Health System in Saudi Arabia

DR. BADER AL-IBRAHIM

FIELD EPIDEMIOLOGY TRAINING PROGRAM

MINISTRY OF HEALTH

Lecture Objectives

- To know why should a medical student understand the health system
- To understand what is a health system
- To know the components of a health system
- To Know the strengths and weaknesses of the current health system
- To know the challenges facing the current Saudi health system
- To know the future changes in the Saudi Health System Strategy

Why should a medical student understand the health system

- You belong to it
  (you are part of the system)
- To participate in the system's improvement process
- To understand the medico-legal aspects of patient care

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"Couldn't find anything wrong with this one. Maybe he's just lazy."

Health System

Definitions

What is Health:

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"

(WHO) 1948

Health System

Definitions

What is a System ?

A SET OF **INTERRELATED** AND **INDEPENDENT** PARTS DESIGNED TO ACHIEVE A SET OF **GOALS**.

What is a Health System ?

A health system is the total of all the organizations, institutions and resources whose primary purpose is to improve health.

Health System Needs

A health system needs to provide services that are:

- Responsive,

- Financially fair,

- Treating people decently.

(WHO)

Health System: Components

- **Financing Resources**
- **Legislative Authorities**
- **Health Regulators**
- **Health Care Providers**
- **Human Resources**
- **Medical supplies providers**
- **Pharmaceutical producers**
- **Judiciary Services**

Health System: Components

Financing Resources:

- Governmental
- Out of pocket.
- Charity.
- Donation.

Health System: Components

Legislative Authorities:

The Royal Cabinet:

➢ Al Shora Council

➢ The Bureau of Experts

Health System: Components

Health Regulators:

The National Organizations:

- **The National Health Council**
- **Ministry of health**
- **The Saudi Commission for Health Specialties**
- **Council of Co-operative Health Insurance**
- **The Saudi Food and Drug Authority**

Health System: Components

Health Care Providers:

- Ministry of Health
- Ministry of Defense and Aviation
- National Guards
- Ministry of Interior
- Specialized Hospitals (KFSH, KKESH)
- Universities (Ministry of Higher Education)
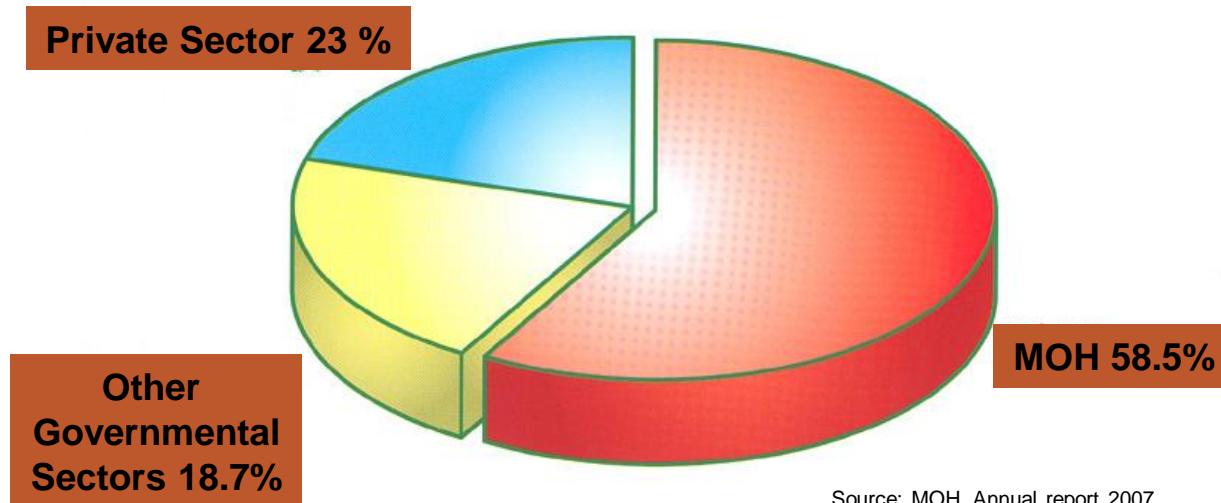
Health System: Components

Health Care Providers:

- Ministry of Social welfare
- The Private Health Providers
- The big Companies:
    - Saudi Aramco,
    - SABIC,
    - Saudi Electric Company,
    - Saudi Airlines
- Charity Health Providers
- The Saudi Red Crescent

