



Kingdom of Bahrain
Ministry of Health

The National Health Information System

ACCESS TO QUALITY HEALTHCARE

I-SEHA
INFORMED HEALTHCARE

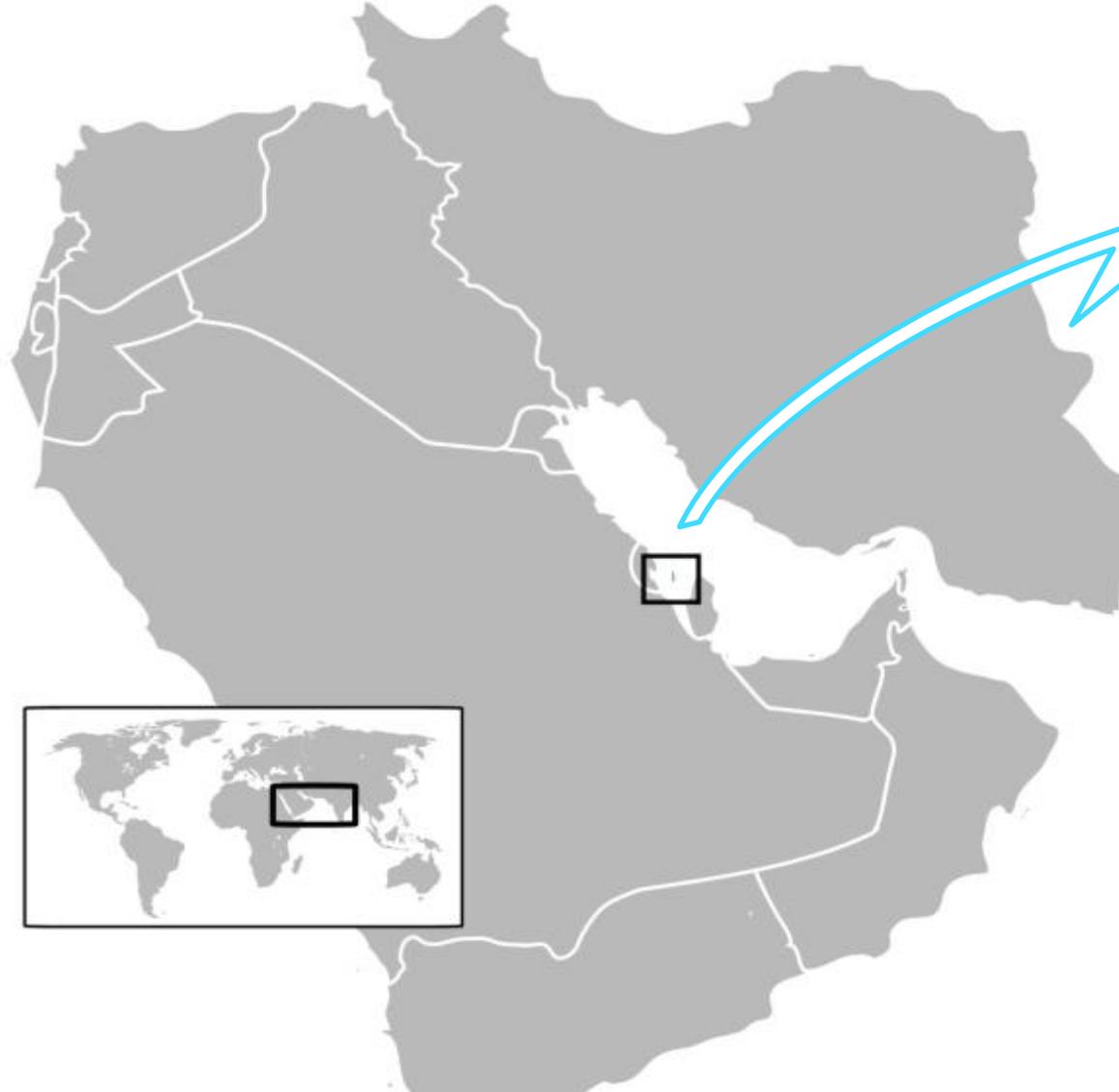


United Nations Public
Service Award 2014

UNPSA
Seoul, June 2014

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Kingdom of Bahrain Mamlakat Al-Baḥrayn



