UNIVERSITY OF KWAZULU-NATAL ™

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HEALTH SYSTEMS BUILDING BLOCKS SESSION 1

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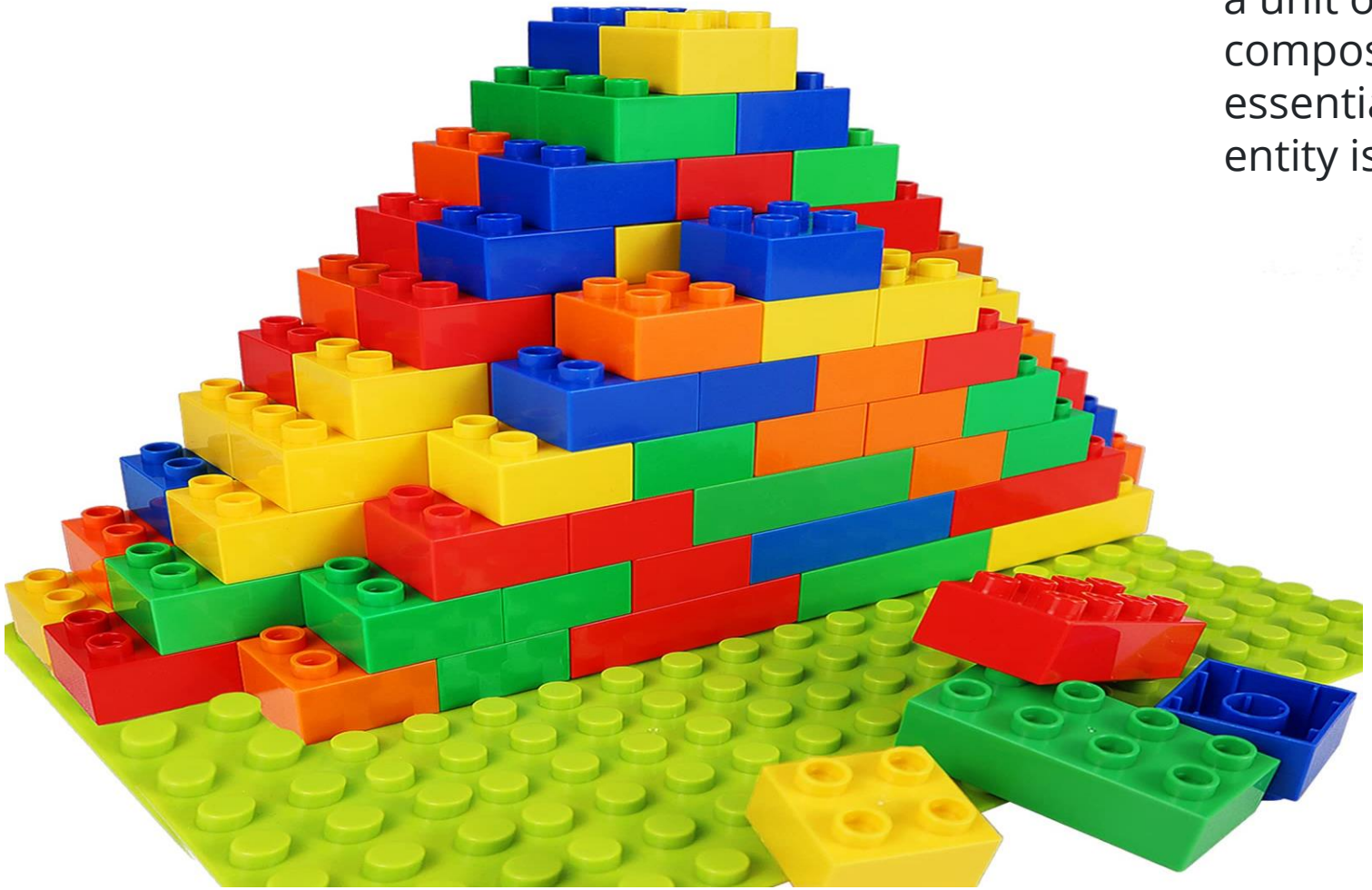
PRESENTATION OUTLINE

Health system building blocks

- Building blocks- what are they
- Overview of the health system building blocks
- Service delivery component-
- Health Financing

What are Building Blocks?



a unit of construction or composition- something essential on which a larger entity is based

Synonyms:

- Component
- Ingredient
- Factor
- Constituent
- Element

What is a Building Blocks?

- Offer basic capabilities that can be used to design and construct solutions.
- Offer modular components that work together and grow coherently as the pieces making up a system.

Value of building blocks

- Helps to focus design efforts on the important questions of:
  - what content to address,
  - how to present it to policy makers,
  - and how to manage it effectively.
- They facilitate the development of services across organizations and borders.

Relationship between building blocks and systems

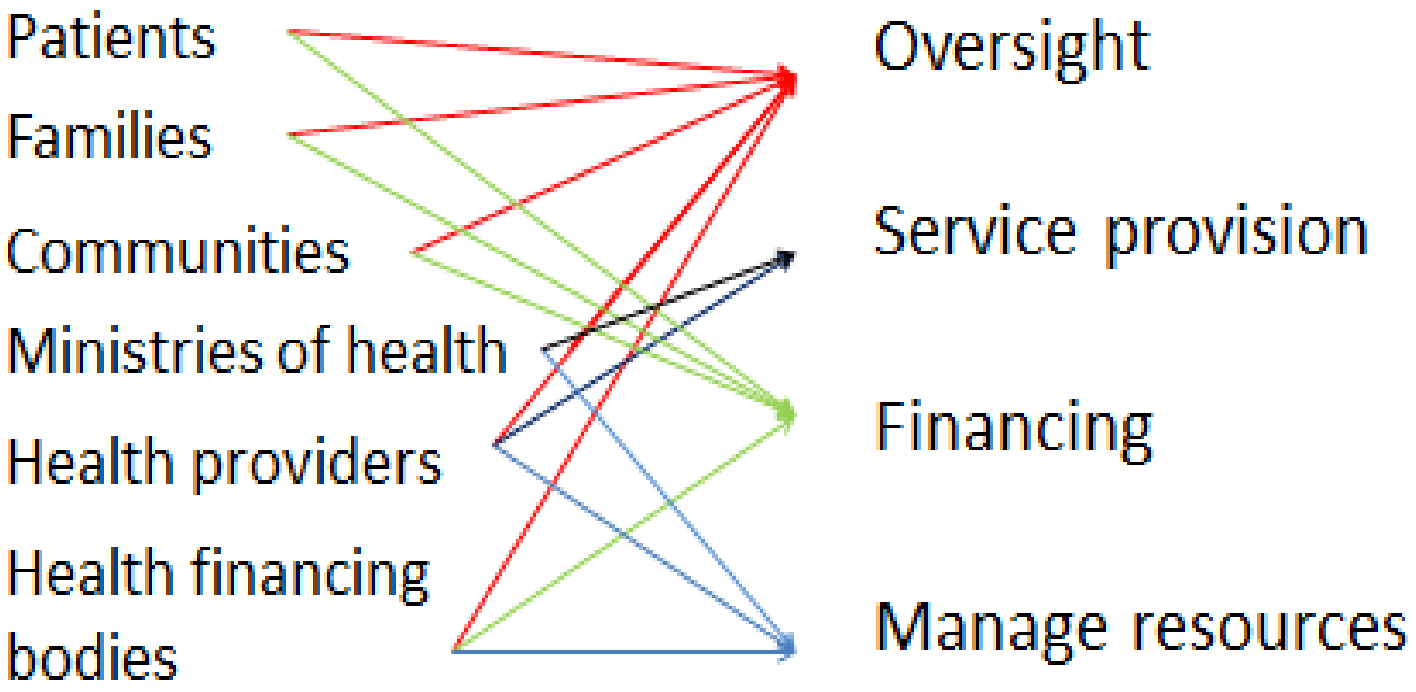
- Systems are built up from collections of building blocks
- Building blocks must interoperate with other building blocks.
- “it is the multiple relationships and interactions among the blocks—how one affects and influences the others, and is in turn affected by them—that convert these blocks into a system”
- building blocks’ frameworks are valuable because they create a common language and a shared understanding