Health System: Components

Health Care Providers:

Hospital Beds distribution according to sectors

Private Sector 23 %

Other Governmental Sectors 18.7%

MOH 58.5%

Source: MOH Annual report 2007

Health System: Components

Health Care Providers:

Level of Care

2325 PHCCs

PRIMARY HEALTH CARE

SECONDARY HEALTH CARE

**Around 484
67% Govermental**

TERIEARY HEALTH CARE
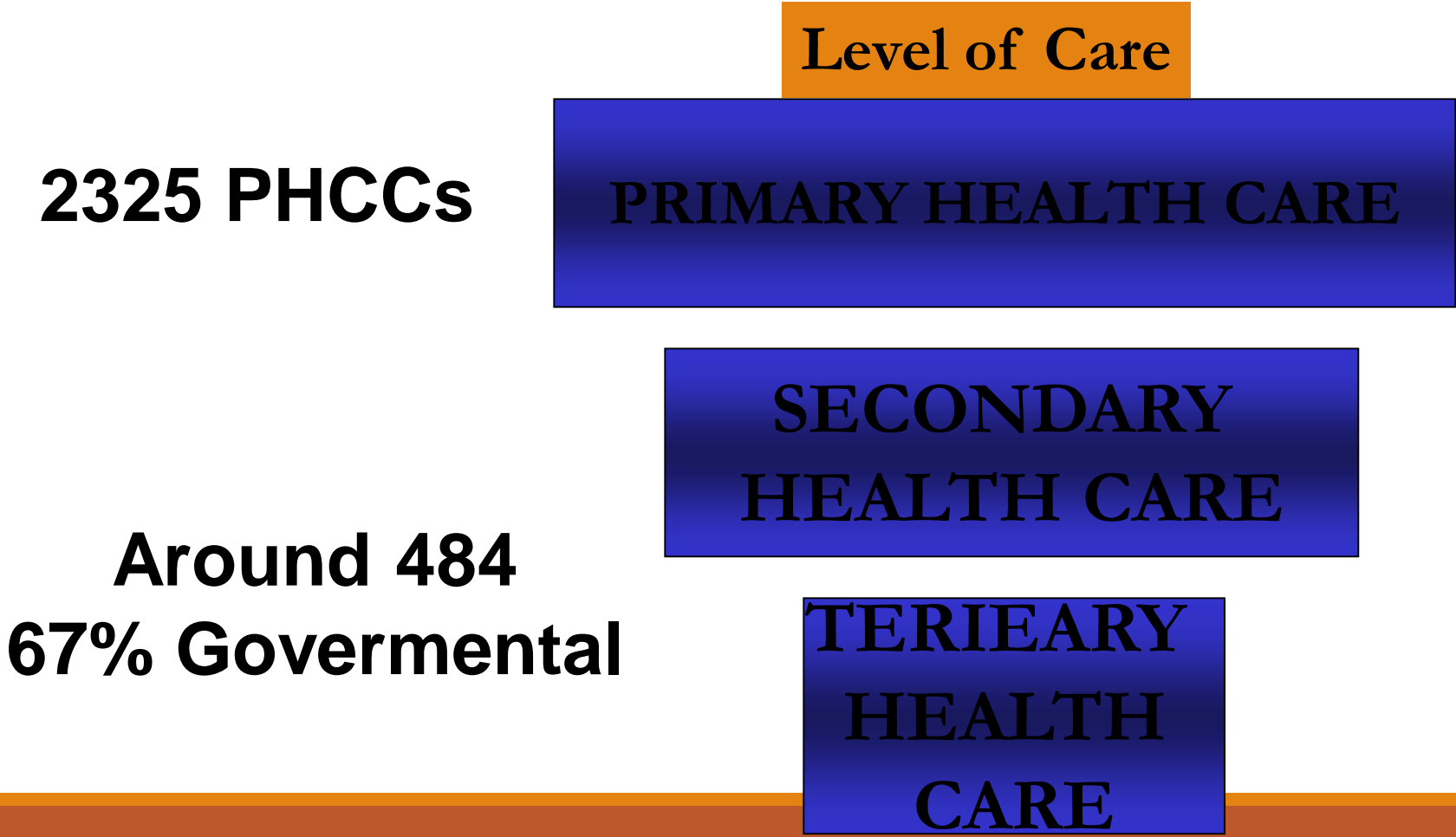
Health System: Components