IMPORTANT INDICATORS

Area: **770 sq km**

Population: **1.2 Million**

Childhood Dependency ratio (0-14): **27.2***

Aging Dependency (aged 65+): **2.9***

Total Dependency Ratio: **30.1***

Crude Birth Rate /1000 pop. (reported): **15.6**

Crude Death Rate/1000 pop. (reported): **2.1**

Life Expectancy Rate at Birth Both Sex : **75.3**

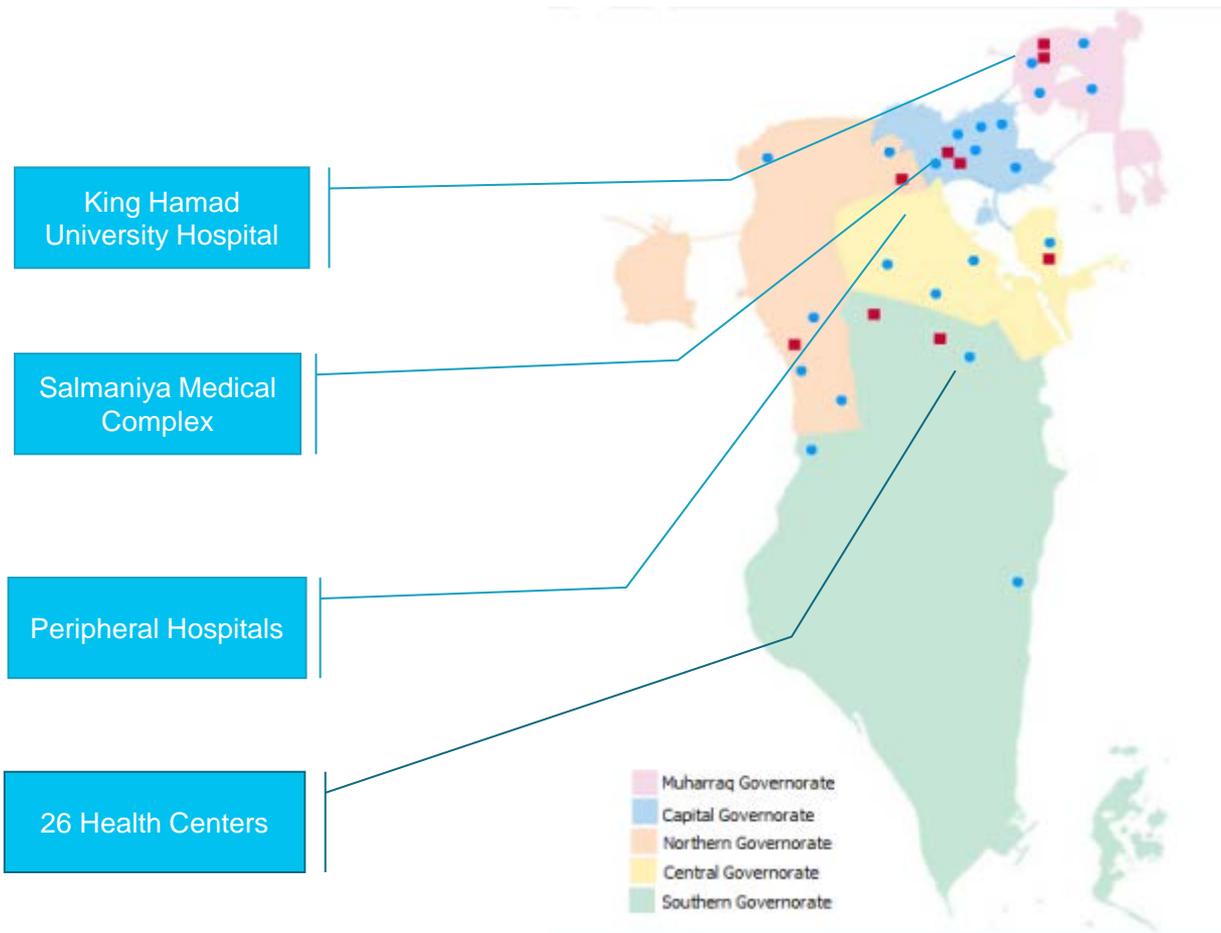
Literacy: **93.5** (Census-2010)