Health system building blocks

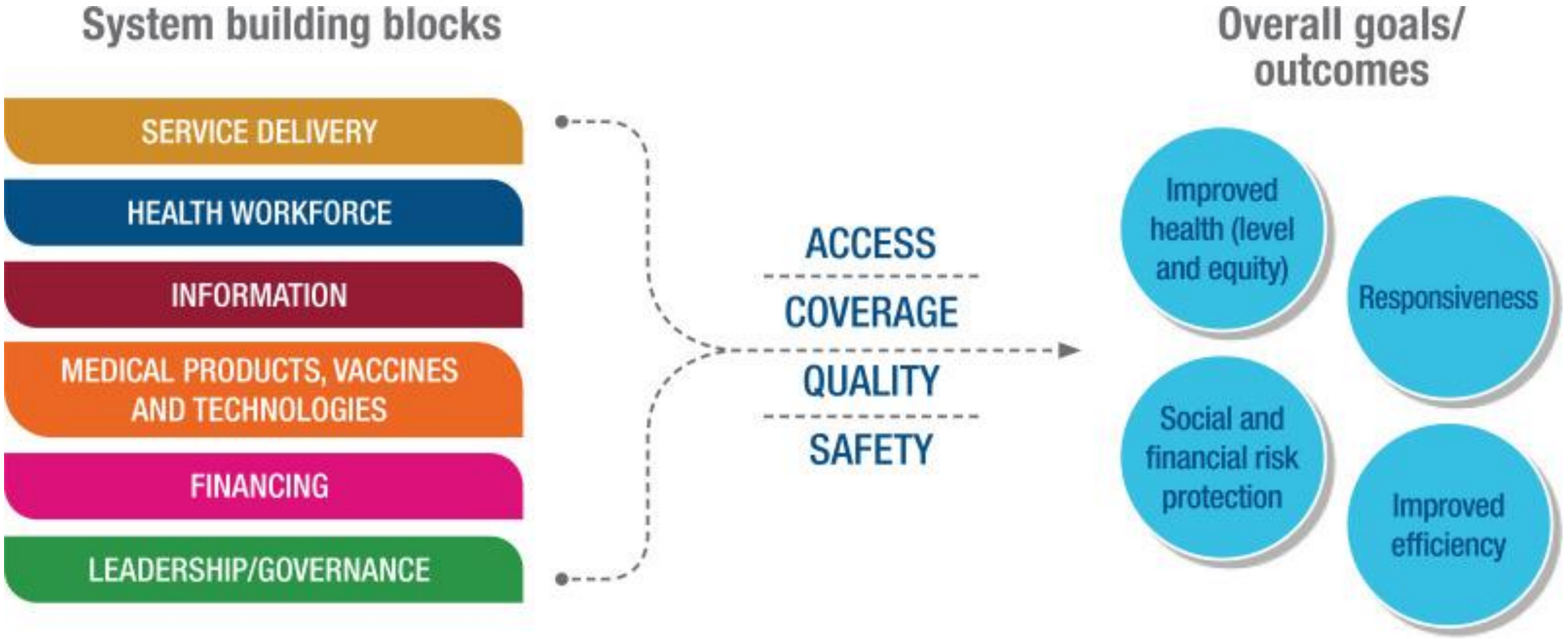
- In 2007, WHO published a framework, commonly known as the “WHO building blocks”
- **Aim**
  - To focus attention on the need to strengthen health systems, and
  - To guide a common conceptual understanding of what constitutes a health system, in order to go about strengthening it.

Roemer early description

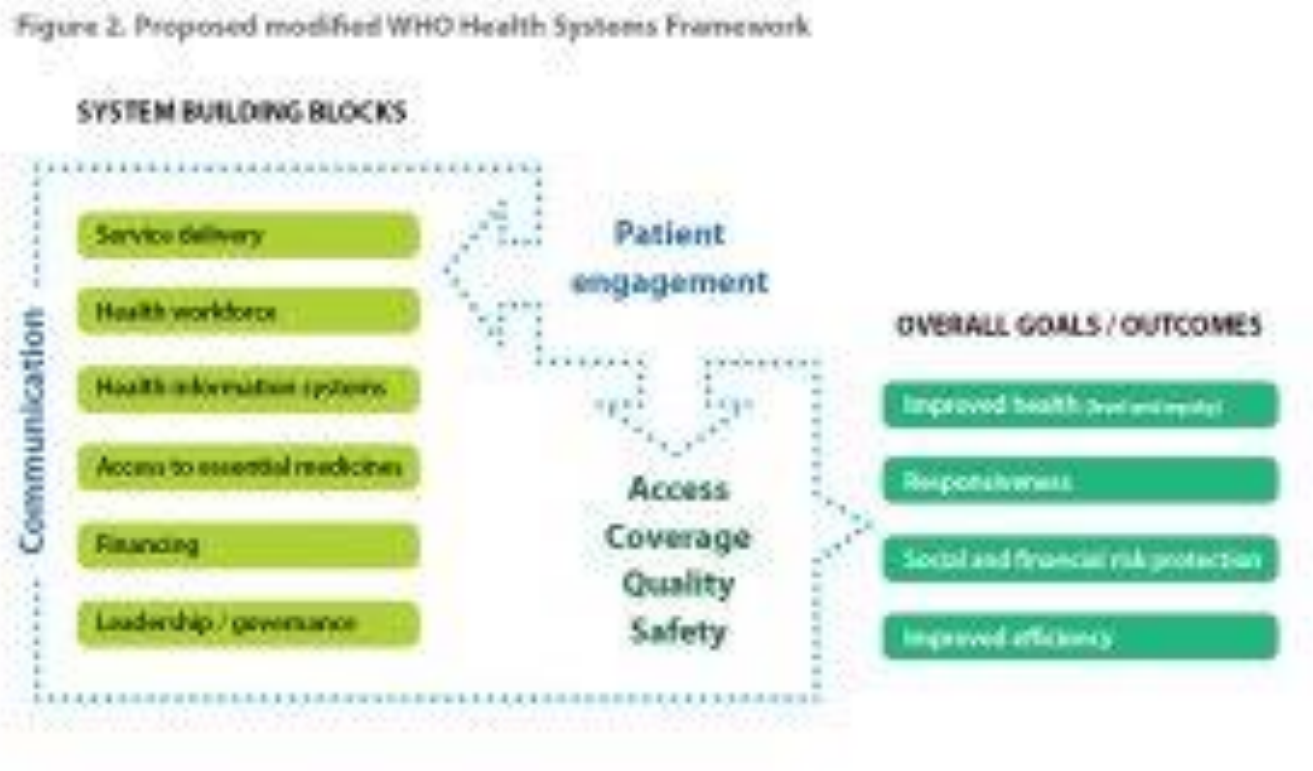
Components of a health system



Health system building blocks



Health System Building Blocks



Modified version of Health system building blocks

Service Delivery

- Delivering health services is thus an essential part of what the system *does*—but it is not what the system *is*“
- Good **health services** are those which:
  - **deliver** effective, safe, quality personal and non-personal health interventions
  - to those who need them,
  - when and where needed,
  - with minimum waste of resources.”

Service delivery

- The service delivery building block is concerned with:
  - how inputs and services are organized and managed,
  - to ensure access, quality, safety and continuity of care across health conditions, across different locations and over time
- Ultimate aim= equity in health outcomes

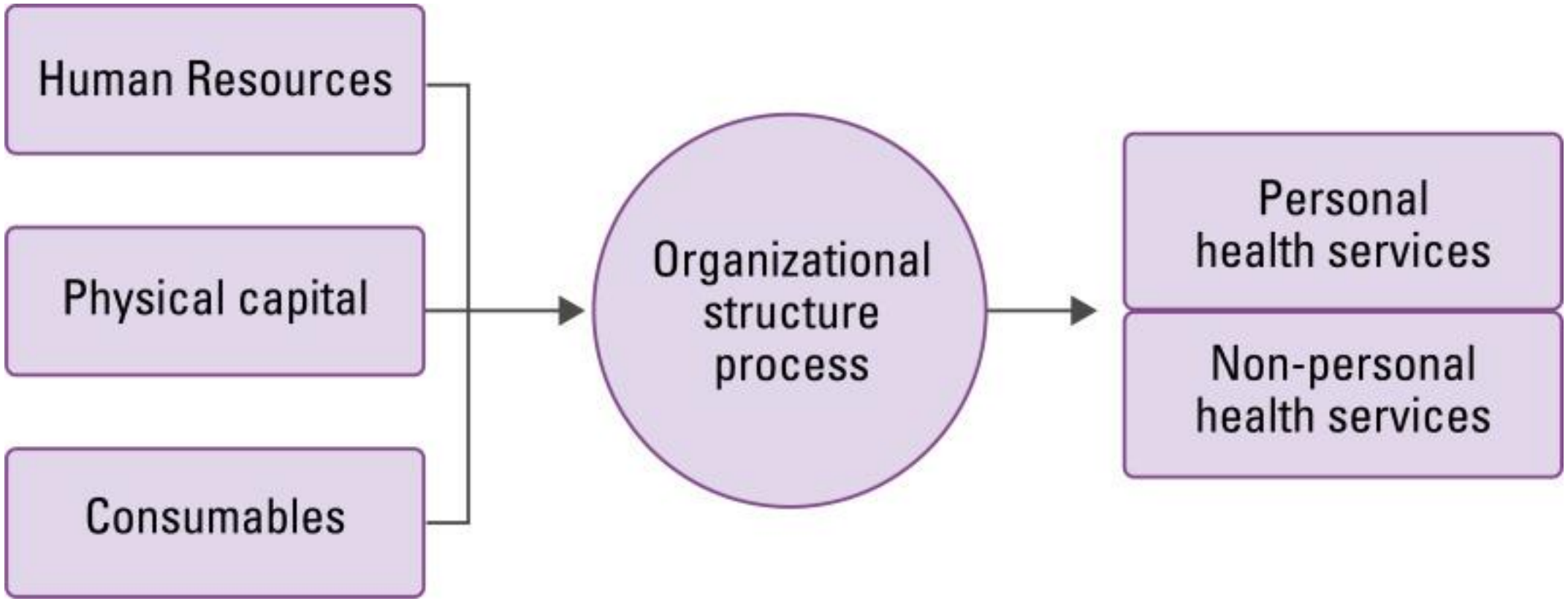
Service Delivery

- **Demand for services-** requires understanding the user's perspective, raising public knowledge and reducing barriers to care
- **Package of integrated services- based on** population health needs
- **Organization of the provider network-** ensure close-to-client care as far as possible and to avoid unnecessary duplication and fragmentation of services

Service Delivery

- **Management-** maximize service coverage, quality and safety, and minimize waste
- **Infrastructure and logistics-**