Human Resources:

Rates per 10,000 Population (MOH)	
Physicians including Dentists	13.5
Dentists	1.13
Pharmacists	1.1
Nurses including Midwives	31.9
Allied Health Personnel	18.1

Health System: Components

Human Resources:

Total Health Manpower in KSA	
Physicians including Dentists	89,675
Dentists	13,935
Pharmacists	25,119
Nurses including Midwives	180,821
Allied Health Personnel	107,323

Health System: Components

Medical supplies providers:

- Medical supplies (consumables)
- Medical Equipment
- Medical Instruments
- Medical Devices

Around 30 Medical Supplies
Factories in KSA

Health System: Components

Pharmaceutical Producers:

- Medications

- Medical Solutions

- Immunizations

Health System: Components

Judiciary Services

- **Committee for Private sector violations**
- **Medico-legal committee.**
- **Health Insurance Violation Committee**

Ministry of Health Organizational Chart

Role of Provincial Health Director

- **Manage Patient Care**
- **Supervise the private sector**
- **Supervise reporting of infectious diseases among all health providers**
- **Co-operate with health related agencies**
- **Participate in the health development planning**

STRENGTHS AND WEAKNESSES OF THE CURRENT HEALTH SYSTEM

Strengths:

- **Universal (covers everybody) (NHS)**
- **Accessible**
- **Comprehensive**
  (primary, secondary and tertiary)
- **Safe**
- **Equitable**

Health System in Saudi Arabia

Vital Statistics	
Crude Birth Rate/ 1000 population	17.23
Crude Death Rate/1000 population	2.9
Life Expectancy at Birth (years)	
Males	73.5
Females	76.1
Total	74.8
Total Fertility Rate	2.4
Neonatal Mortality Rate/1000 live birth	2.74
Infant Mortality Rate/1000 live birth	4.82
Under 5 years Mortality Rate/1000 live birth	8.05
Maternal Mortality Ratio/ 100 ›000 live birth	12

STRENGTHS AND WEAKNESSES OF THE CURRENT HEALTH SYSTEM

Weaknesses:

- **Weak Primary care**
- **Multi - sectoral:**
  - o **Duplication of services among Providers**
  - o **Difficult to Co-ordinate**
  - o **Waste of resources**

CHALLENGES FACING
THE CURRENT HEALTH SYSTEM

- **Financial**

Budget allocated to the health sector by the Ministry of Health :

1956: 39.549.458 SR

1958: 68.480.000 SR

1960: 116.395.000 SR

2009: 40.43 billion SR

2010: 61.20 billion SR

2019: 172 billion SR

CHALLENGES FACING
THE CURRENT HEALTH SYSTEM

- **Financial**
- **Data for decision-making/policy-making .**
- **Manpower**
- **Population:**
  - ➤ **Growth**
  - ➤ **Aging**
  - ➤ **Demanding**
- **Changes in Disease patterns (NCD)**
- **New medical technologies and**
  new medications

HIGH COST OF HAELTH CARE

Why?

- Population growth of 3.1% per annum
- Increased demand on health services
- Rise in the cost of health care

HIGH COST OF HAELTH CARE

what to do with...

WHAT TO DO NOW...

A delivery system that prevents <u>abuse</u> and <u>excessive use</u>

a **managed** health care model, under the National Health **Insurance**

New Model Of Care

Model of Care (MoC) is based on six systems of care that center around ensuring patient well-being and contributing to a healthier society

Model of Care design

Six Systems of Care
Draws the patient journey through clinical pathways

Six Layers of Service
Identify patients services at every level of service

MoC will be delivered through the 42 interventions spread across Systems of Care, which will be rolled out across all the clusters