** Central Statistics & Communication Organization , 2011*

Note: Increase in population due to development of urban and Infrastructural projects

Bahrain's Healthcare System



■ Health Information System in Bahrain

Prior to 2011:

- limited to administrative work
- barely clinical management through electronic services



Important Room for Improvement before Implementing I-Seha

There were a need for:

- Quick transfer of health data between professionals
- Unlimited access to health records between hospitals
- Integration of all medial and paramedical services given to patients
- Availability of data for informed decisions
- Delivering latest evidence based medicine through technology.
- Improving the quality of care
- Safely secured information

ALIGNMENT WITH 2030 VISION

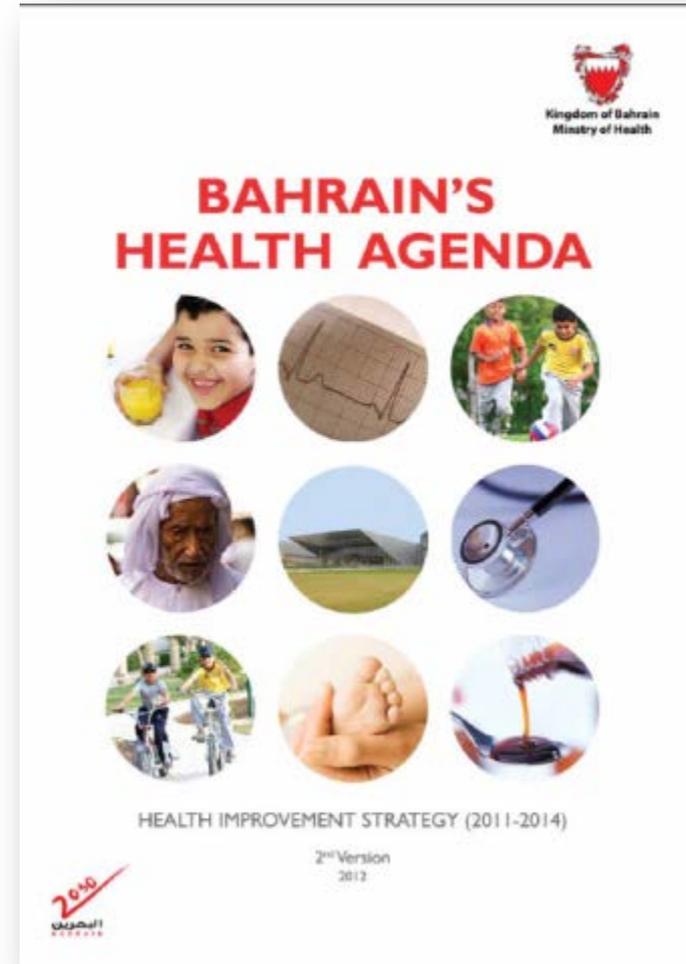
2.2 The public-sector becomes more productive and is accountable for delivering better quality services via leaner organisations and operations

