



National Health Policies

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Objectives

- To understand the difference between the old and new healthcare system in the Kingdom
- To highlight the drivers for the national healthcare transformation
- To list the aims of the national healthcare transformation
- To understand the difference between the different bodies for the new Saudi healthcare system
- To be familiar with concepts important for developing the new healthcare system approach (e.g. population health management)



History of Saudi Healthcare System

History of MOH

- **1925 (1343H):** Public Health Department, in Makkah
- **1925 (1344):** Public Health and Ambulance Services
- **1950 (1370):** *Ministry of Health established* by a royal decree from King Abdul Aziz

MOH Mission

- Provision of healthcare at all levels
- Promotion of general health and prevention of disease
- Developing laws and legislations regulating both governmental and private health sectors
- Monitoring performance in health institutions
- Monitoring research activity and academic training in field of health



Legislators, regulators and providers

Legislation

- Executive bodies:
 - The King
 - The Council of Ministers
- Judicial body:
 - The Saudi court
- Legislative body:
 - Shariah

Health regulators

- 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
- Public Health Authority => new!

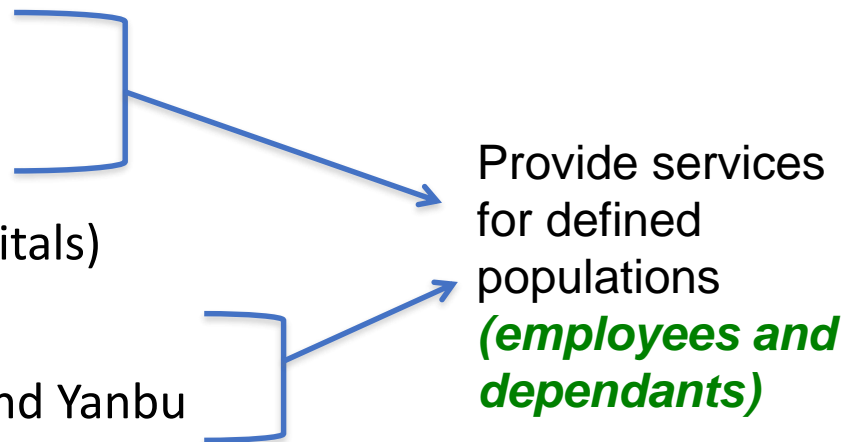
Healthcare providers

- Governmental
 - MOH
 - Other ministries (MOE, MOD...etc)
- Non-governmental (private)
 - These are regulated by the council of cooperative health insurance (مجلس الضمان الصحي التعاوني)

Providers (public providers)

- Prior to 2016, almost **60%** of the healthcare provision was provided by MOH and free
- **Other Government** bodies include:

- Referral hospital (KFSHRC)
- Security Forces
- Army Forces
- National Guard
- MOE hospitals (teaching hospitals)
- ARAMCO hospitals
- Royal commission for Jubail and Yanbu
- School health units
- Red Crescent Society



Provide services for defined populations
(employees and dependants)