Model of Care Interventions

Interventions cross-cutting all Systems of Care

- Health In All Policies
- Virtual Self-Care Tools
- Virtual Education and Navigation Tools
- Health Hotline Services
- Healthy Living Campaigns
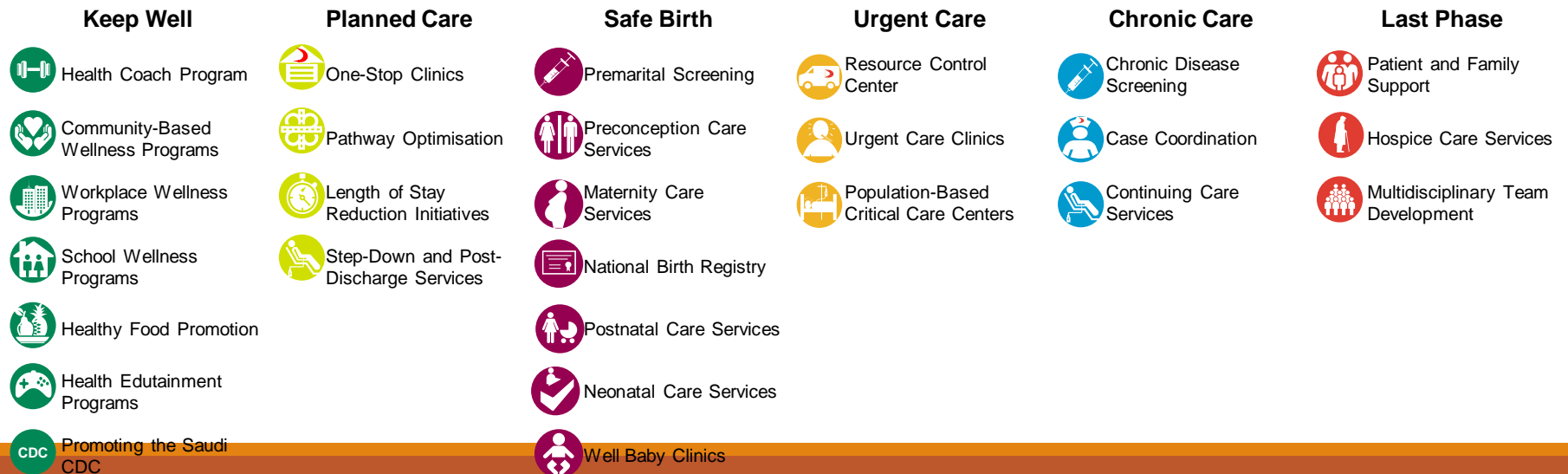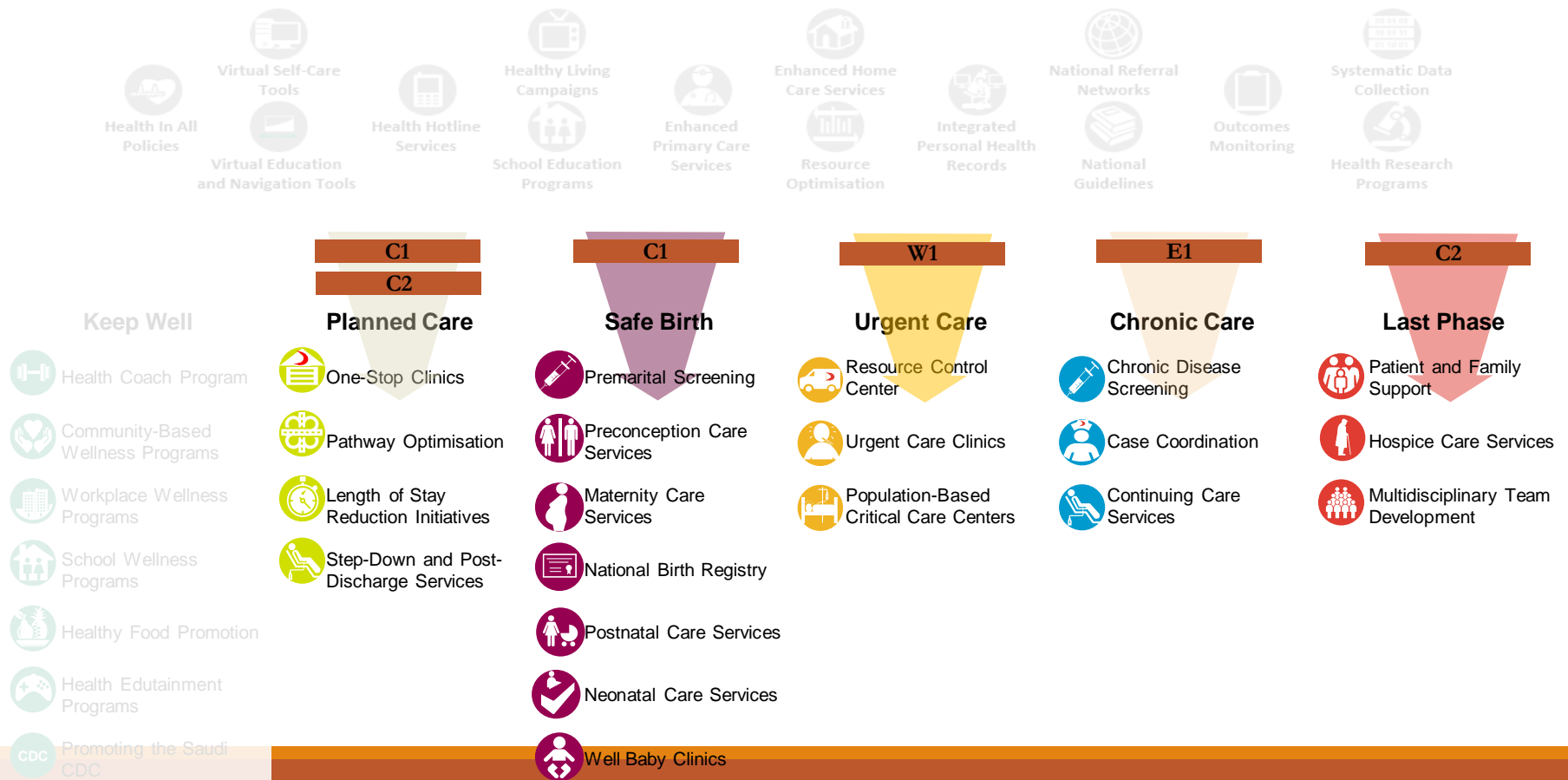- School Education Programs
- Enhanced Primary Care Services
- Enhanced Home Care Services
- Resource Optimisation
- Integrated Personal Health Records
- National Referral Networks
- National Guidelines
- Outcomes Monitoring
- Systematic Data Collection
- Health Research Programs