3.2 All Bahraini nationals and residents have access to quality healthcare



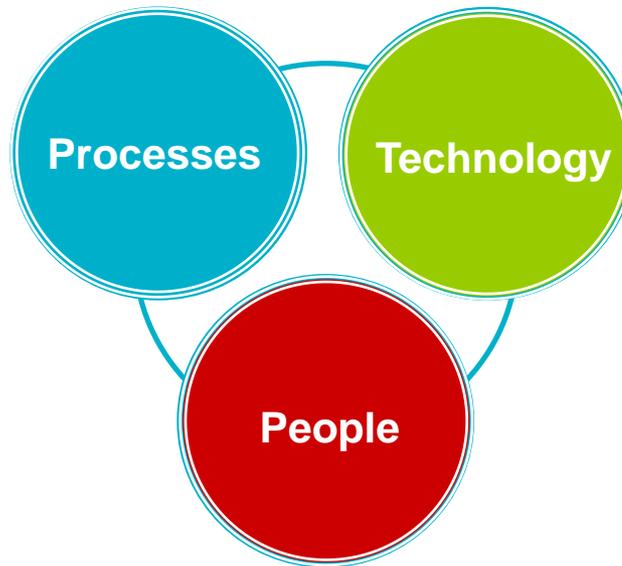
ALIGNMENT WITH 2030 VISION

- The Bahrain Economic Vision 2030 stipulates the **universal availability of quality healthcare and by 2030**, positions Bahrain as a leading centre of modern medicine in the region.
- The MoH have worked hard on taking this decision to make a strategic plan (Bahrain's Health Agenda 2011-2014) and choosing I-SEHA one of its key strategies to do that.
- I-SEHA -and all its modules- was clearly stated as a need in the strategic plan.



THREE COMPONENTS TO SUCCEED

Definition and implementation of processes following the **Best Practices** and the specific requirements of a Healthcare environment

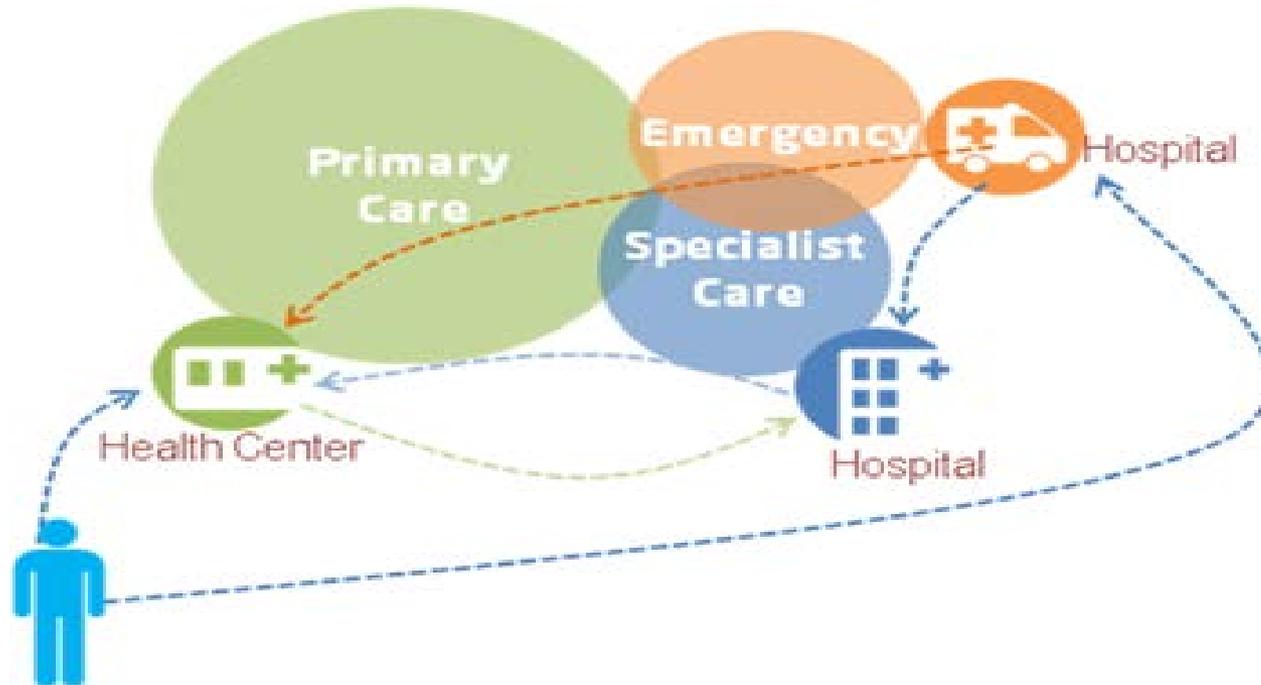


Implementation of full-proof solution, with a robust **architecture, scalable** and with **high availability**

