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EHS307

INTRODUCTION TO PRIMARY HEALTH CARE

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EHS 307

Introduction to Primary Health Care

Series 1 Concepts, Principles, and Evolution of Primary Health Care

Part 1 Concepts of Primary Health Care

- 1.1 Definition of Primary Health Care (PHC)
- 1.2 Related terms: immunology, universal health coverage, immunisation, vaccination
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- 3.2 Evolution of PHC in Nigeria
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Introduction

Health systems across the world are built on different foundations, yet one approach has consistently proven to be both practical and sustainable: **Primary Health Care (PHC)**. Imagine a community where every individual, regardless of income or location, has access to essential health services. This vision is at the heart of PHC, which emphasises prevention, equity, and community participation. Understanding its concepts, principles, and historical development is crucial, as these elements form the backbone of modern health delivery and provide the context for all other aspects of this course.

The aim of this Series is to introduce you to the foundations of PHC by defining its core concepts, explaining its guiding principles, and tracing its evolution both globally and within

Nigeria. By doing so, you will gain the knowledge needed to appreciate how PHC has shaped health systems and continues to influence public health practice today.

We shall commence this Series by exploring the **concepts of PHC**, including its definition and related terms such as immunology, universal health coverage, immunisation, and vaccination. Next, we will examine the **principles of PHC**, focusing on equity, accessibility, community participation, intersectoral collaboration, and sustainability. Finally, we will conclude with the **history and evolution of PHC**, beginning with the Alma-Ata Declaration of 1978 and moving on to its development and relevance in Nigeria. This structured journey will provide you with a clear and comprehensive understanding of the foundations of Primary Health Care.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- define the term *Primary Health Care (PHC)* and related concepts such as immunology, universal health coverage, immunisation, and vaccination,
- explain the importance of PHC within health systems and its role in promoting equity and accessibility,
- analyse the guiding principles of PHC, including community participation, intersectoral collaboration, appropriate technology, and sustainability,
- trace the global history of PHC with reference to the Alma-Ata Declaration of 1978,
- evaluate the evolution of PHC in Nigeria and its contemporary relevance in public health practice.