Healthcare Delivery Structure in 2011

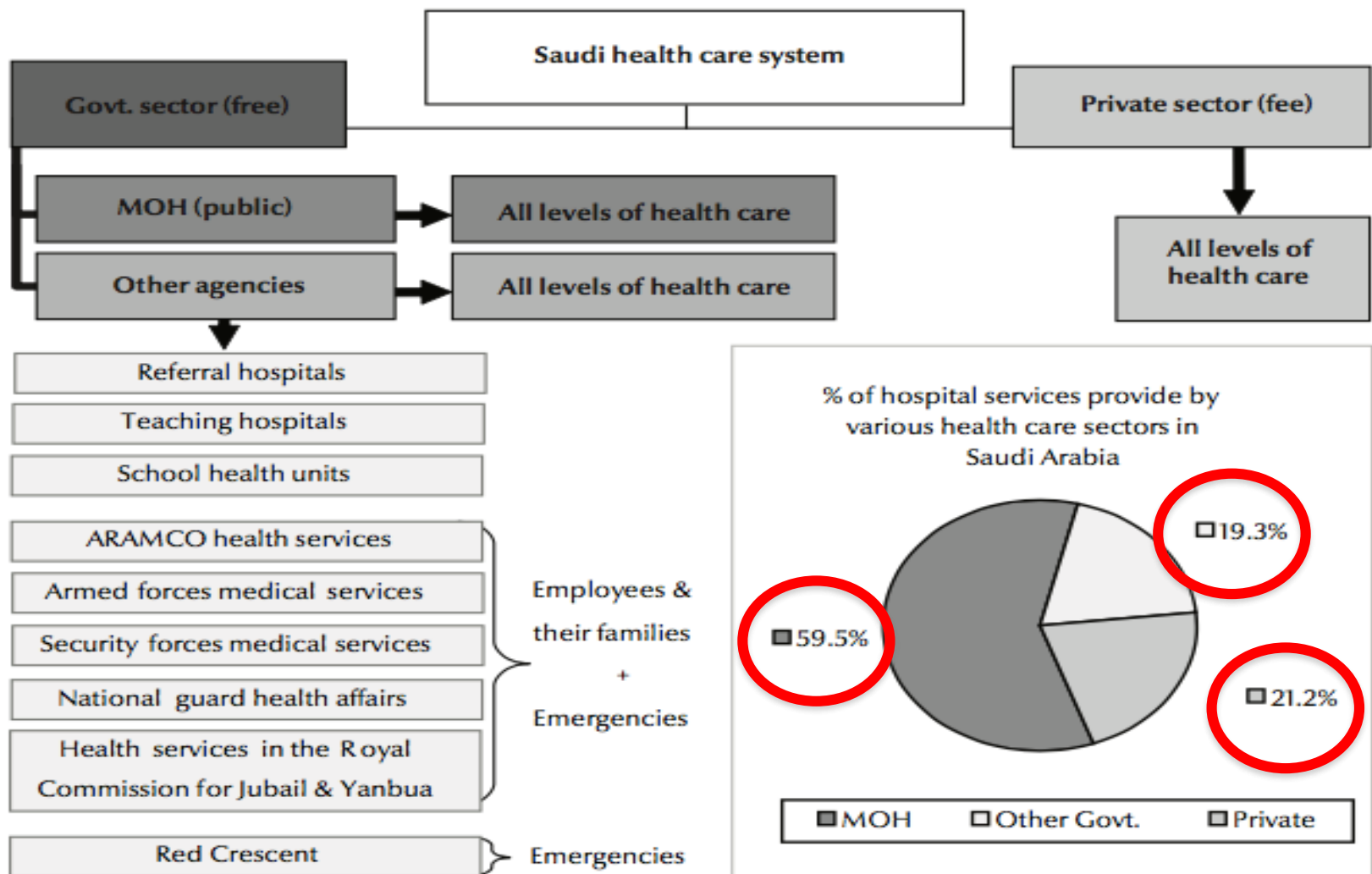


Figure 1 Current structure of the health care sectors in Saudi Arabia (MOH = Ministry of Health). Source of data: [4]

Source: Almalki M, Fitzgerald G, Clark M. Healthcare system in Saudi Arabia an overview. East Mediterr Health J 2011; 17(10): 784-793

MOH Milestones in Prevention and Control

- **1950:** ARAMCO collaborated with WHO to MOH control malaria in Eastern region
- **1978:** The country adopted concept of Primary Health Care
- **1983:** Primary healthcare was implemented in healthcare system
- **1997:** Successful immunization program where 90% of children were immunized
- **2016:** National Healthcare Transformation begins..



Why do we need to change our healthcare system approach?

Challenges to healthcare systems worldwide

1. Resources for healthcare are limited
2. Populations are getting older
3. Changes in the epidemiology of diseases
4. Healthcare systems are fragmented

These are causing a shift in healthcare

Why does the MOH need to change its model?

1. The population is aging (life expectancy is expected to rise, and so would the need for services for the elderly to meet demands)
2. Rates of avoidable non-communicable diseases and injuries are getting higher (current prevention measures are not sufficient)
3. Primary care is not adequate. (they are not acting as gate-keepers and people are accustomed to accessing secondary and tertiary care for things that can be treated in primary care setting)
4. There is significant gaps in quality of services
5. There is disparity in access to care
6. Organizations are institution and staff-centric (not population-centric)
7. Gaps in workforce capacity and capabilities
8. A lot of waste in resources and medical spending

Source: <https://www.moh.gov.sa/en/Ministry/vro/Documents/Healthcare-Transformation-Strategy.pdf>

The Saudi population is changing

- 35+ Million in 2020 -> 39.5 Million by 2030
- People between ages 60 – 70 y will increase by 136.2% by 2030
- Latest annual growth rate as per GSTAT was approximately 2.5%
- The current youth (child and adolescent populations) will be of child-bearing age soon, and will require obstetrics and pediatric services -> increased demand for these services
- The increase in aging population -> would mean that we should expect a higher prevalence of the different chronic diseases and more frequency of “mild disability” in elderly population; as in other parts of the world -> increased demand for coordinated care, assisted self-care and home-care services

The Saudi National Health transformation

- As part of the Vision 2030 Transformation Programs, Saudi Arabia has established a national health transformation program
- This is based on a national shift in “governmental” healthcare services to “value-based care” services

Aims of this transformation

- **1. Improve health outcomes:** Increase the length, wellbeing and quality of life of Saudi citizens, which includes the Vision 2030 goal of increasing the life expectancy of citizens to 80 years by 2030;
 - **2. Improve quality of care and patient experience:** By improving the quality and consistency of services and the performance and accountability of healthcare organizations and staff to deliver care that is safe, effective, person-centered, timely and equitable; and
 - **3. Reduce costs:** by containing costs, improving outcomes, controlling public healthcare expenditure and guiding new investment
-
- Improve quality + reducing costs will improve value!
-
- This is called the “Triple Aim”; first developed by the Institute for Healthcare Improvement



Change in governance structure

Previous model vs. new model

MOH one body for financing,
regulating and providing



What will the new healthcare system offer?

- Provide services by specified healthcare networks (health clusters) to specified populations designated in demarcated geographic locations
- Funding for these services would be based on a quality-incentivized system, such that these health-networks would be rewarded for favorable population health outcomes and would be penalized for improper allocation of services and resources
- Each health network would be accountable for the population it is supposed to serve (accountable care organizations)
- Some services not available in the health-network can be outsourced to private sectors, and networks with specialized services can provide them for a fee, to individuals outside of their network (privitization)
- Primary care services will be better allocated
- Distribution of MoH secondary and tertiary care centers will be improved across different regions in the country (in each health network)
- A better approach to prevention services (public health programs)



How will healthcare services be provided?

How will healthcare services be provided?

- Through health-networks called “**Health Clusters**”
- A total of 21 health clusters to be launched
- Each health cluster has a defined population (ranging from 800 K to 1.6 M); at least 4 hospitals and specialized centers; and a number of PHCs under its organization
- These will act as “**accountable care organizations**” and will need to operate as such
- Health clusters need to establish the following:
 - Build a good **population health management** model
 - Integrate electronic health records from different systems to unify the electronic health record system used in the cluster
 - Develop public health and community participatory programs
 - Repurpose of resources and projecting future budgets
 - Implement 42 planned interventions (as part of the **Model of Care**)
 - Evaluate quality of care and making improvements

Accountable care organization


- organizations that assume financial responsibility and clinical accountability for the care provided to a defined patient population, where their accountability extends beyond organizational boundaries¹
- They are networks of providers that are jointly responsible for the costs and quality of care for a defined population²

¹ Barnes AJ, Unruh L, Chukmaitov A, van Ginneken E. Accountable care organizations in the USA: types, developments and challenges. *Health Policy*. 2014; 118: 1-7.