Change Management, Training and **Local Support** are critical tasks and must be managed as projects in itself.

I-SEHA

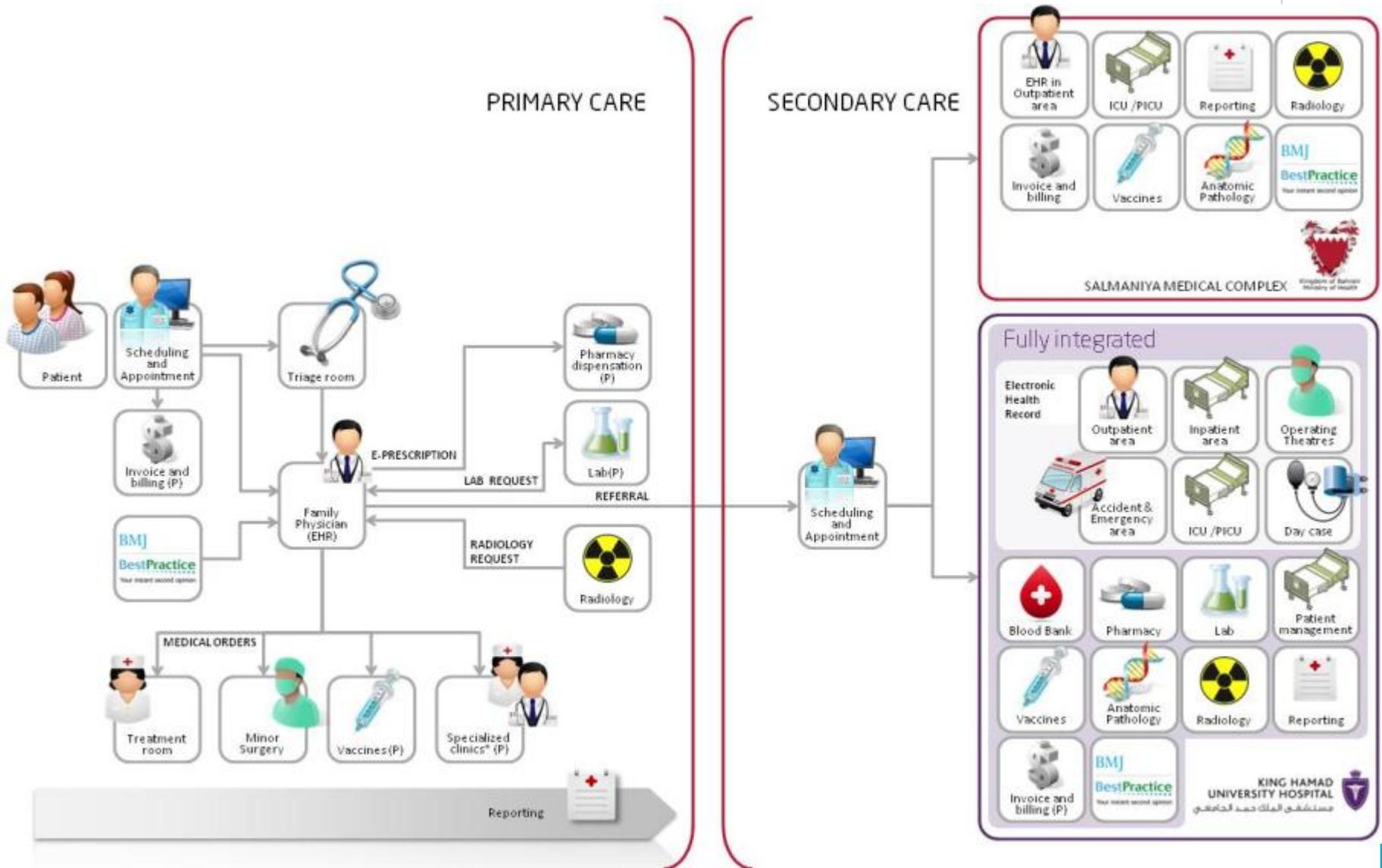
- I-SEHA is being deployed by Indra, a major IT company.