Service delivery



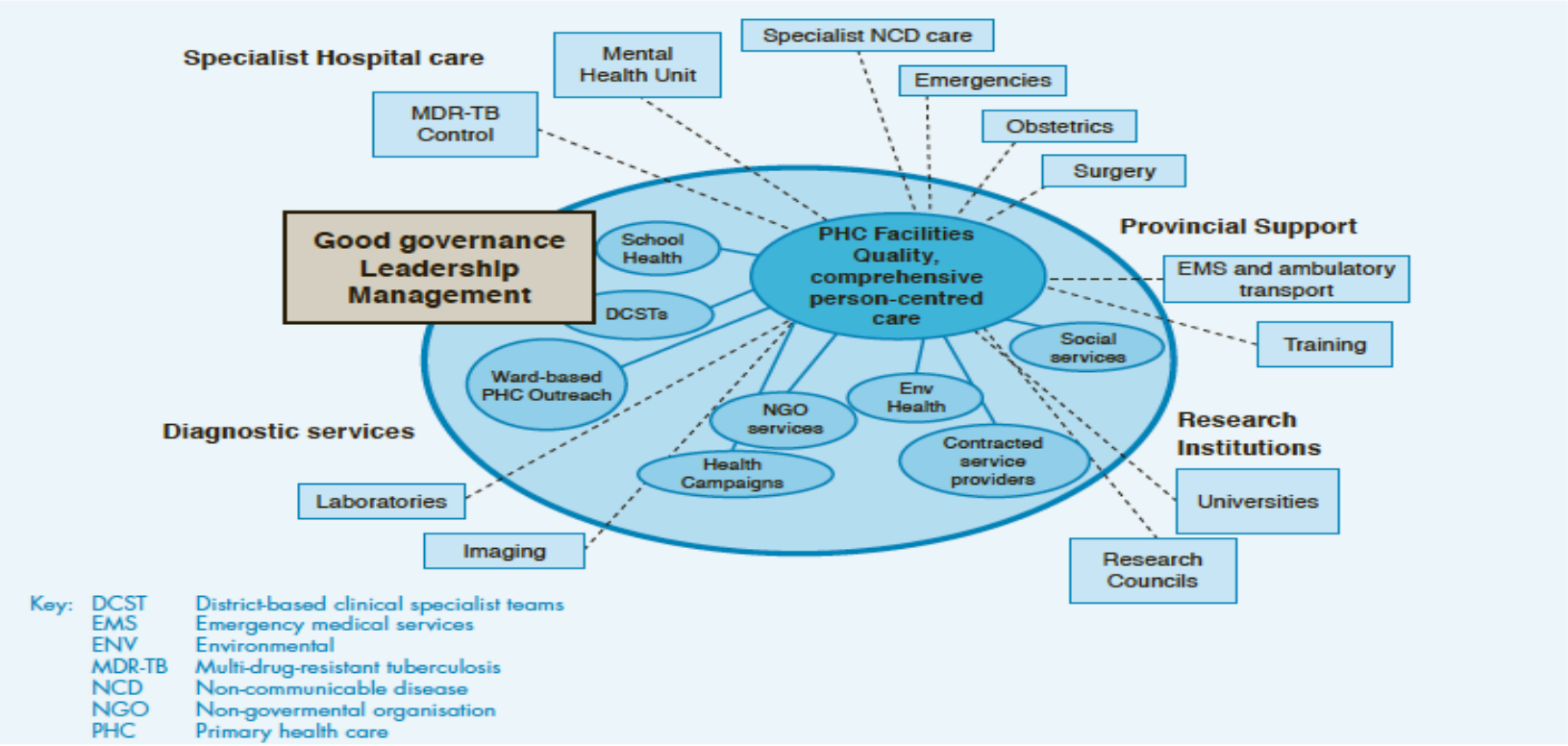
Service Delivery

- **Demand for services-** requires understanding the user's perspective, raising public knowledge and reducing barriers to care = Responsiveness to patients needs
- **Package of integrated services- based on** population health needs
- **Organization of the provider network-** ensure close-to-client care as far as possible and to avoid unnecessary duplication and fragmentation of services

Service Delivery

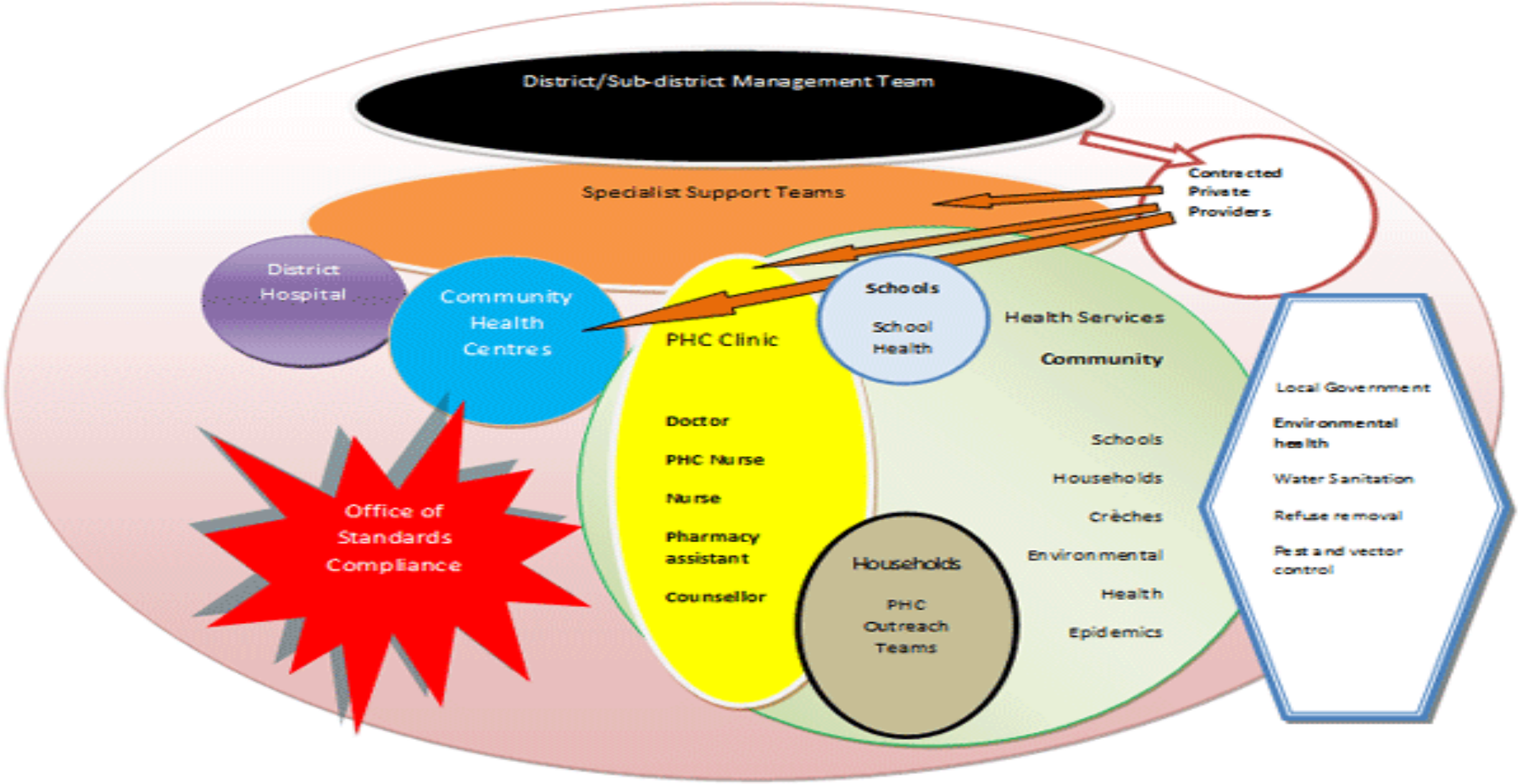
- **Management-** maximize service coverage, quality and safety, and minimize waste = Quality
- **Infrastructure and logistics-**

Organisation of services



District Health system model

Community oriented PHC



Package of integrated services

- Evidence based clinical guidelines

Rationale – Why "best buys" for NCDs?

