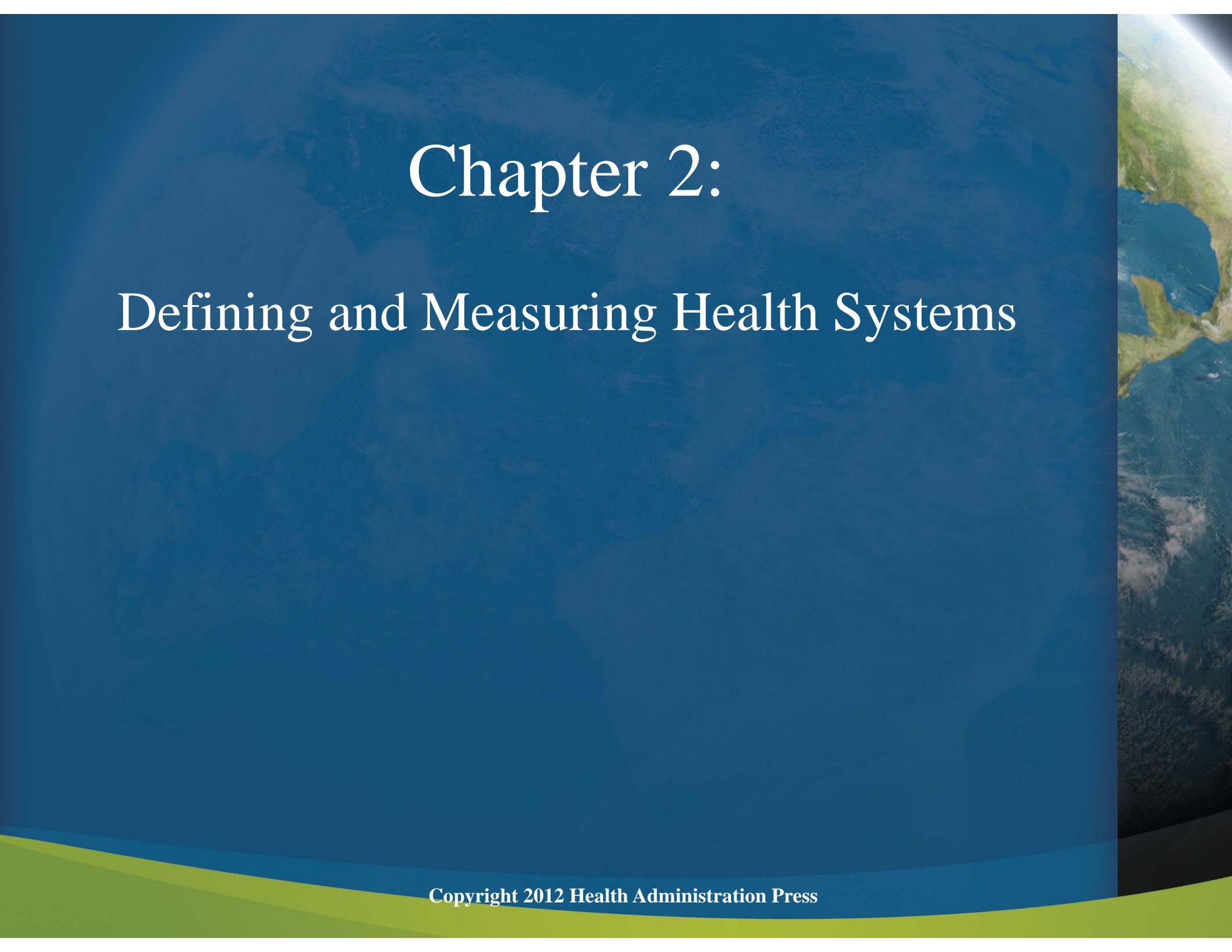


WORLD HEALTH SYSTEMS

SECOND EDITION

Challenges & Perspectives

BRUCE J. FRIED | LAURA M. GAYDOS
EDITORS



Chapter 2:

Defining and Measuring Health Systems

Introduction

- Health systems differ in terms of structure, organization, human resources capacity, financing, service delivery, resource allocation, and the types of diseases they face, but their underlying components and functions share many similarities.
- Defining health systems is important as international development shifts focus from vertical, disease-specific programs to whole-system initiatives.