² Hilligoss B, Song PH, McAlearney AS. Aligning for accountable care: strategic practices for change in accountable care organizations. *Health Care Manage Rev*. 2017; 42(3): 192-202.

Types of ACO Models

The type adopted
by the Kingdom

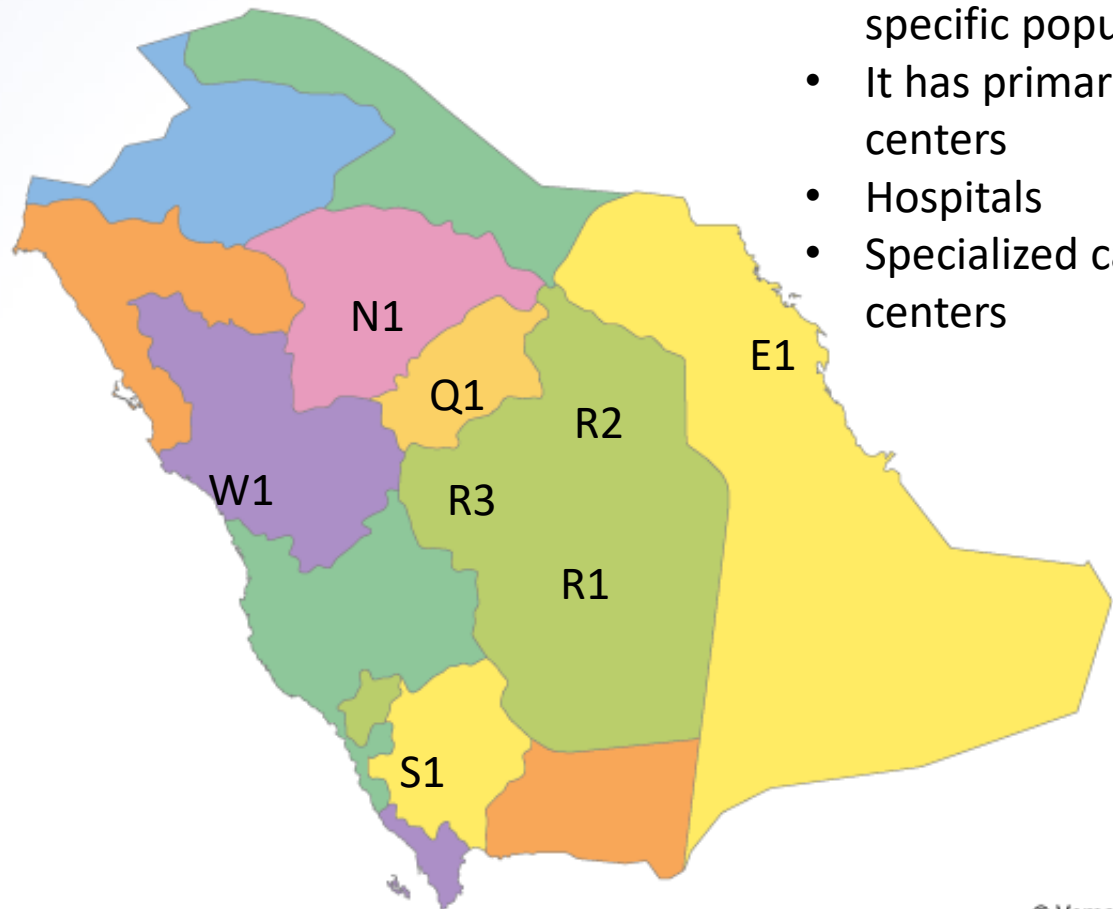


ACO Model	Description
Integrated Delivery Systems	Based on a common ownership of hospitals, physician practices and insurance plan (single insurance company)
Multispecialty Group Practices	Multiple practices (specialty clinics) that are affiliated to one hospital, in which patients are funded through multiple payers (multiple insurance companies)
Physician Hospital Organizations	A subset of hospital staff who coordinate care together for the purpose of improving quality of care and health outcomes, and reducing costs
Independent Practice Associations	Individual physician practices that come together for the purpose of contracting with common health plans, and evolved into organized networks
Virtual Physician Organizations	Physicians integrate their services together virtually; this is usually provided for rural settings

Source: Shortell SM, Casalino LP, Fisher ES. What is an accountable care organization? How the center for Medicare and Medicaid Innovation should test accountable care organizations. Health Affairs, 2010. Available from: <https://pnhp.org/news/what-is-an-accountable-care-organization/>. Accessed on: Jan 16, 2021.

Health clusters (التجمعات الصحية)

- All ministry of health governmental facilities in the Kingdom will be grouped and then divided into 21 clusters, distributed by geographic regions
- Not all have been activated yet



- Each health cluster is responsible for a specific population
- It has primary care centers
- Hospitals
- Specialized care centers

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Interventions for the model of care

