donated is being spent
Telemedicine	Via online video conference the doctor or the nurse can consult a patient remotely

3.2.1 Modules of HMIS

Core Modules	Supporting Modules
1. In and Out Patient	10. Assets management
2. Clinical Management	11. HR management
3. Theatre Management	12. Finance & Accounting
4. Lab	13. Pharmacy
5. Radiology and Imaging	14. Telemedicine
6. Emergency	15. Bio Medical
7. Nursing	16. Blood Bank
8. Administration	17. Inventory and Supply Chain
9. Ward Management	

Compliance With JCI Standards - HMIS is being developed in accordance with standards of JCI

3.2.2 Benefits of the system

Benefits
Allows to manage *n* number of hospitals, labs and pharmacies
Flexibility for the staff movement
Least man power required
Instant information retrieval
Timely treatment decisions
Information sharing across the healthcare specialists across the world
Access Medical record of the patient from anywhere in the world from the web portal
Online appointment scheduling
Telemedicine
Automation of 120 business processes
Anticipated 35% operational cost reduction
80% reduction of paper work
60% improvement in patient care
80% reduction in information flow time
Enhanced competitive advantage
100% timely and accurate information
JCI standard compliance