What Is a Health System?

- Definition: all organizations, people, and actions whose primary interest is to promote, restore, or maintain health
 - Does not include secondary activities, such as education, that may impact health outcomes

Defining Health Systems

- Objectives of frameworks: 2002 World Health Organization (WHO) report
 - To improve health outcomes
 - To ensure financial protection against catastrophic payments
 - To be responsive to population expectations (patient satisfaction)
- Movement to universal health coverage
 - Definition: a health system in which all residents have access to affordable, high-quality healthcare; more than one version
 - Gaining traction around the world as preferred structure
 - Pushed by World Health Assembly

Existing Frameworks

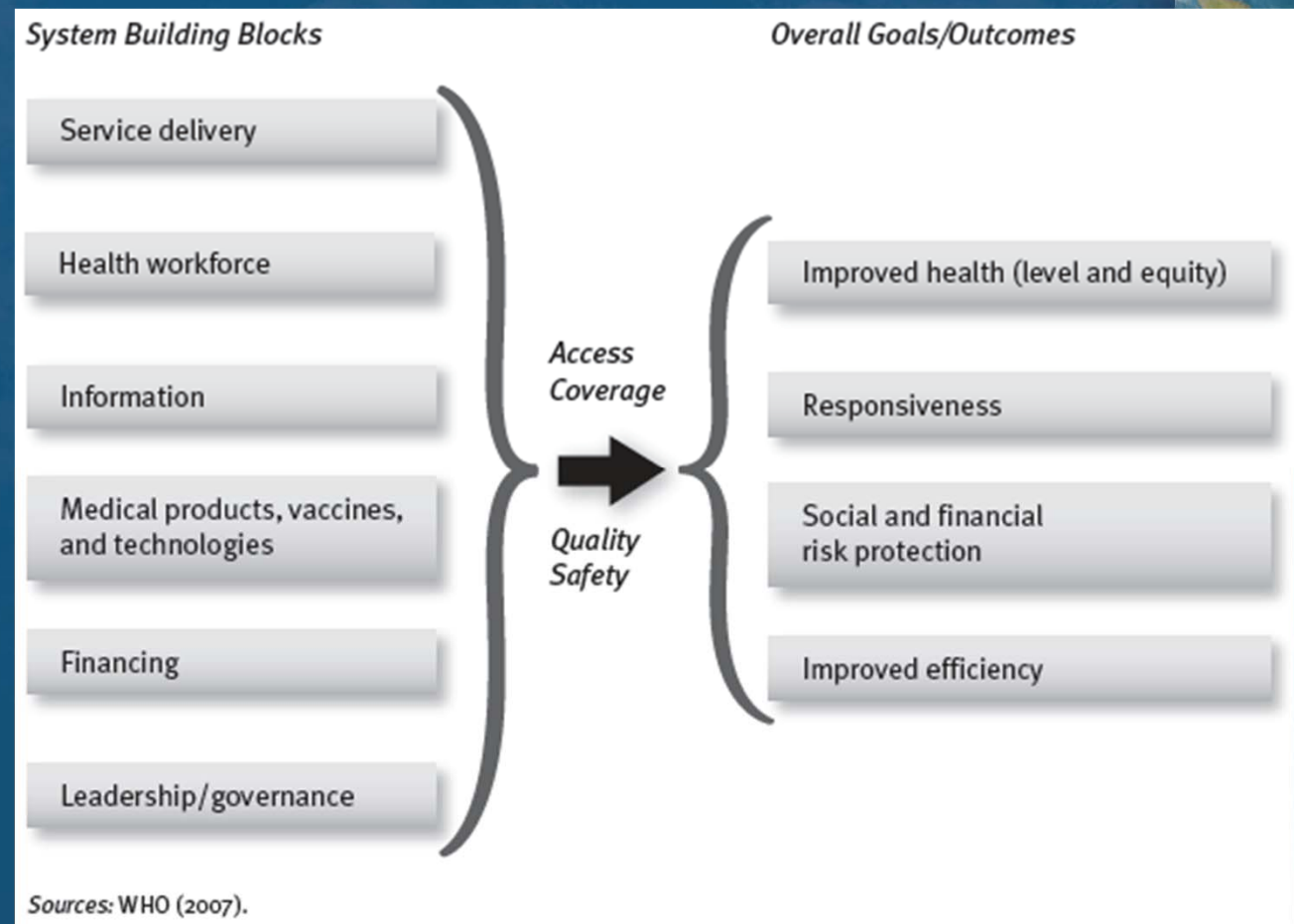
- Many frameworks exist
- Major examples:
 - **Evans:** four principal actors (patients, providers, payers, government)
 - **Hurst:** builds on Evans; seven subsystems of care focused on payment
 - **Frenk and Cassels:** health sector is the interplay of actors and relationships; Frenk sees four levels; Cassels adds additional actors
 - **Hsiao:** “control knobs” affect change in the system
 - **Mills and Ranson:** four key functions of a health system and four key actors responsible for linking those functions