The new Model of Care will deliver 42 coherent interventions

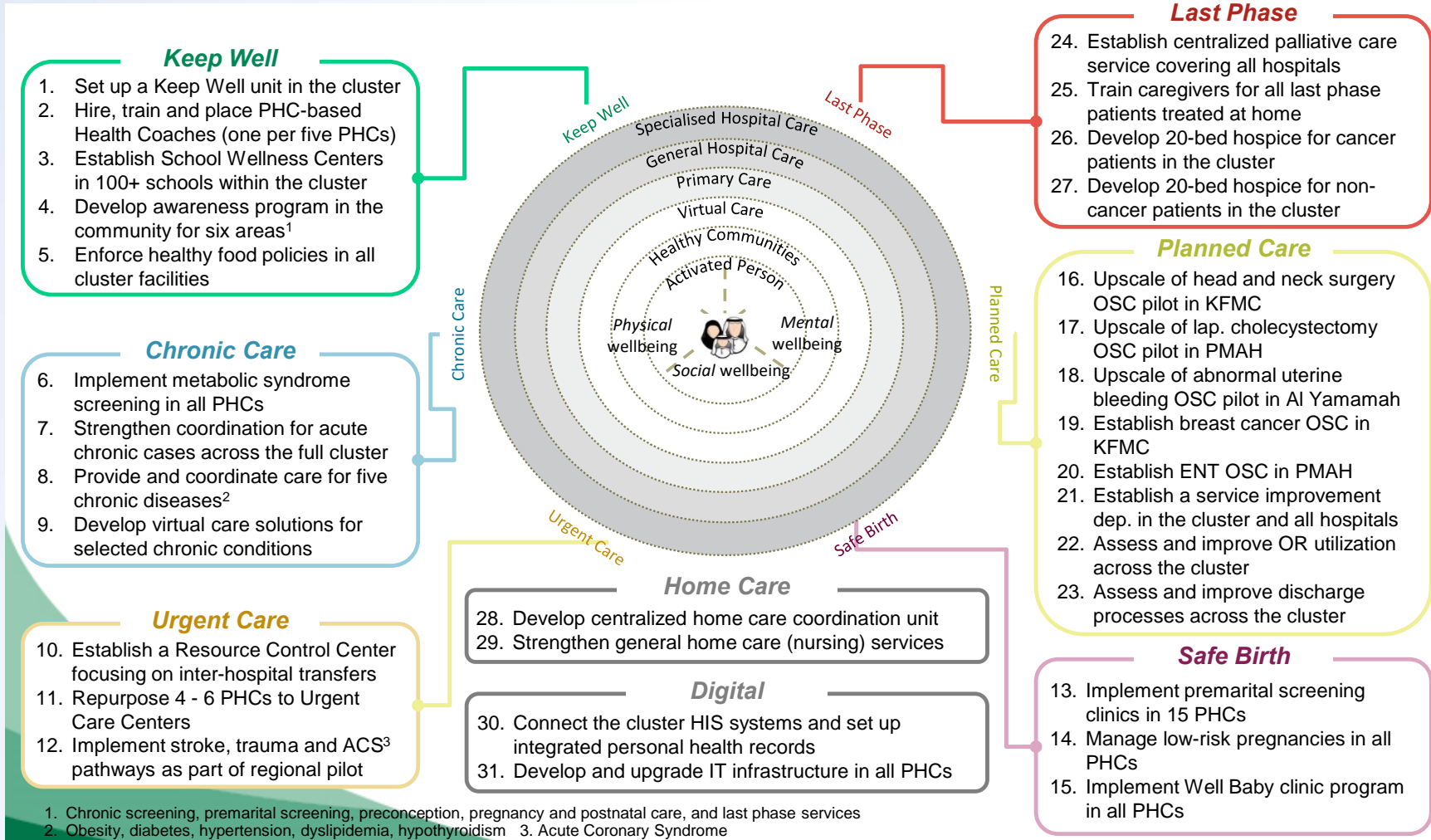
Interventions that cut across all systems of care



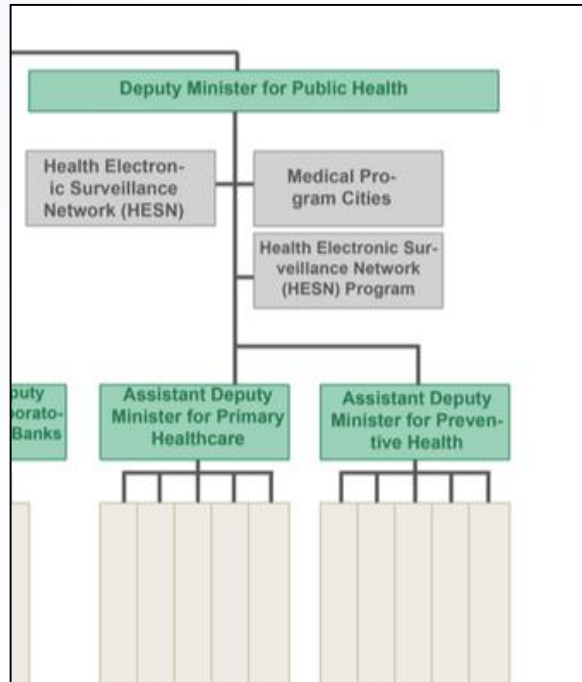
<i>Keep Well</i>	<i>Planned Procedure</i>	<i>Safe Birth</i>	<i>Urgent Problem</i>	<i>Chronic Condition</i>	<i>Last Phase</i>
Health Coach Program	One-Stop Clinics	Premarital Screening	Resource Control Center	Chronic Disease Screening	Patient and Family Support
Community-Based Wellness Programs	Pathway Optimization	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			

Source: Ministry of Health, 2020

Model of Care Initiatives and Programs



Public health policies and guidelines



The healthcare system is moving from a “reactive to proactive”

- Reactive => only caters the individuals health when the individual has a problem or comes to the healthcare facility
- Proactive => reaches out to the individuals before they come to the healthcare facility; go to them in their community;