Public health and economic burden – show the size of the problem, but not how to address and reduce it

Cost-effectiveness – indicates solutions but not their feasibility, affordability and acceptability

Consequent need to develop:

NCD "best buy" interventions that are cost-effective, feasible, low-cost and appropriate to implement within the constraints of the local health system

Financial planning tool for identifying resource needs

Price tag analysis to inform global resource

Table 2: "Best Buy" Interventions

Risk factor / disease	Interventions
Tobacco use	• Tax increases • Smoke-free indoor workplaces and public places • Health information and warnings • Bans on tobacco advertising, promotion and sponsorship
Harmful alcohol use	• Tax increases • Restricted access to retailed alcohol • Bans on alcohol advertising
Unhealthy diet and physical inactivity	• Reduced salt intake in food • Replacement of trans fat with polyunsaturated fat • Public awareness through mass media on diet and physical activity
Cardiovascular disease (CVD) and diabetes	• Counselling and multi-drug therapy for people with a high risk of developing heart attacks and strokes (including those with established CVD) • Treatment of heart attacks with aspirin
Cancer	• Hepatitis B immunization to prevent liver cancer (already scaled up) • Screening and treatment of pre-cancerous lesions to prevent cervical cancer

RISK FACTOR / DISEASES	INTERVENTIONS / ACTIONS	COST OF IMPLEMENTATION (low=<I$1 per capita, high=>I$2 per capita)	HEALTH IMPACT (DALYs per 1m population) (small<100large >1000)	COST EFFECTIVENESS (1$ per DALY averted) (very= <GDP per capita, quite=1-3GDP per capita)
TOBACCO USE	Raise taxes on tobacco products	low	large	Very
	Enforce bans on tobacco advertising	low	modest	Very
	Smoke free workplaces	low	modest	Quite
	Packaging, labelling, and awareness counter measures	low	modest	Very
HARMFUL USE OF ALCOHOL	Raise taxes on alcoholic beverages	low	modest	Very
	Enforce bans on alcoholic advertising	low	modest	Very
	Restrict access to retiled alcohol	low	modest	Very
	Enforce drink-driving laws	quite	modest	Quite
HEALTHY DIET AND PHYSICAL INACTIVITY	Reduce salt intake	low	large	Very
	Food taxes on unhealthy food (foods high in fats and sugar) and food subsidies on healthy food (fruits and vegetables)	low	modest	Very
	Physician counselling	high	large	Quite
DIABETES	Glycemia Control	high	large	Quite
CARDIOVASCULAR DISEASE	Hypertention drug treatment	low	large	Very
CANCER	Treatment of Stage 1 Breast Cancer	low	modest	Very
	Cervical Cancer Screening (PAP Smear) and treatment	low	modest	Very
RESPIRATORY DISORDER	Inhaled corticosteroids for asthma	low	small	Quite

Population-based interventions addressing NCD risk factors: "Best buy" & "Good buy" interventions

Risk factor	Best buy	Good buy
Tobacco use	•Protect people from tobacco smoke •Warn about the dangers of tobacco •Enforce bans on tobacco advertising •Raise taxes on tobacco	• Offer counseling to smokers
Harmful use of alcohol	•Restrict access to retailed alcohol •Enforce bans on alcohol advertising •Raise taxes on alcohol	• Enforce drink-driving laws (breath-testing) • Offer brief advice for hazardous drinking
Unhealthy diet	•Reduce salt intake •Replace trans-fat with polyunsaturated fat •Promote public awareness about diet	•Restrict marketing of food& beverages to children Replace saturated fat with unsaturated fat •Manage food taxes & subsidies •Offer counseling in primary care •Provide health education in worksites •Promote healthy eating in schools
Physical inactivity	•Promote physical activity (mass media)	•Promote physical activity (communities) •Support active transport strategies •Offer counseling in primary care •Promote physical activity in worksites •Promote physical activity in schools
Infection	•Prevent liver cancer via hepatitis B vaccination	

Individual-based (Health care) interventions addressing NCD risk factors: "Best buys"

Risk factor	Best buy	Good buy
Cardiovascular disease (CVD) & diabetes	• Counseling & multidrug therapy (including glycemic control for DM) for people (≥30 years), with 10-year risk of fatal or nonfatal cardiovascular events ≥ 30% • Aspirin therapy for acute myocardial infarction	• Counseling & multidrug therapy (including glycemic control for DM) for people (≥ 30 years), with a 10-year risk of fatal and nonfatal cardiovascular events ≥ 20%
Cancer	• Cervical cancer screening (VIA), & treatment of pre-cancerous lesions to prevent cervical cancer	•Breast cancer – treatment of stage I •Breast cancer – early case-finding through biennial mammographic screening (50–70 years) & treatment of all stages •Colorectal cancer-screening at age 50 and treatment •Oral cancer – early detection and treatment
Respiratory disease	• Treatment of persistent asthma with inhaled corticosteroids and beta-2 agonists	

Early detection & care, using cost-effective & sustainable health-care interventions >> integrate into primary health care

World Health Organization

Package of Essential Noncommunicable (PEN) Disease Interventions for Primary Health Care in Low-Resource Settings

Definition of Integrated Care

- “Integrated care" is a global buzzword in healthcare
- Lack of a common definition of *integrated care*.
- It is most frequently equated with
  - *managed care*,
  - *continuity of care*,
  - *case/care management*,
  - *patient-centred care*,
  - *shared care*,
  - and *integrated delivery systems*,

Perspectives on Integration

- The term is often used by different people to mean different things.
  - To the *user*, it means a process of care that is seamless, smooth, and easy to navigate.
  - To the *frontline provider*, it means working with professionals from different fields and coordinating tasks and services across traditional professional boundaries.

Integration

- To the *manager*, it means merging or coordinating organisational targets and performance measures, and managing and directing an enlarged and professionally diverse staff.
- To the *policymaker*, it means merging budgets, and undertaking policy evaluations which recognise that interventions in one domain may have repercussions on those in other domains, and thus should be evaluated as part of a broader care package.

Levels of integration

- Functional integration (the degree to which back-office and support functions are coordinated across all units),
- organizational integration (relationships between healthcare organizations),
- professional integration (provider relationships within and between organizations),
- service or clinical integration (coordination of services and the integration of care in a single process across time, place and discipline),
- normative integration (shared mission, work values and organizational/professional culture), and
- Systemic integration (alignment of policies and incentives at the organizational level)

Definition of integrated care-WHO

- *“[Integrated care] is a concept bringing together inputs, delivery, management and organisation of services related to diagnosis, treatment, care, rehabilitation and health promotion.”*

(Grone & Garcia-Barbero: 2001)

Second Definition of Integrated Care

- *"[Integrated care] is a coherent set of methods and models on the funding, administrative, organisational, service delivery and clinical levels designed to create connectivity, alignment and collaboration within and between the cure and care sectors."*

(Kodner & Spreeuwenberg: 2002)

Patient Centred Definition

- “patient care that is coordinated across professionals, facilities, and support systems; continuous over time and between visits; tailored to the patients’ needs and preferences; and based on shared responsibility between patient and caregivers for optimizing health.”

(Slinger et al)

What perspective we have adopted on integration?

- A useful definition for integrated care has been stated by Judith Dixon (2010), quoting from Lloyd and Wait (2005):
  - "Care, which imposes the patient's perspective as the organising principle of service delivery and makes redundant old supply-driven models of care provision.
  - Integrated care enables health and social care provision that is flexible, personalised, and seamless."
- clinical integration as a mechanism for improving patient care, particularly for those with complex needs.

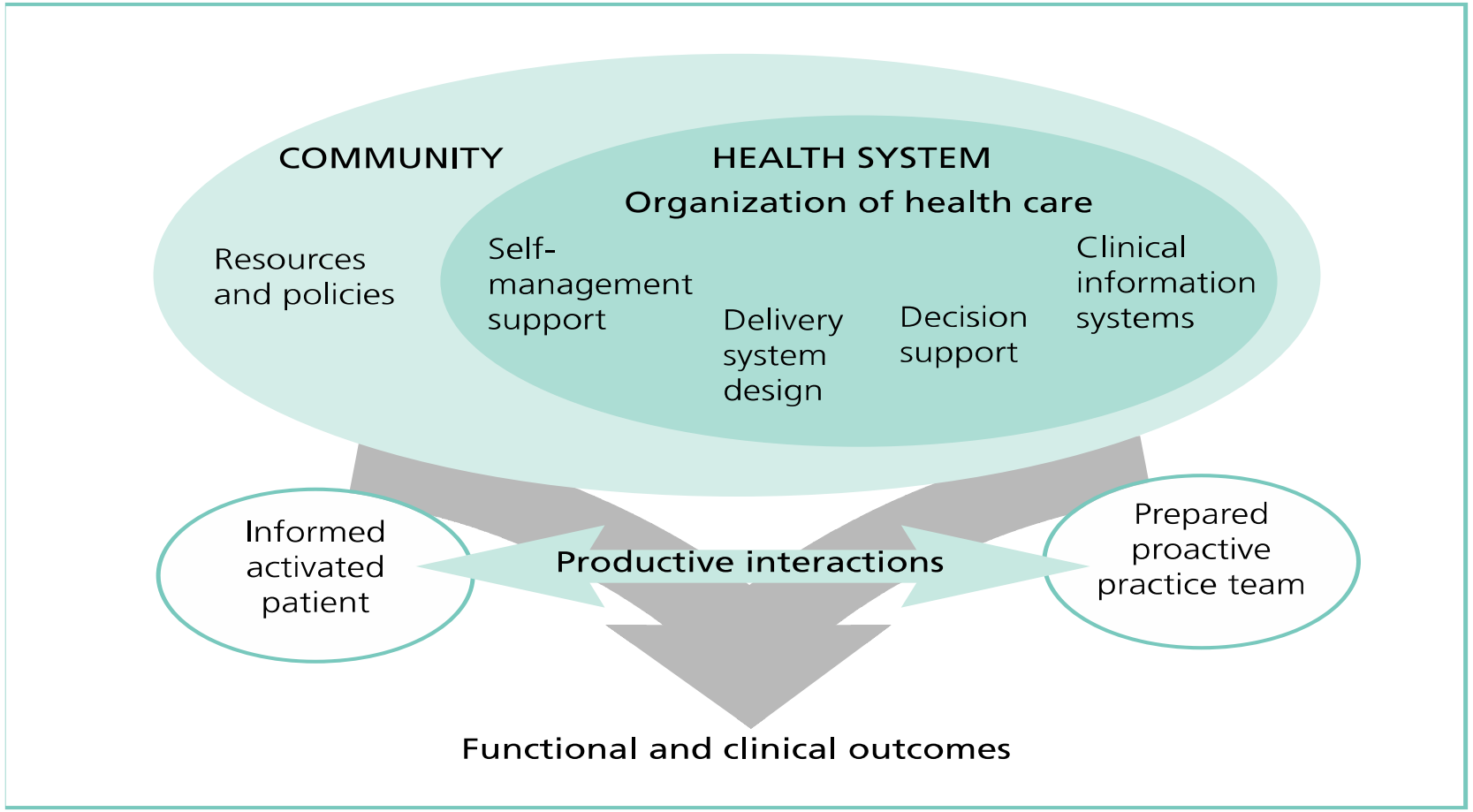
Theoretical/International Framework

- Health care improvement programmes at hospitals
  - focus on isolated interventions
    - medication supply or multidisciplinary cooperation,
  - rather than on the total care process of the patient.
- Integrated care programmes or disease management programmes are beginning to receive greater support
  - To reduce fragmentation
  - and to achieve improved results for patients at acceptable cost