WHO Building Blocks

- What are they?

- A way to define the desirable attributes of what a health system should have the capacity to do
- Help determine where gaps in a health system exist so policymakers can clearly identify where and why investment is needed

Exhibit 2.2:



WHO Building Blocks

- Service delivery
 - Goals: provide a mechanism for organizing and managing various system inputs (including staff, medical supplies, financing, and government support)
 - Challenges
 - Consider all determinants of supply and demand at all service levels
 - Account for differences in cultural behaviors and practices and environmental factors
 - Move from vertical, disease-focused care to holistic care
- Health workforce
 - Definition: any person whose primary intent is to improve health, whether public or private, trained or untrained, clinical or support
 - Challenges: huge unmet need for health workers, one-fourth of which is needed in Africa alone

WHO Building Blocks

- Information
 - Vital in helping health system leaders make analytically driven decisions
 - Critical to disease surveillance, especially to prevent national problems from turning into an international epidemic
 - Collected through a variety of sources: surveys, census, medical records and audits, and health system infrastructure data
 - Challenge in low- and middle-income countries
- Medical products, vaccines, and technologies
 - Ready and adequate supply of essential resources is critical to a health system's ability to function well
 - Government or health system must establish and enforce standards to ensure all of these resources are of high quality and safety

WHO Building Blocks

- Sustainable financing and social protection
 - Health system must balance providing quality and complete medical care without leading patients to financial crisis or hardship or bankrupting the system
 - Important principles:
 - Raise additional funds
 - Move patients from out-of-pocket payment to insurance
 - Ensure equitable financial access
 - Ensure system is efficient
 - Increase information communicated to patients
- Leadership and governance
 - Government as overseer: one of the most critical components of a well-functioning healthcare system
 - Must balance political demands with available resources and population demands
 - Duties:
 - Policy
 - Intelligence and oversight
 - Collaboration and coalition building
 - Regulation
 - System design
 - Accountability

Measuring Health System Performance

- Need for common dialogue
 - Consistent performance measures help policymakers effectively respond to the needs of the health system and assess its performance
 - Frameworks attempt to address this issue
 - Need to agree on an outcome variable (e.g., pharmaceutical access, child survival, beds/facility) to measure success effectively
- WHO toolkit
 - Developed from WHO Building Blocks framework and multiple organizations

Selecting Appropriate Indicators

- One indicator is not enough, but too many indicators can make the assessment more of an obstacle than a helpful tool.
- Composite indicators can be helpful but also limited; they are only as good as the input indicators.
- Limited resources in low- and middle-income countries can make collecting data for comparison with high-income countries and choosing indicators more difficult if goal is to compare aspects of the health system across nations.