- The main objective of I-SEHA is to enhance the **quality of patient care** and **safety** as a result of a better flow of information among professionals.

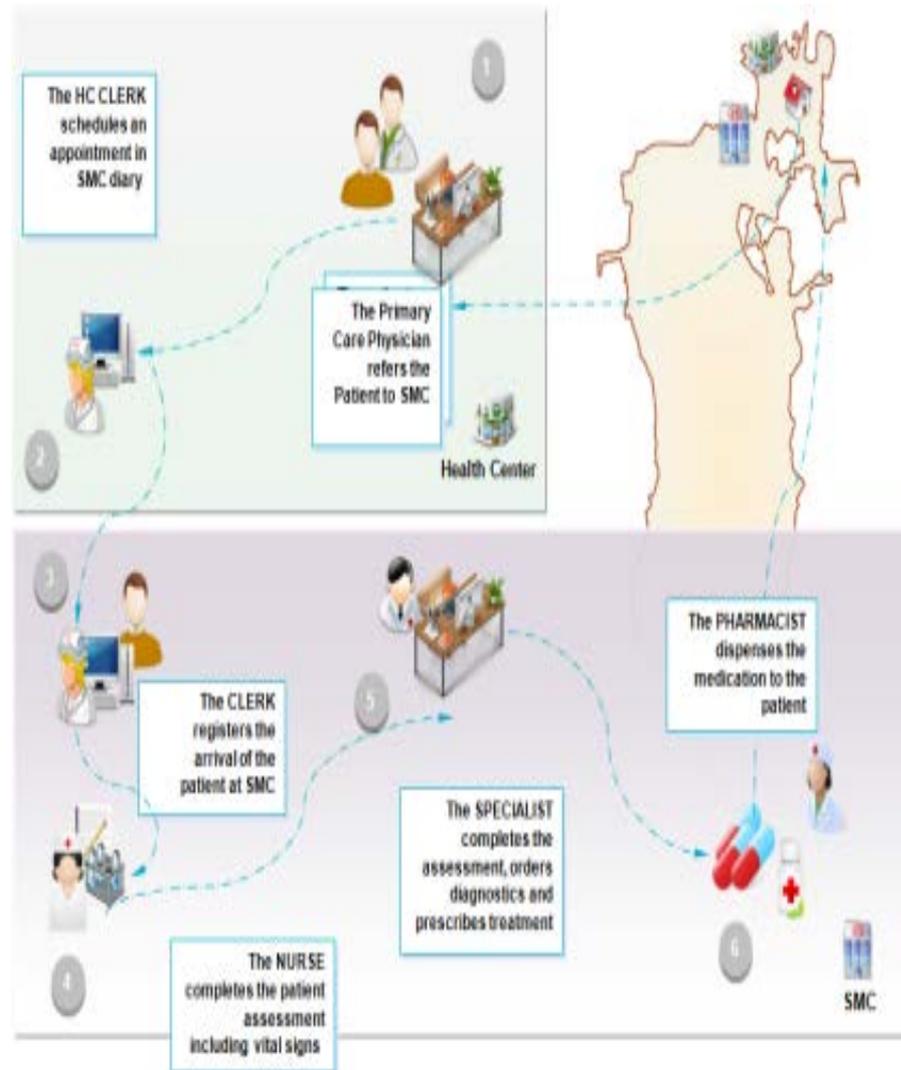


INTEGRATED SYSTEM IN A WORKFLOW



Single Electronic Health Record

- It allows any patient to come to any location within the public health care network, and to be able to access his patient file in everywhere and with electronically updated information.