Delivery Level Initiatives

- Broad frameworks
  - The Chronic Care Model
  - Innovative Care for Chronic Conditions Model
  - The Public Health Model
  - The Continuity of Care Model
- Examples of service delivery models
  - Kaiser,
  - EverCare and Pfizer approaches
  - Strengths Model
  - Guided Care

Chronic Care Model- Ed Wagener- 1998



Six elements of CCM

Element	Description
Health system or a health organization	Entity desiring to implement CCM is composed of staff, leaders, operations, values and goals of the organization and may vary from a small family practice to a multisite integrated health system.
Clinical information systems (CIS	Needs to have readily accessible disease specific database of individual patients and this database should alert the provider to needed tests and provide tracking. The system should facilitate and promote exchange of information between providers and patients.
Decision support	Defined as evidence based guidelines consistent with scientific evidence and patient preference. These guidelines should be embedded into daily practice and should be shared with patients to encourage participation.
Delivery system design	Involves how care delivery services are organized, staffed and delivered. This element is typically where care innovations are implemented and represents an important opportunity to improve quality of care and health outcomes of patients.
Self-management support	Emphasizes patient's role in managing health. Established self-management techniques such as mutual goal setting and action planning have focused on various methods of teaching such as group classes, skill development, and various lifestyle behaviors.
Community including organizations and resources for patients	Involves linking and using community resources that support healthcare effort by clinicians. The use of church-based support groups, local community health programs, clinic based support groups and internet are acceptable community interventions.

Service Delivery Components

Delivery System Design
- Care management roles
- Team practice
- Care delivery/coordination
- Proactive follow-up
- Planned visit
- Visit system change

Self-management Support
- Patient education
- Patient activation/psychosocial support
- Self-management assessment
- Self-management resources and tools
- Collaborative decision making with patients
- Guidelines available to patients

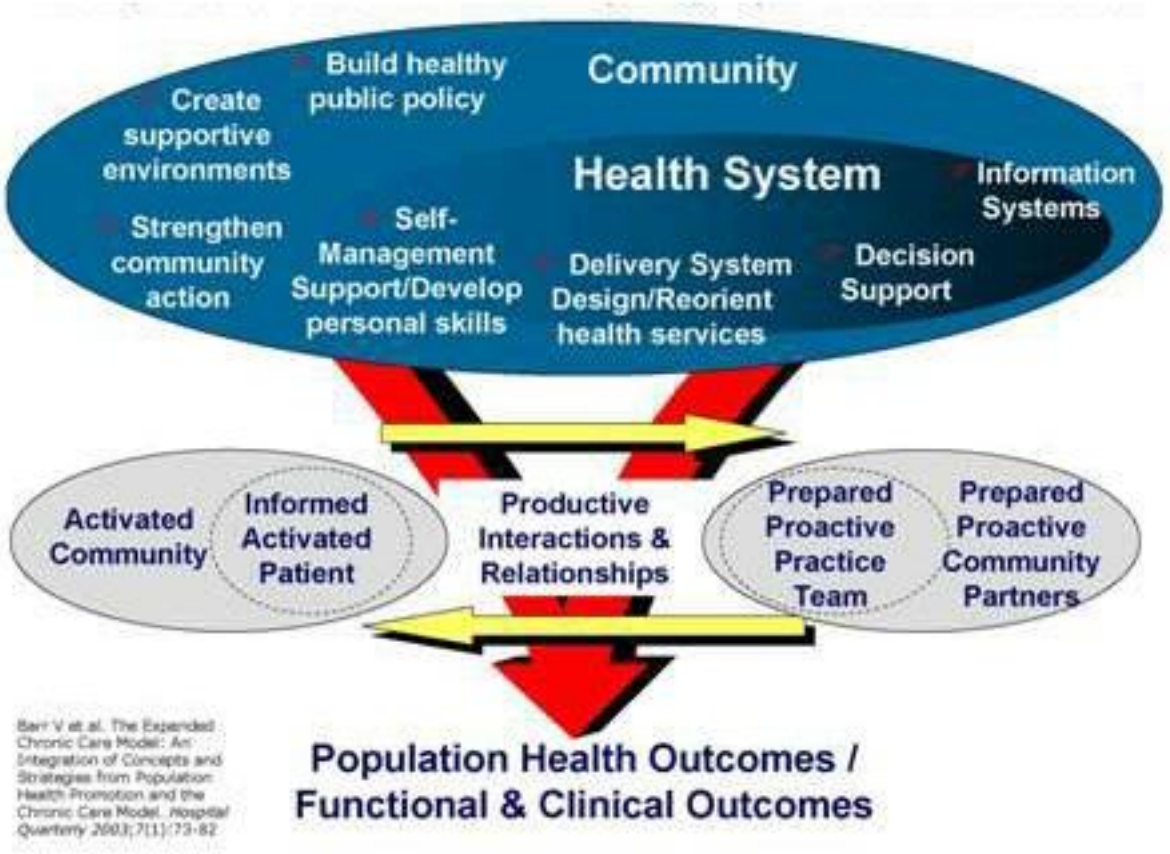
Decision Support
- Institutionalization of guidelines/prompts
- Provider education
- Expert consultation support

Clinical Information Systems
- Patient registry system
- Use of information for care management
- Feedback of performance data

Community Resources
- For patients
- For community

Health Care Organization
- Leadership support
- Provider participation
- Coherent system improvement and spread