Reactive

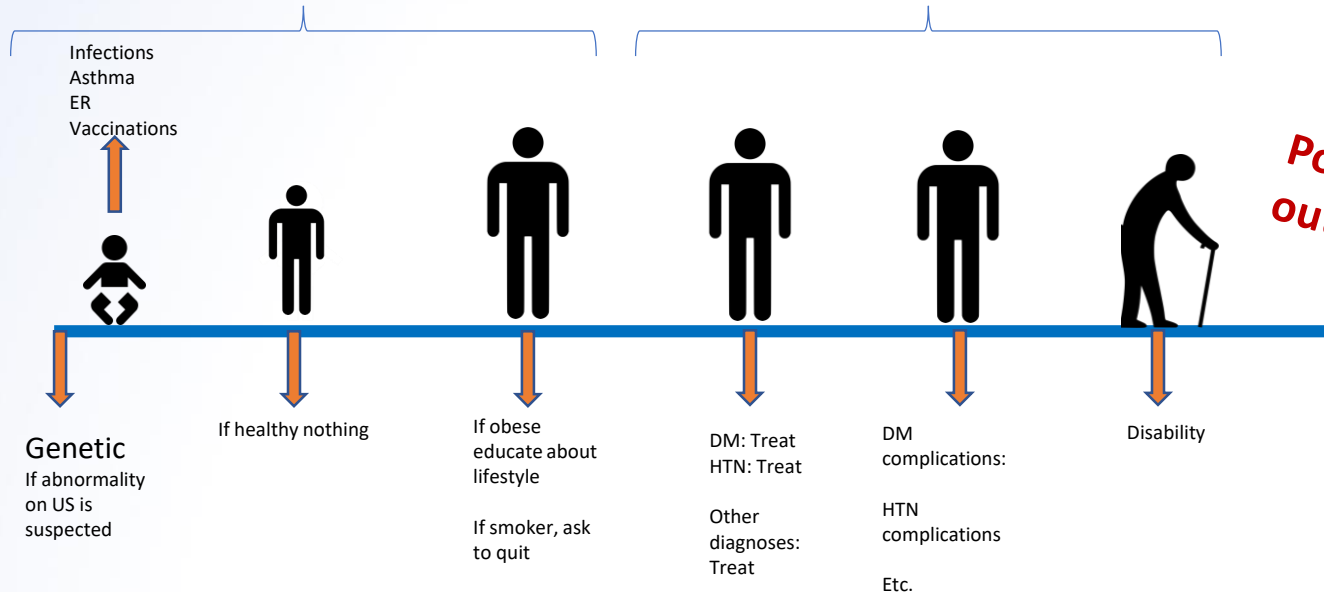
No continuity of care

Less focus on primary prevention

More focus of money and resources on secondary and tertiary prevention

Scattered replicated services

Poor community outreach



Patient has multiple files in different hospitals

Proactive

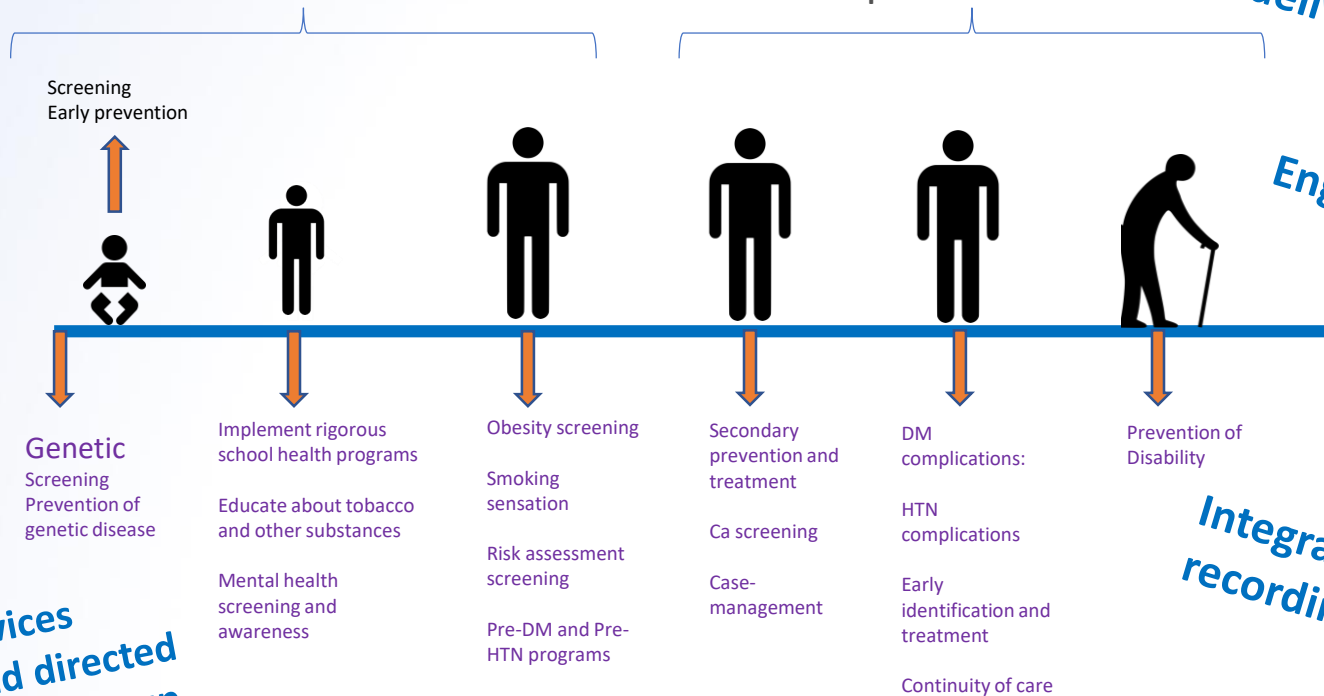
Focus and increase resource allocation to primary prevention

Less spending resources on secondary and tertiary prevention

Continuity of care

Uniform care delivery

Engagement of the community



Focused services designed and directed to targeted risk-group across entire health continuum

Integrated Health recording system

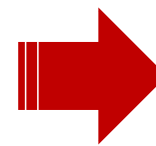
giving attention to everyone across the health spectrum

To be proactive....