Interventions specific to Systems of Care

Keep Well	Planned Care	Safe Birth	Urgent Care	Chronic Care	Last Phase
Health Coach Program	One-Stop Clinics	Premarital Screening	Resource Control Center	Chronic Disease Screening	Patient and Family Support
Community-Based Wellness Programs	Pathway Optimisation	Preconception Care Services	Urgent Care Clinics	Case Coordination	Hospice Care Services
Workplace Wellness Programs	Length of Stay Reduction Initiatives	Maternity Care Services	Population-Based Critical Care Centers	Continuing Care Services	Multidisciplinary Team Development
School Wellness Programs	Step-Down and Post-Discharge Services	National Birth Registry			
Healthy Food Promotion		Postnatal Care Services			
Health Edutainment Programs		Neonatal Care Services			
Promoting the Saudi CDC		Well Baby Clinics			

Currently, each Cluster is running specific pilots corresponding to a given System of Care

Model of Care Interventions

	Planned Care	Safe Birth	Urgent Care	Chronic Care	Last Phase
	C1 / **C2**	**C1**	**W1**	**E1**	**C2**

Keep Well
- Health Coach Program
- Community-Based Wellness Programs
- Workplace Wellness Programs
- School Wellness Programs
- Healthy Food Promotion
- Health Edutainment Programs
- Promoting the Saudi CDC

Planned Care
- One-Stop Clinics
- Pathway Optimisation
- Length of Stay Reduction Initiatives
- Step-Down and Post-Discharge Services

Safe Birth
- Premarital Screening
- Preconception Care Services
- Maternity Care Services
- National Birth Registry
- Postnatal Care Services
- Neonatal Care Services
- Well Baby Clinics

Urgent Care
- Resource Control Center
- Urgent Care Clinics
- Population-Based Critical Care Centers

Chronic Care
- Chronic Disease Screening
- Case Coordination
- Continuing Care Services

Last Phase
- Patient and Family Support
- Hospice Care Services
- Multidisciplinary Team Development

Virtual Self-Care Tools · Health In All Policies · Virtual Education and Navigation Tools · Health Hotline Services · Healthy Living Campaigns · School Education Programs · Enhanced Primary Care Services · Enhanced Home Care Services · Resource Optimisation · Integrated Personal Health Records · National Referral Networks · National Guidelines · Outcomes Monitoring · Systematic Data Collection · Health Research Programs