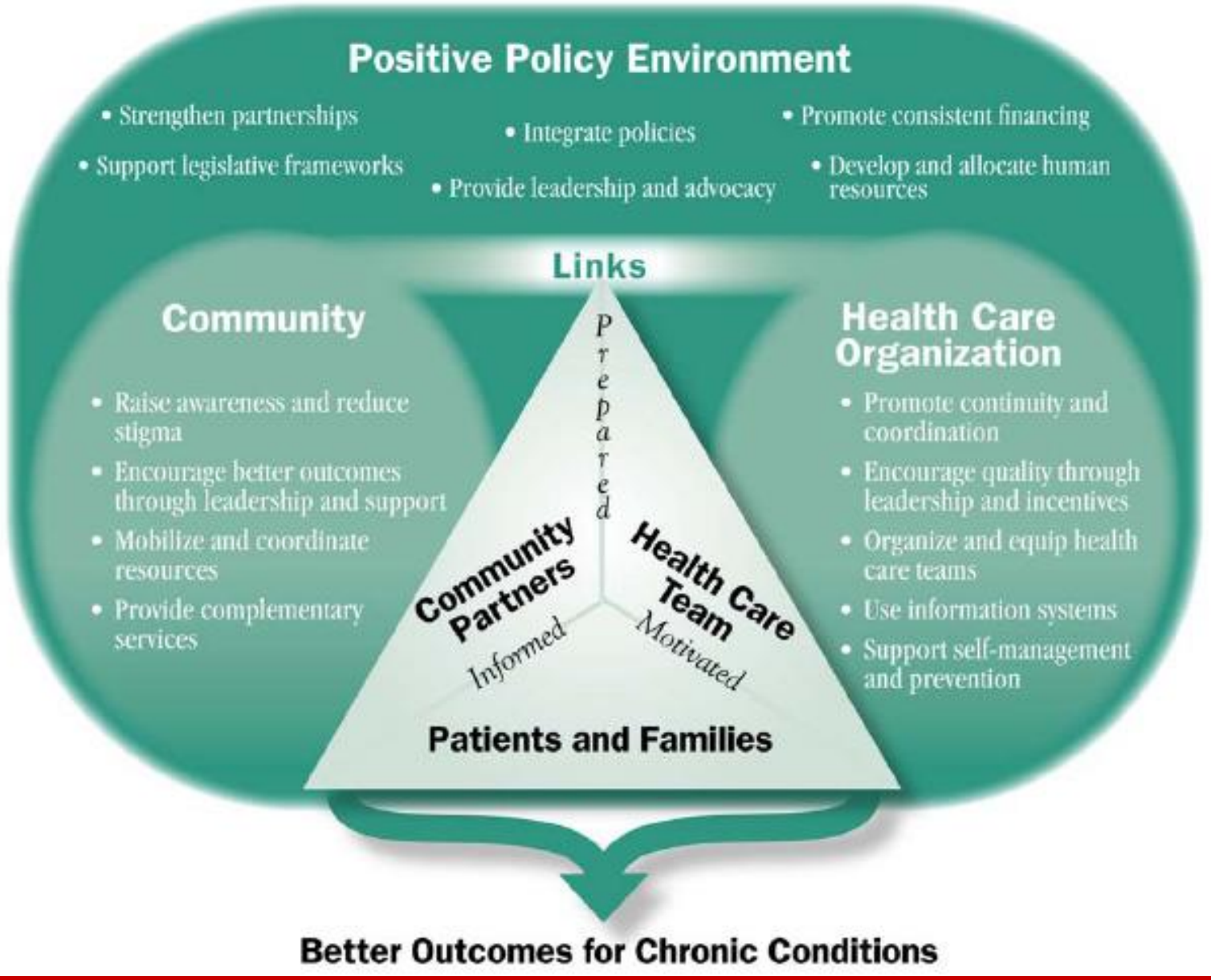
Expanded chronic care model



Additional themes included in CCM

Themes	Description
Patient Safety (in Health System	A system seeking to improve chronic illness care must be motivated and prepared for change throughout the organization. There is a need to identify care improvement and translate it into clear improvement goals and policies through application of effective improvement strategies, including use of incentives that comprehensive system change. Breakdowns in communication and care coordination can be prevented through agreements that facilitate communication and data-sharing as patients navigate across settings and providers.
Cultural competency (in Delivery System Design)	Improving health of people with chronic illness requires transformation of a system to one that is proactive instead of reactive. Roles need to be defined and tasks need to be distributed among team members. Interactions need to be planned to support evidence-based care. More complex patients may need more intensive management for a period of time to optimize clinic care and self-management. Health literacy and cultural sensitivity are two important features and providers are increasingly being called upon to respond effectively to the diverse cultural and linguistic needs of patients (Wielawski, 2011).
Care coordination (in Health System and Clinical Information Systems)	Effective chronic illness care is impossible without information systems that assure ready access to key data on individual patients as well as populations of patients (Wielawski, 2011; Wagner et al. 2002). An information system can identify groups of patients needing additional care as well as facilitate performance monitoring and quality improvement efforts.
Community policies (in Community Resources and Policies)	Mobilize community resources to meet needs of patients by advocating for policies to improve patient care.
Case management (in Delivery System Design)	Provide clinical case management services for complex patients and care that patients understand and that fits with their cultural background.

Innovative Care for Chronic Conditions- 2002



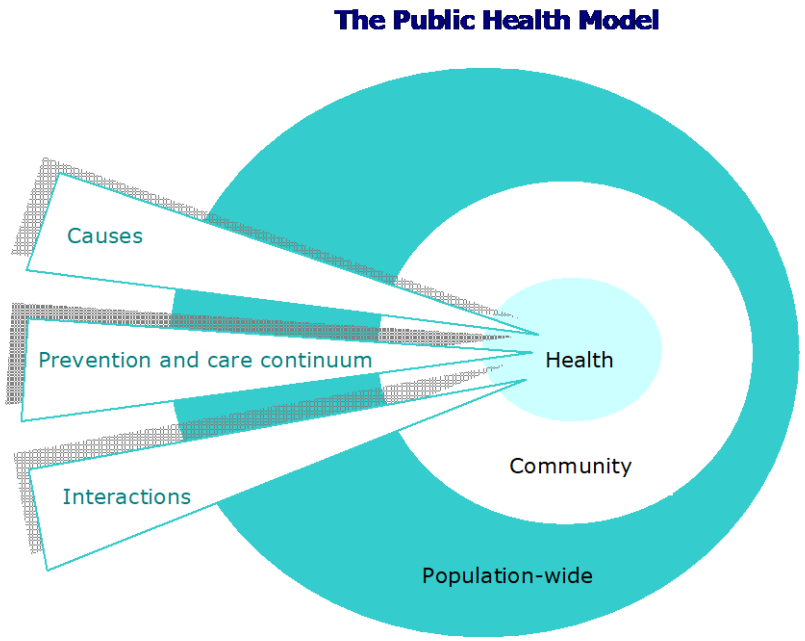
ICCC Model

Element	Description
Support a paradigm shift	A new shift will dramatically advance efforts to solve the problem of managing diverse patient demands given limited resources. Health care systems can maximize their returns from scarce and seemingly non-existent resources by shifting their services to encompass care for chronic conditions.
Manage political environment	Policy-making and service planning inevitably occur in a political context. Political decision-makers, health care leaders, patients, families, and community members, as well as organizations that represent them, need to be considered. It is crucial to initiate bi-directional information sharing and to build consensus and political commitment among stakeholders at each stage (Wielawski, 2011; WHO, 2002).
Build integrated health care	Care for chronic conditions needs integration to ensure shared information across settings and providers, and across time. Integration also includes coordinating financing across different arms of health care including prevention efforts and incorporating community resources that can leverage overall health care services. The outcome of integrated services is improved health, less waste, less inefficiency and a less frustrating experience for patients.
Align sectoral policies for health	The policies of all sectors need to be analyzed and aligned to maximize health outcomes. Health care can be and should be aligned with labor practices (e.g., assuring safe work contexts), agricultural regulations (e.g., overseeing pesticide use), education (e.g., teaching health promotion in schools), and broader legislative frameworks (WHO, 2002).

ICCC Model

Use healthcare personnel more effectively	Health care providers, public health personnel and those who support health care organizations need new, team care models and evidence-based skills for managing chronic conditions. Advanced communication abilities, behavior change techniques, patient education, and counseling skills are necessary in helping patients with chronic problems (WHO, 2002). Health care personnel with less formal education and trained volunteers have critical roles to play.
Center care on the patient and family	Management of chronic conditions requires lifestyle and daily behavior change. Focusing on the patient in this way constitutes an important shift in current clinical practice. The present scenario has a patient role as a passive recipient of care, missing the opportunity to leverage what he or she can do to promote personal health. Health care for chronic conditions must be re-oriented around the patient and family.
Support patients in their communities	Patients and families need services and support from their communities. Communities can also fill crucial gap in health services that are not provided by organized health care.
Emphasize prevention	Most chronic conditions are preventable. Strategies for reducing onset and complications include early detection, increasing physical activity, reducing tobacco use, and limiting prolonged, unhealthy nutrition (Wielawski, 2011; WHO, 2002). Prevention should be a component of every health care interaction.

Public Health Model



Stanford Model

- The most widely used and researched self-efficacy enhancing health care intervention is Chronic Disease Self-Management Program (CDSMP) **(**Stanford University, 2012).
- The CDSMP aims to provide participants
  - with the self-efficacy and skills required to optimally manage their chronic conditions regardless of specific diagnosis.
- The overall aim is to help the participants' master six fundamental self-management

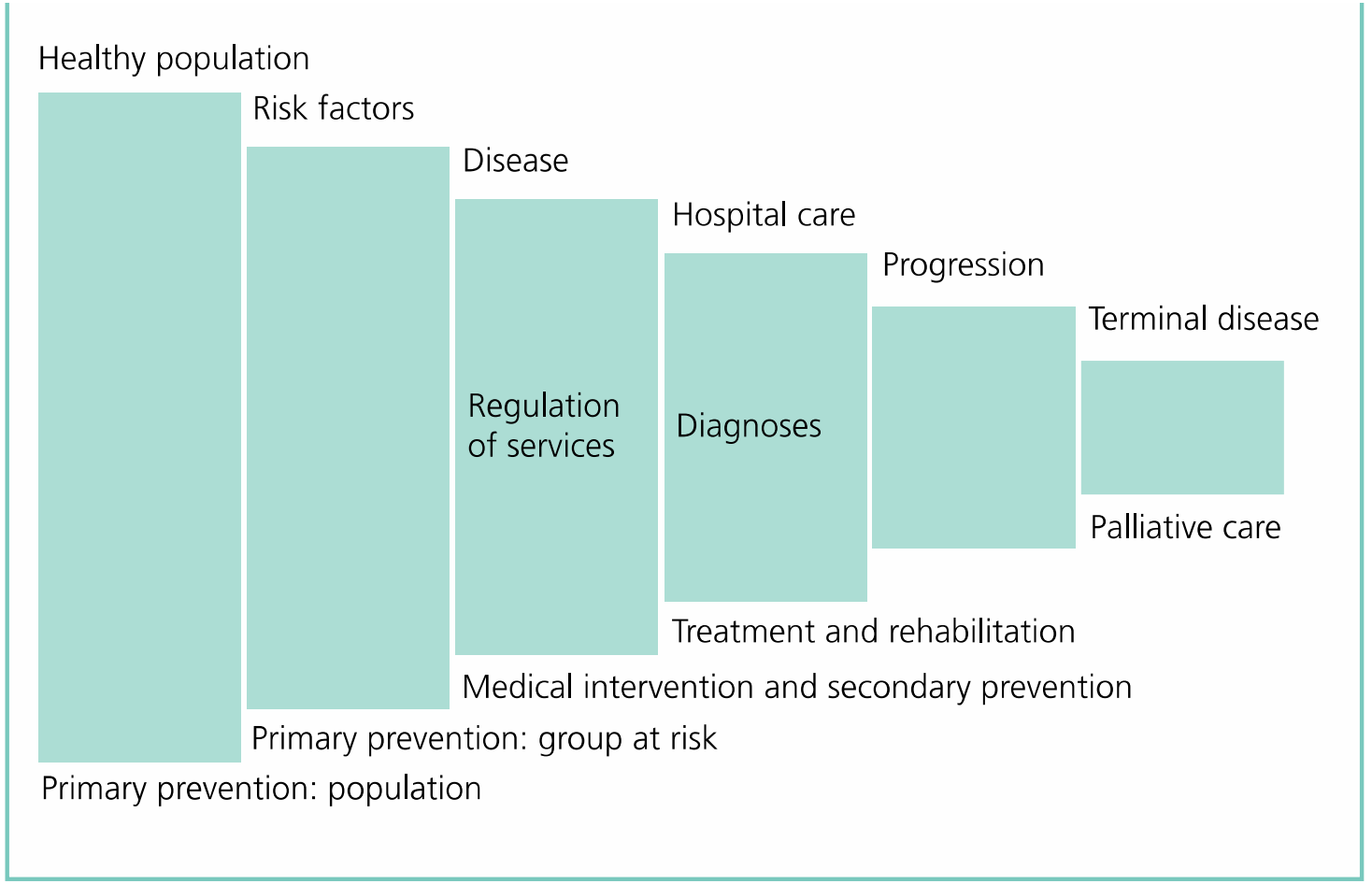
Transitional Care mode

- Transitional care is defined as a set of actions designed to ensure the coordination and continuity of healthcare as patients transfer between different locations or different levels of care within the same location
- Transitional care is based on a comprehensive plan of care and the availability of healthcare practitioners who are well-trained in chronic care and have current information about the patient's