We need an approach that:

- understands the needs of each individual
- Integrates data about them from different sources
- allows to make decisions about person-centered interventions
- monitors the quality of care; apply continuous improvements
- predicts future outcomes for better planning
- manages healthcare resources with minimal waste
- reduces the costs of care



**Population Health
Management
Is the solution!**

Many definitions for PHM

A proactive, organized, and cost-effective approach to prevention that utilizes newer technologies to help reduce morbidity while improving the health status, health service use, and personal productivity of individuals in defined populations

A systematic approach to ensuring that all patients receive appropriate preventive, chronic, and transitional care

Accountability and management of the health of an entire community, regardless of system membership or insurance status

A community-based, patient-centered, provider-led approach that has evidence behind it, can be measured, and can not only improve health status, but also reduce cost.

An approach designed to improve consumer health and increase quality of care with an eye toward managing medical costs

Population Health Management (PHM)

PHM is an organized, proactive and multidisciplinary approach for a healthcare delivery system that provides cost-effective health interventions (at all three levels of prevention) that are targeted to the respectable risk-groups in a defined population, using evidence-based approaches, making use of the latest advancements in health information technology, and through engaging the community in the healthcare process

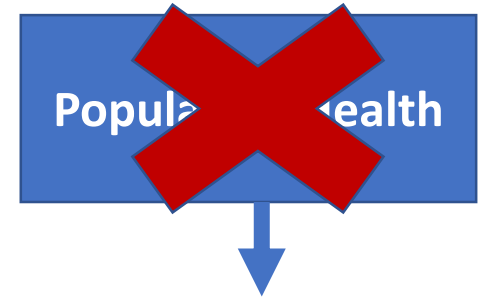
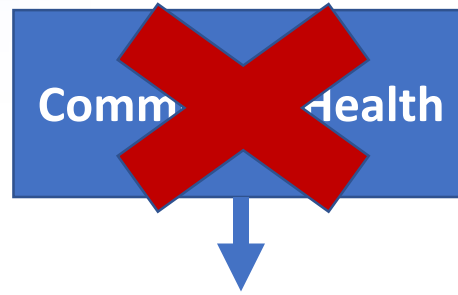
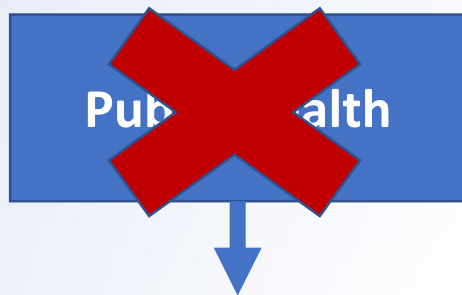
Source: Steenkamer BM, Drewes HW, Heijnk R, Baan CA, Struijs JN. Defining population health management: a scoping review of the literature. *Popul Health Manag* 2017; 20(1): 74-85.

What PHM is not!

- PHM is NOT synonymous to community health
- PHM is NOT synonymous to public health
- PHM is NOT a healthcare system, but rather an approach to one
- PHM is NOT synonymous to primary care delivery

PHM is approaching your healthcare system to deliver person-centered care with better quality, to improve health, and to reduce costs!

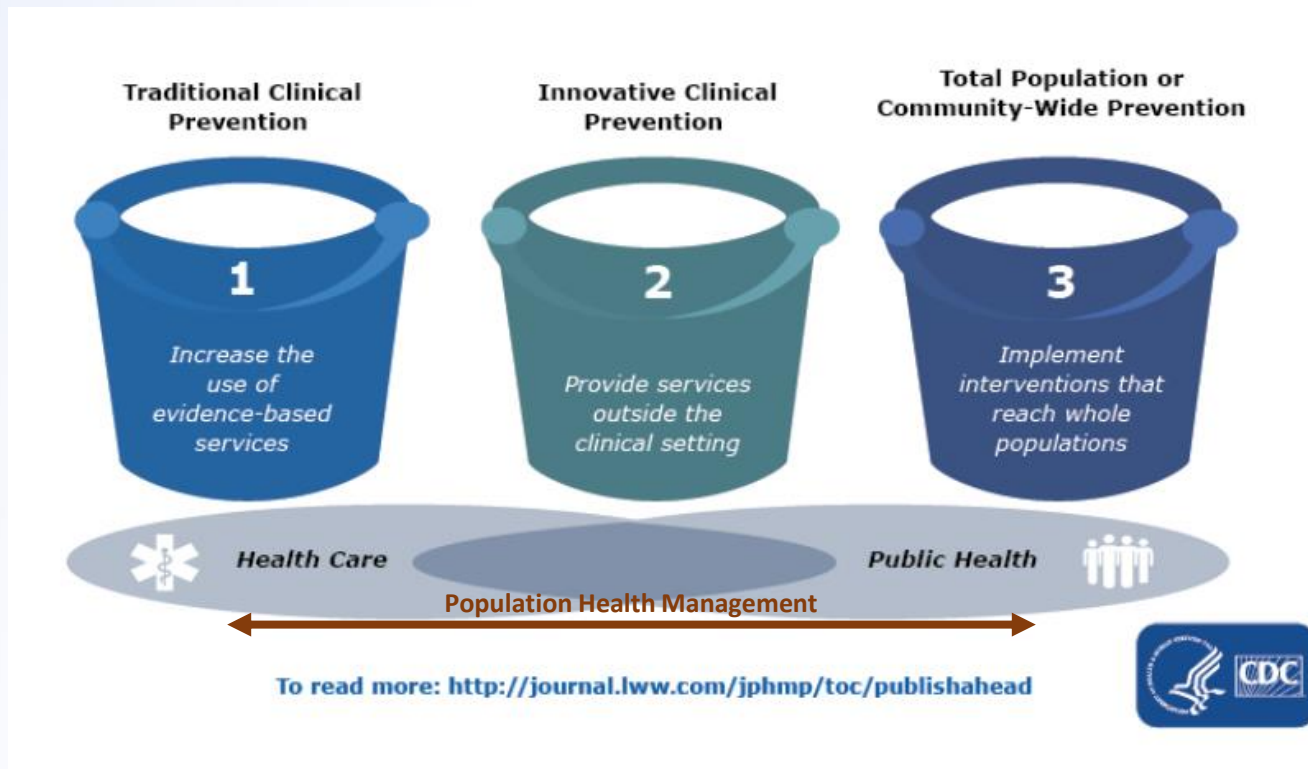
Public Health vs. Community Health vs. Population Health