MoC aim is to create comprehensive Integrated Care Systems for holistic care delivery based on the Model of Care
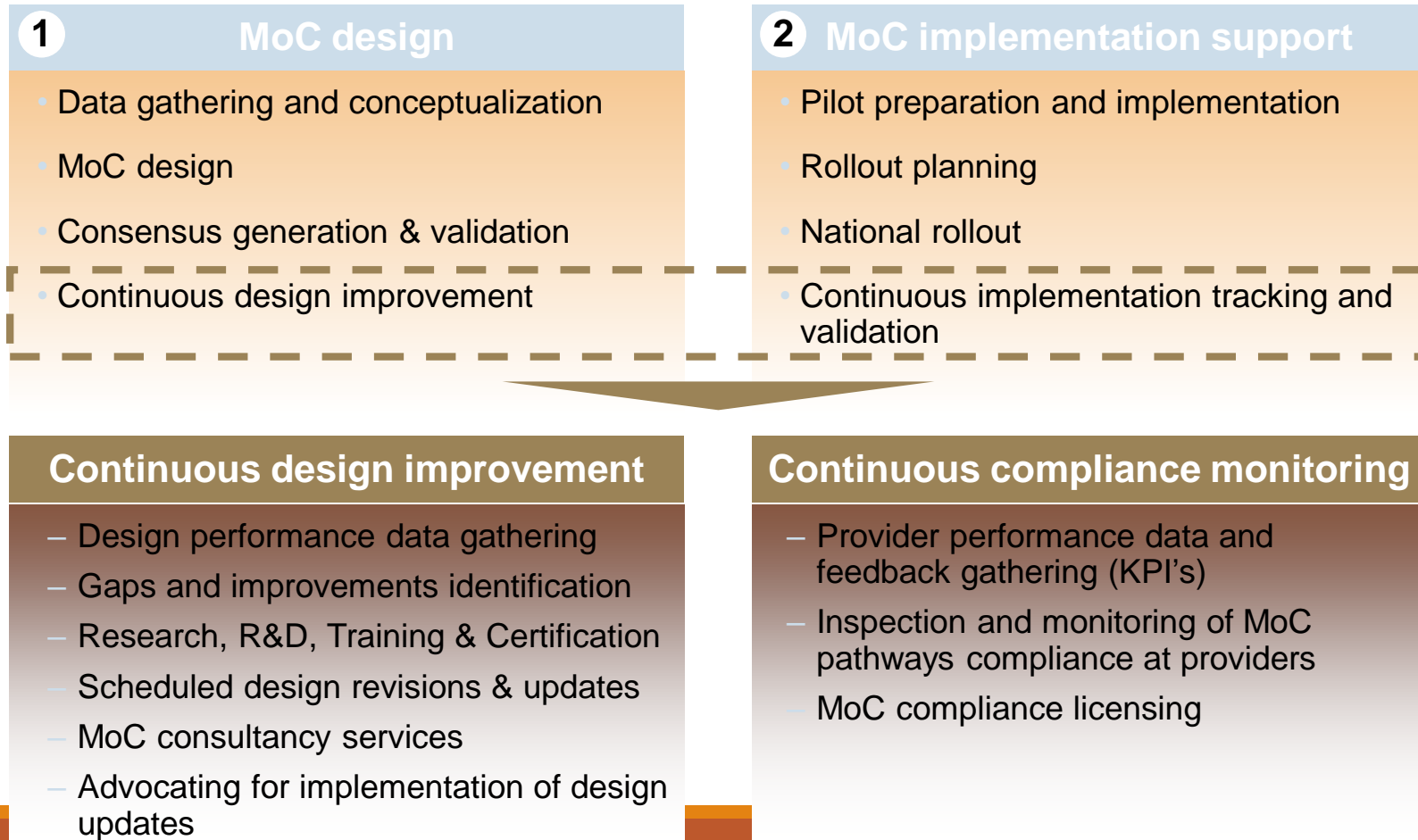
How does MoC fit into Integrated Care Systems?