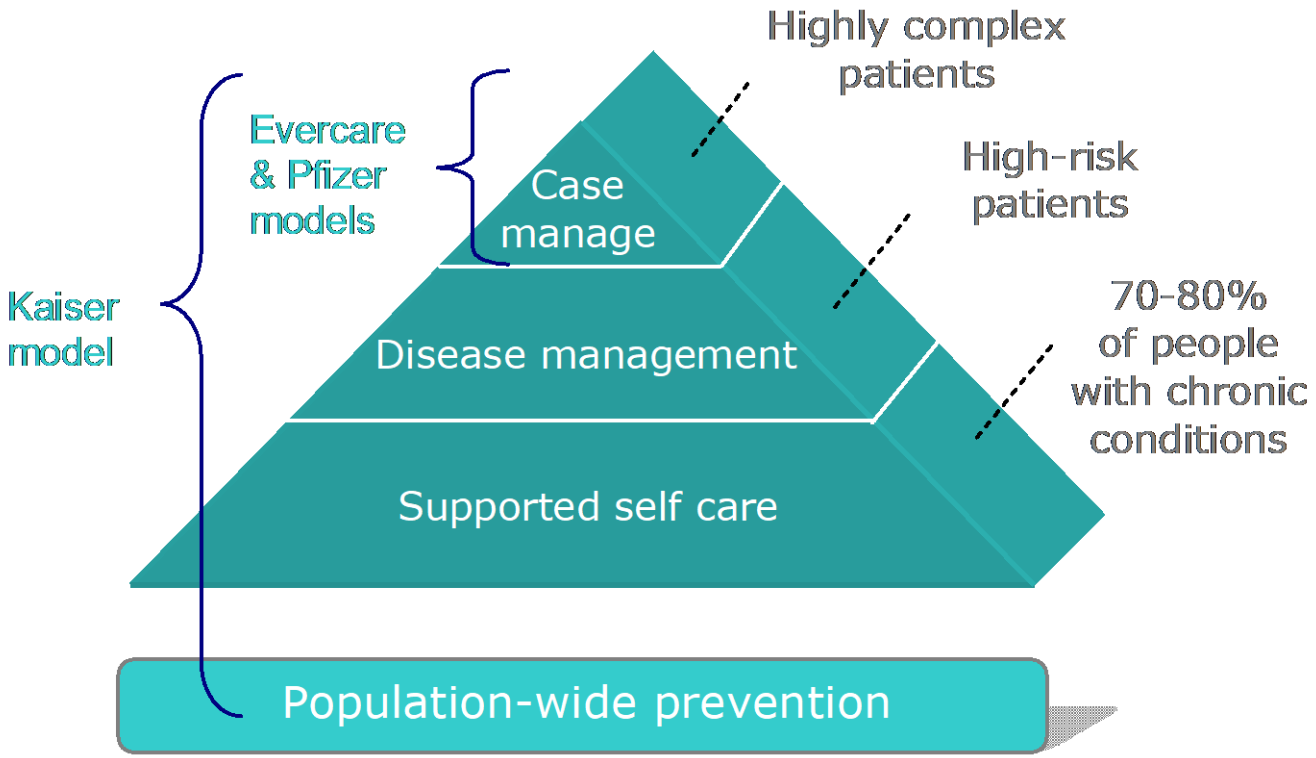
TCM

- The TCM address patients' chronic care needs across time including;
  - Identification of patient-specific concerns related to transition process.
  - Medication adherence and persistence.
  - Assessing and supporting health literacy between physician visits/treatments.
  - The utilization of remote patient monitoring specifically to facilitate problem solving, confidence-building, and the promotion of needed behaviour changes for optimal condition management

Level of Prevention/Life cycle



Kaiser triangle



Kaiser Model

- Kaiser focus on integrating organisations and disciplines.
- Doctors from primary and secondary care share the same budget and function within multi-speciality centres which also house nurses, pharmacists, laboratory technicians, radiology staff and others.
- People with long- term conditions are stratified according to need, with intensive management targeted at

Evercare and Pfizer Approach

- United Healthcare's EverCare model targets people at highest risk
- focus is on integrating social and healthcare to meet an individual's needs.
- Once older people at high risk have been identified, Advanced Primary Nurses assess their care needs and coordinate their journey along a care pathway.

- Integrated Clinical Services adopts a *supermarket approach* in the organisation and delivery of services.
- The supermarket approach refers to the following:
  - All services offered daily but
  - Services are organised in different streams (like aisles in the supermarket)
  - Staff are clearly identifiable
  - Standard operating procedures and clinical guidelines guide the services offered
  - Customer satisfaction is the central goal of the services

Organised system

Benefits of Integrated Care

Patient	Facility	Health System
• Reducing number of facility visits- improve the patients social and economic productivity • Improved quality of care will be received- due to continuity of care being provided	• Improved working environment due to the reduction in the overflow of patients • Decreased patient waiting times • Improvement in quality of care provided- standardised documentation and care guided by protocols	• Improved coordination of care between clinics and community • Imprved efficiency in services delivered • Decreased costs • Strengthening of up and down referral system • Improved capacity of human resources

What is the ICSM?

- A health **system strengthening** model
- Builds on the **strengths of the HIV** programme
- To deliver **integrated care** to **all** patients –either with **chronic diseases, minor ailments or** requiring **maternal and child health and, sexual reproductive health services (preventive and promotive)**
- Takes a **patient-centric view** that encompasses the full value chain of **continuum of care and support**

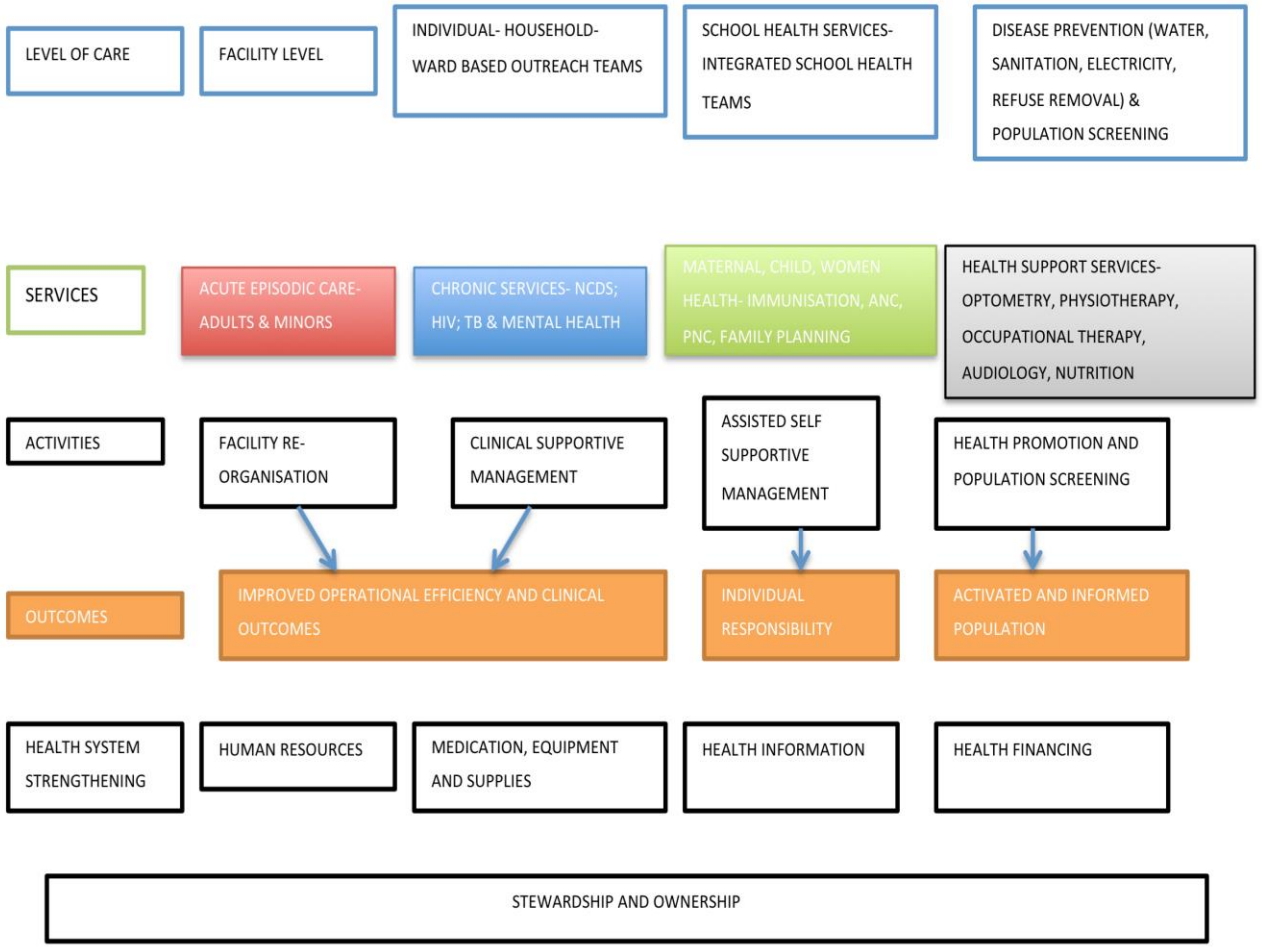
Purpose of the ICSM

- Ensuring the **coordination of care** and transitioning to self-management at a community level
- Using the health system **building block framework**, to improve the efficiency and decrease the strain on the health care system
- Maintaining the **economic productivity** of the patient