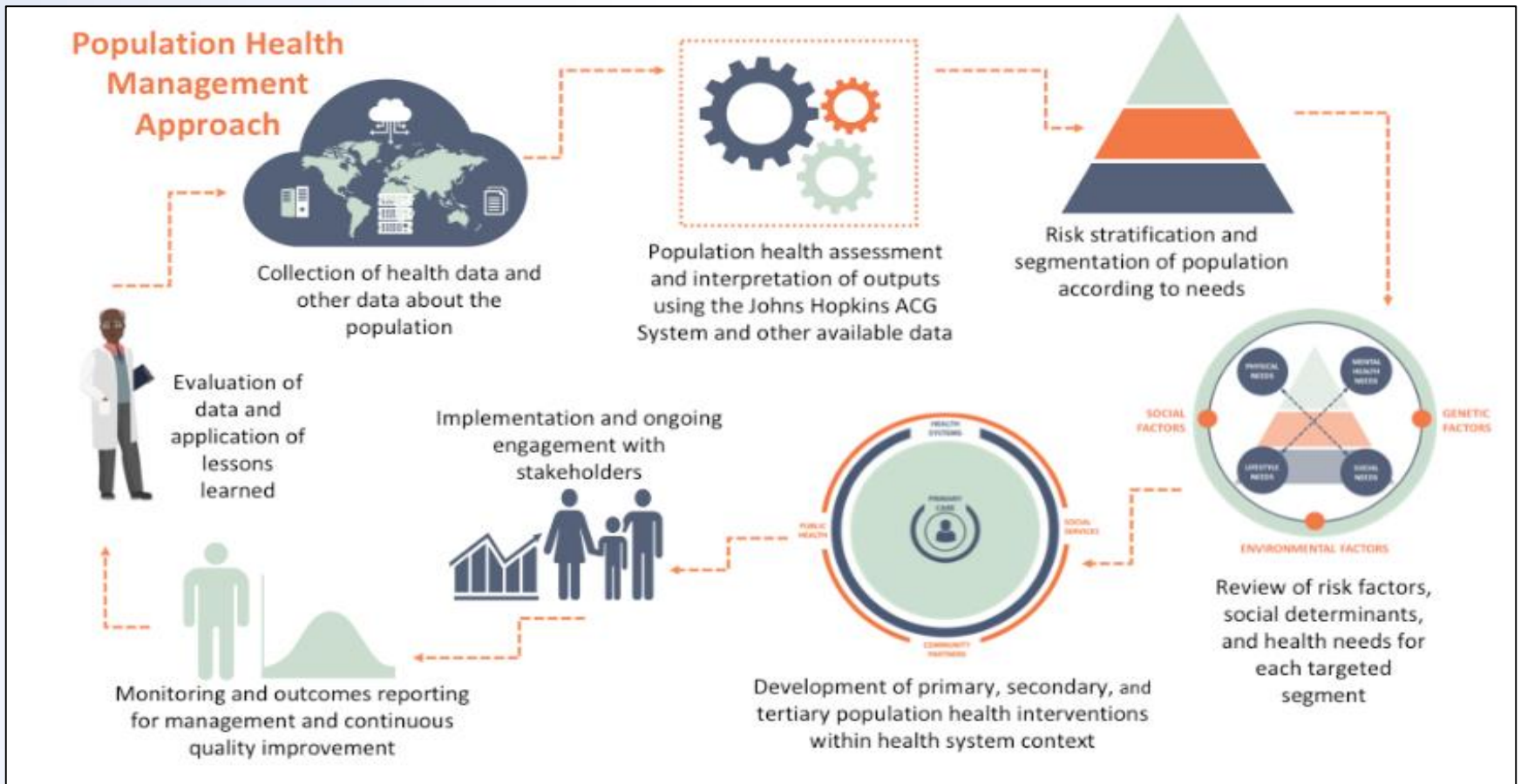


None are population health management

All are needed for population health management, but are NOT in themselves population health management

PHM Bridges the gap between public health and traditional healthcare delivery





Source: Johns Hopkins Population Management Approach. Available from: https://www.hopkinsmedicine.org/international/partners-forum/2018/slides/Melissa.Sherry_Rethinking%20Value%20How%20Hospitals%20Can%20Drive%20Value%20in%20Communities%20They%20Serve.pdf. Accessed on: Oct 12, 2019.

What PHM will help us identify?