Measuring the Building Blocks

- Service delivery
 - Goal is to safely deliver care
 - Indicators are related to utilization, access, and coverage and often stratified by point of contact in the healthcare system (primary, secondary, or tertiary)
- Health workforce
 - Indicators measure how individuals deliver care
 - Include provider density and distribution, workforce entry and exit, certification, and provider capacity
 - Does not include those not in the formal sector (“lay” health workers)

Measuring the Building Blocks

- Information
 - Objectives: to generate, compile, analyze, and synthesize and to communicate and use health data
 - Examples of measures: existence of a survey tool; percentage of a district that turns in reports to national health system in a timely manner
- Medical products, vaccines, and technologies
 - Essential to fulfilling Universal Declaration of Human Rights
 - Challenges: obtaining equipment, regulation of products, negotiating reasonable drug prices
 - Indicators: wide variety for measurement

Measuring the Building Blocks

- Sustainable financing and social protection
 - Includes: all payments, regardless of whether they came from a government, private payer, or patient (out of pocket)
 - Indicators: health expenditures as percentage of gross domestic product; percentage of donor expenditures as percentage of total health expenditures
- Leadership and governance
 - Multiple levels of governance: structure depends on the country; may overlap or be redundant
 - Tools: established strategies for handling disease conditions and surveying patient satisfaction

Exhibit 2.4:

Building Block	Health Systems Indicators (<i>Indicator in Italics</i>)	Sources
Medical products, vaccines, and technologies	<ul style="list-style-type: none"> • <i>Proportion of population with access to affordable essential drugs on a sustainable basis</i>—The MDG indicator on health service delivery has not been monitored regularly, but WHO recommends nine indicators to measure the structure and process components of access to essential drugs. <p>The availability and price of essential medicines is measured through the following three indicators:</p> <ul style="list-style-type: none"> • <i>Percent of facilities that have all tracer medicines and commodities in stock on the day of visit, and in the last three months</i>—a composite index based on 61 essential medicines, commodities, and vaccines (availability of essential medicines) • <i>Supplemented by median proportion of tracer drugs that are in stock on the day of visit, and in the last three months</i> (availability of essential medicines) • <i>Ratio of median local medicine price to international reference price (median price ratio) for core list of drugs</i> (price of essential medicines) <p>Supplemental indicators recommended by various sources:</p> <ul style="list-style-type: none"> • <i>The existence and year of last update of a published national medicines policy</i> • <i>Existence and year of last update of a published national list of essential medicines</i> • <i>Existence of standard treatment guidelines</i> • <i>Percent of drugs purchased through competitive bidding of total pharmaceutical expenditures</i> • <i>Appropriate prescription practices and rational drug use</i> 	MDG, HFS, SPA, EMPP, WHO, HAJ, IDPG, MSH, MOH, WHS
Financing	<ul style="list-style-type: none"> • <i>Total health expenditures (THE) per capita in international and US\$</i> • <i>THE as a percent of gross domestic product (GDP)</i> • <i>General government health expenditure as a proportion of total general government expenditure (GGHE/GGE)</i> • <i>The ratio of household out-of-pocket payments for health to total health expenditures</i> <p>Supplemental indicators [Walford (2007), Kruk and Freedman (2008)]</p> <ul style="list-style-type: none"> • <i>Amount of total donor spending on health as a percent of THE</i> • <i>Percent of government health spending that reaches the poorest income quintile</i> • <i>Selected indicators for monitoring country actions for strengthening health financing—WHO suggests an additional six indicators for country monitoring</i> 	WHO, USAID, MCC/MCA

Review and Reflect

- Framework options
- Consensus around WHO framework
- Accomplishments thus far
- Discussion questions



Discuss