Supports: 100%

Population covered

Total 1,250,000

5.000 Professionals

Physicians, Nurses, Clerks, Technicians

2 General Hospitals

26 Health Centers

4 Peripheral Hospitals



WHY IS SO INNOVATIVE?

- **Unique health information system for primary care and specialized care.**
- Includes **several applications/modules interrelated in a workflow**: electronic health record, scheduling and appointment, pharma prescription and dispensation, invoice & billing, etc.
- Includes an **strategic collaboration with British Medical Journal (BMJ)**.
- Includes **electronic prescription** which is an innovative and paperless drug prescription and dispensing model

A SUSTAINABLE PROJECT

- There are three factors that can warrantee the sustainability of I-Seha
 - **The commitment of the MoH and main stakeholders.** As described before this initiative is part of I-SEHA which is one of the major projects carried out recently to modernize Bahrain's health system.
 - **The benefits for professionals and end users.** This project facilitates the work of healthcare givers and therefore, they are the most interested in sustain this system.
 - **The return on investment** by enhancing productivity, saving money and improving people's health.

HOW I-SEHA IS CONTRIBUTING TO SAVE RESOURCES?

- It is still early to get a total picture and it is always difficult to estimate since there are many factors that may contribute to savings which can be grouped as follows:

Direct and tangible savings

- Potential reduction of redundant personnel
- Reduce medical and testing errors
- Elimination of film

Time value of money

- Save time in consultations
- Improved physician productivity

Qualitative value of money

- Improved patient satisfaction
- Decreased length of patient stay in the hospital
- Improved referring physician satisfaction

Clinical studies show that EHR can cut the cost of care by about 3%, in ambulatory health costs after 18 months after adoption compared with traditional paper records.

July 2013, issue of Annals of Internal Medicine

HOW I-SEHA IMPACTS ON PUBLIC SERVICE?

Set up the ground for a future Health insurance system

The combination between business intelligence and the accounting system would have a huge impact in the strategic decision-making process.

I-SEHA will allow to integrate –both data and billing – **public and private health sector.**

I-SEHA is the tool to set up a **reimbursement system** for insurance companies.

I-SEHA will bring information on **the opportunity- cost calculation**: the statistical data analysis will support strategic decision-making process in the financial area.



The UN Award

I-Seha video



Press Coverage



Promotional materials

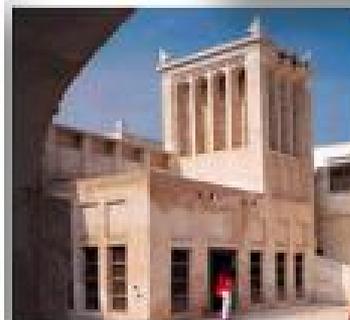
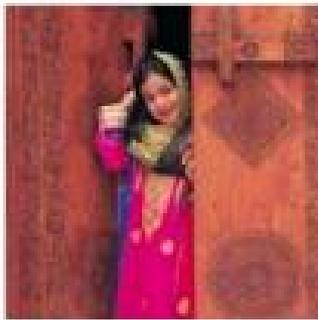
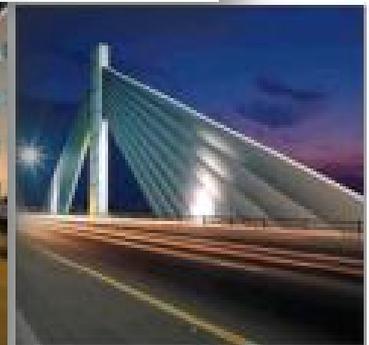


Website / Newsletter





Thank you



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