=> 50% of
the
population
But use 3%
of costs

Healthy majority



low-risk people



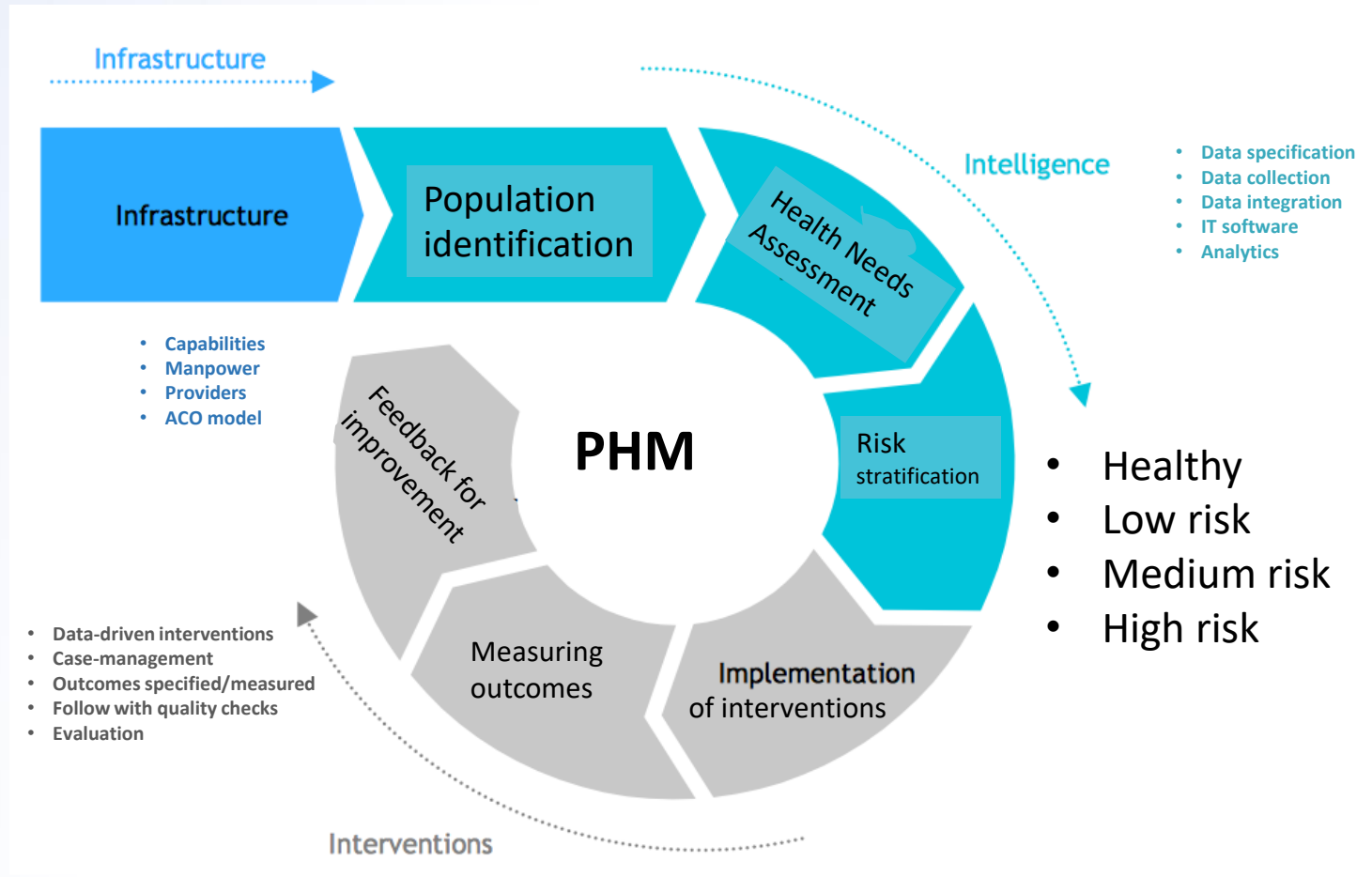
**Medium-risk people
(chronic-conditions
stable)**

**1% of the
<=
population
But use 20%
of costs**



**High-risk complex
(chronic conditions complex)**

PHM framework

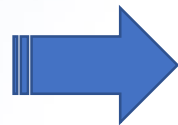


Adapted from: Population Health Management Flatpack: a guide for starting population health management. National Health Service, England, 2018. Available from: <https://imperialcollegehealthpartners.com/wp-content/uploads/2018/07/Population-Health-Management-Flatpack-Version-1.0-Final-Sent.pdf>

An Organization with a PHM model

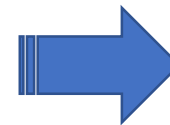


Well defined population



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Datawarehouse (PHM indicators)



Risk group 1: Healthy

Risk group 2: Low risk

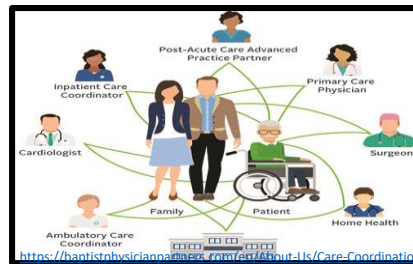
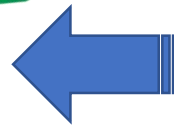
Risk group 3: Medium risk

Risk group 4: High risk

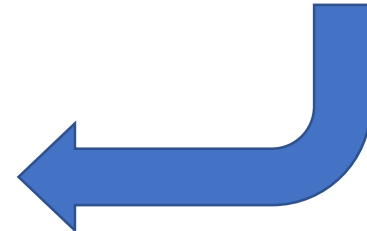


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Better quality
Lower cost
Better health



Ensure continuity of care



Identify these risks
Enroll each risk-group into
the appropriate care program

The Saudi health transformation is a long journey

- This is just the beginning
- Only the MoH facilities are involved now -> could it expand to other health sectors?
- It requires
 - patience
 - A lot of determination
 - Alignment and collaboration with different stakeholders
 - Good funding
 - Good IT support
 - Well trained labor force

Summary

- Worldwide the population is growing, and a big part of this can be contributed to aging
- Focus should be on prevention, because it is less costly and more effective in decreasing chronic disease burden
- The Kingdom of Saudi Arabia has taken this into consideration in their planning of their transformed healthcare system
- The MOH will be transformed into three bodies: provider; payer; regulator
- Public health policies and guidelines will also be transformed
- The aims of this new system are to improve health; reduce costs, and improve quality of care and patient experience
- Population health management is an important building block for this transformation

References

- Garza A. The aging population: the increasing effects on healthcare. Pharmacy Times. Jan 19. 2016. Available from: <https://www.pharmacytimes.com/publications/issue/2016/January2016/The-Aging-Population-The-Increasing-Effects-on-Health-Care>. Accessed Dec 29, 2020.
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