Model of Care **interventions** will be responsible for **delivery** of all **health services** from preventive to curative to a **defined population** according to their **needs** over time and across different **levels** of the health system

The objective of the MoC workstream is to design and implement KSA's future healthcare delivery system

Key activities of MoC workstream

1 **MoC design**

- Data gathering and conceptualization
- MoC design
- Consensus generation & validation
- Continuous design improvement

2 **MoC implementation support**

- Pilot preparation and implementation
- Rollout planning
- National rollout
- Continuous implementation tracking and validation

Transformation

Continuous design improvement

– Design performance data gathering
– Gaps and improvements identification
– Research, R&D, Training & Certification
– Scheduled design revisions & updates
– MoC consultancy services
– Advocating for implementation of design updates

Continuous compliance monitoring

– Provider performance data and feedback gathering (KPI's)
– Inspection and monitoring of MoC pathways compliance at providers
– MoC compliance licensing

End state

We are currently nearing the end of Phase III and are preparing for Phase IV

MoC roadmap and progress so far

Phase IV: Conduct national roll out

We're prepping for this

Phase III: Launch pilots and continue preparations

We're here

Phase II: Prepare for pilot implementation

Phase I: Design the MoC

In Phase I, citizens, experts and workforce were engaged to design the new Model of Care…

Phase I: MoC design effort

60,000+ citizens participated in Public Survey around the patient centric design

2500+ healthcare professionals engaged in e-discussions

1000+ healthcare professionals surveyed to identify improvement opportunities

400+ healthcare professionals from around the country participated in assessing the current system

3 Care Design Group sessions were held to address key issues in KSA healthcare delivery, shortlist necessary interventions, and design the SoCs[1]

1. System of Care

In Phase II, preparation initiated for implementation by detailing a pathway for each System of Care, 6 national interventions and a national cost-benefit analysis

Phase II: Pathway development and implementation preparation

2a Workstream 1

Regional Pathway Development

5 Systems of Care were detailed[1] by 5 National Pathfinders

King Saud Medical City
Safe Birth & Planned Care

King Fahad Medical City
Last Phase & Planned Care

King Khaled Eye S. Hospital
Planned Care

King Fahad S. Hospital
Chronic Care

King Abdullah Medical City
Urgent Care

Central
Western
Eastern

2b Workstream 2

National Implementation Planning

6 Cross-cutting interventions + Keep Well were detailed by a centralized team of experts

Cross-cutting interventions

- National Guidelines
- Virtual Education and Navigation Tools
- Enhanced Primary Care Services
- Healthy Living Campaigns

Keep Well interventions

- School Wellness
- Health Coach Program

2c Cost benefit analysis

A top-down estimate of the economic impact of all the Systems of Care and all the cross-cutting interventions

1. Developing national Systems of Care designs into implementable regional pathways

In Phase III, 5 pathway development projects (pilots) launched and continued detailing interventions

Phase III: Pilots implementation

3a Pathway pilot implementation

Ownership of pathways transferred to clusters

Central Cluster 1
Safe Birth & Planned Care

Central Cluster 2
Last Phase & Planned Care

Jeddah Pilot
Hypertension

Eastern Cluster
Chronic Care

Western Cluster 1
Urgent Care

Central
Western
Eastern

3b National interventions development

Specialized Care
- Ophthalmology
- Oncology
- Mental Health Services

Urgent Care Pilots
- Acute Coronary Syndrome
- Stroke
- Trauma

Cross-Cutting
- Resource optimization
- Health Hotline
- National Referral Networks

Health in All Policies & GIS

3c Cost benefit analysis

A bottom-up economic impact estimation of the Model of Care based on learnings from the pathway implementation projects

currently planning MoC cluster rollouts as the first step towards national rollout

Phase IV: National rollout

Focus areas for rollout planning

Capability building
Develop capabilities to implement and maintain MoC

Engagement and adoption
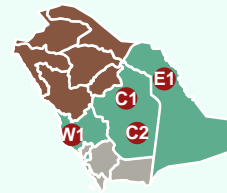Create a sense of ownership at clinical and community-level to support roll-out

Funding
Secure the required funding for national implementation of MoC

Rollout planning tracks

In progress

Planning for MoC roll out in **current clusters**
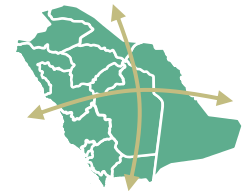
Planning for MoC roll out in unclustered providers

Planning for MoC roll out support mechanisms needed for implementation

Initiated

Planning for MoC roll out for **national interventions**

Rollout Tracks

illustrative

Thank You!