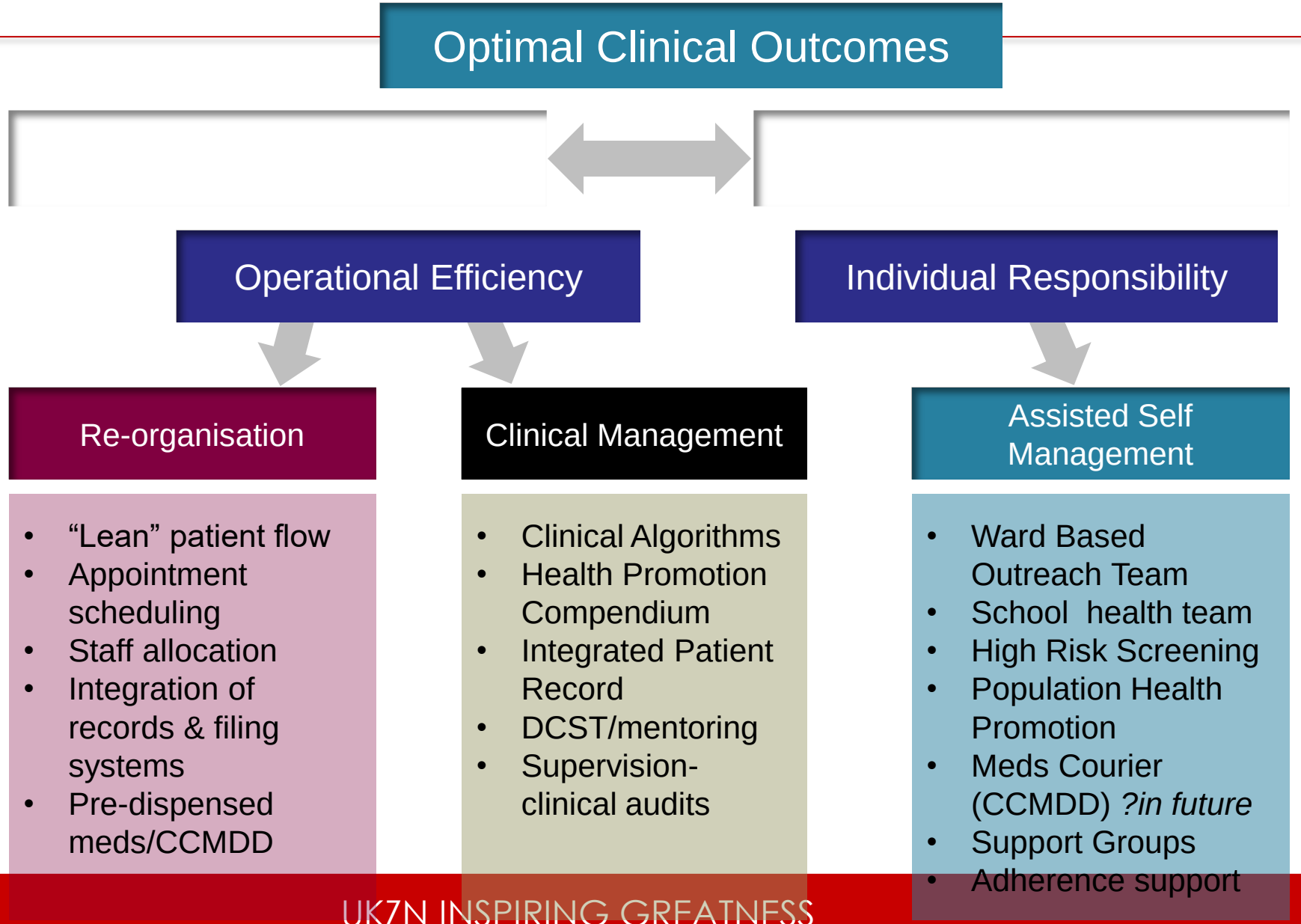
Anticipated benefits of ICSM

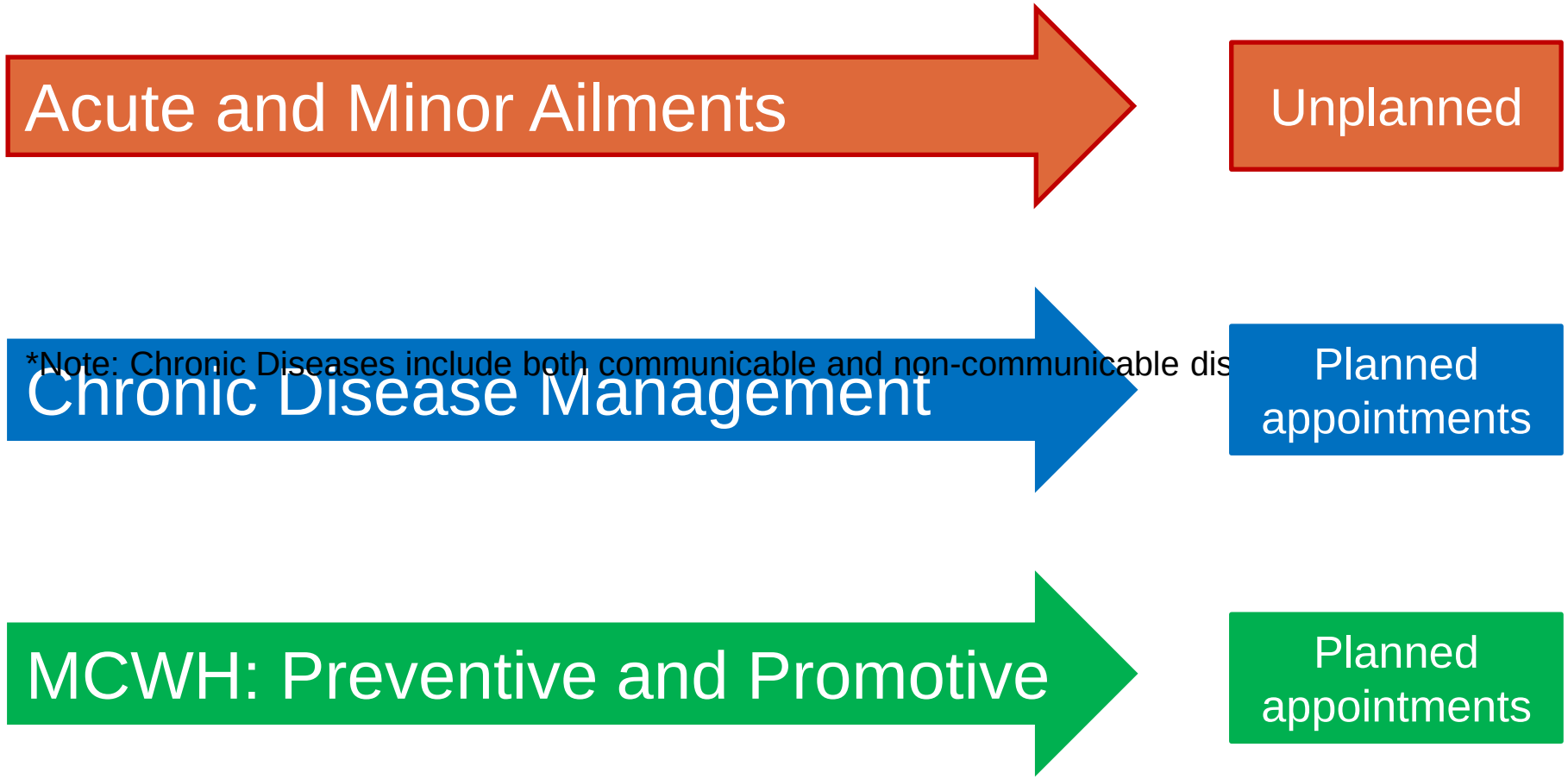
- Enhanced **operational efficiency**
- Improved **quality of care**
- Better **patient outcomes**

Integrated Clinical Service Management Model



Integrated Clinical Services Management




Acute and Minor Ailments
Unplanned
*Note: Chronic Diseases include both communicable and non-communicable dis
Chronic Disease Management
Planned appointments
MCWH: Preventive and Promotive
Planned appointments

Primary Health Care Services Streams

Prepared by
TM Chandran