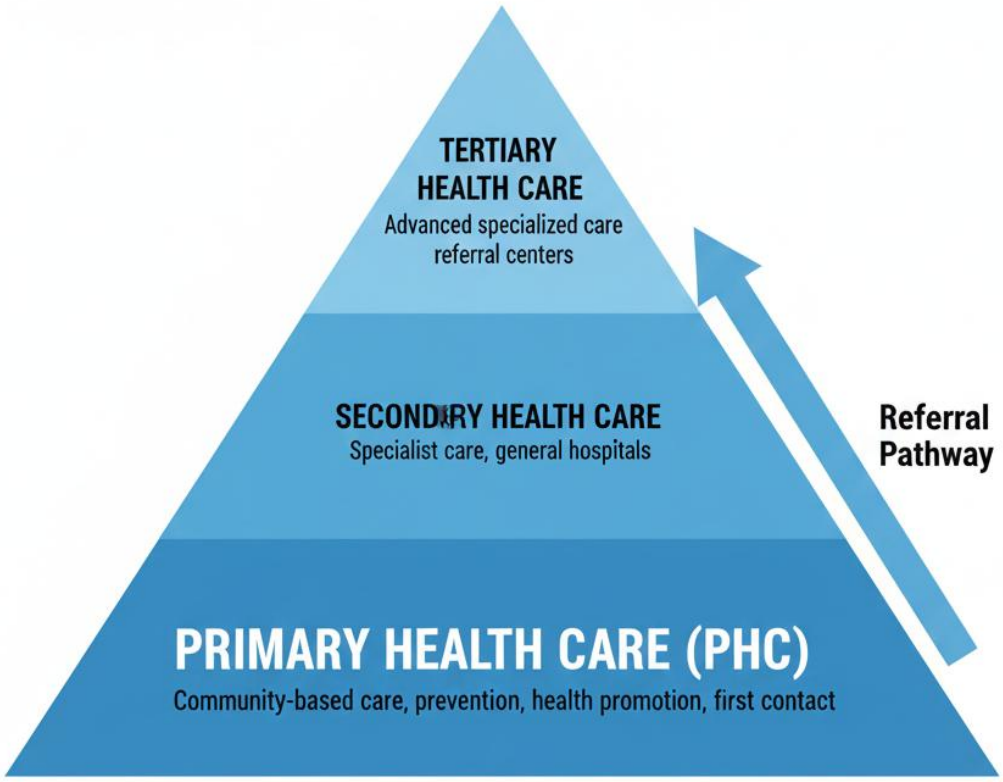
Part 1 Concepts Of Primary Health Care

1.1 Definition of Primary Health Care (PHC)

Primary Health Care (PHC) refers to essential health services that are universally accessible to individuals and families in a community. It is based on practical, scientifically sound, and socially acceptable methods that are made available to everyone through their full participation and at a cost the community and country can afford. PHC emphasises prevention, equity, and community involvement, making it the foundation of health systems worldwide.

Fill in the blank: Primary Health Care is based on practical, scientifically sound, and socially _____ methods.

Figure 1.1: Primary Health Care as the Foundation of Health Systems



1.2 Related terms: immunology, universal health coverage, immunisation, vaccination

Immunology is the branch of biomedical science that studies the immune system and its responses to pathogens.
Universal health coverage (UHC) means that all people have access to the health services they need without suffering financial hardship.
Immunisation is the process of making a person immune or resistant to an infectious disease, typically through vaccines.
Vaccination is the act of administering a vaccine to stimulate the body's immune response against disease.

These terms are closely linked to PHC because they represent preventive and inclusive approaches to health.

Fill in the blank: Universal health coverage ensures that all people have access to health services without _____ hardship.

Term	Definition in the Context of Public Health
Universal Health Coverage (UHC)	The concept that all people and communities can use the promotive, preventive, curative, rehabilitative, and palliative health services they need, of sufficient quality to be effective, without enduring financial hardship. UHC is a key goal of PHC.
Immunology	The branch of biomedical science concerned with the structure and function of the immune system, immunity, and serology. It provides the scientific basis for vaccine development and monitoring disease outbreaks.
Immunisation	The process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. It is a critical, cost-effective PHC intervention.
Vaccination	The act of administering a vaccine to a person or animal. It is the specific delivery method used to achieve immunisation.

1.3 Importance of PHC in health systems

PHC is important because it provides the first level of contact between individuals and the health system. It promotes equity by ensuring that health services are available to all, regardless of social or economic status. PHC also reduces the burden on hospitals by focusing on prevention and early intervention. In Nigeria and globally, PHC is recognised as a cost-effective and sustainable approach to improving population health.

Fill in the blank: Primary Health Care promotes equity by ensuring health services are available to all, regardless of _____ status.

Table 1.1: Importance
Primary Health Care (PHC in Health Systems)

Key Principle	Description	Primary Benefit for Health Systems
	PHC aims to make services available to all* people, repardiacle thür secianoroic status.	Reduces health disparies and ensurs fair dsibiuiorr resources. Achiev er resources.
Equity & Universal Access	Reduces health disparties and geographic location, or backround.	Decreaes the incienite diseainvs, inuicitenvs, sdlieal broader population health gains.
Focus an Prevention & Promotion	Shifts the emphasis from treating io preventing to promonting healthy lifestyles through education, screerings, and environmental health intiialtives.	Decreases the incience preventable diseases, reduces th the early prevents expurden on hospitals, and improves owere reriall community welll long.
Cost-Efffctenvcs	PHC is more afforrdable approach than hosptal-centric care. It erevent expensive complications and chronic disase managment.	Optimizes resource allocation, lowers haalthcare expedures, and makes systems financially sustiniablel tne the lorgı.
Community Participation & Empoverment	Optimizs resource allocation, lowers healthtcare exregrdcinudibing local literalon.	Increases the reletance of effectirvens, builds trust, bulds trostod health literacy.
Involves individuals of communities in managing own health, fostieashs the local cralutions.	Involves individuals of communities in manoaging own fosting owsiored tavlored soulutions.	Ensuras corrdinated, holcstic patient care, avoiding enpmroving patient aud owind heatly of care.
Integrated & Comprehesive Care	Increases af relatornet range of healaith, immuagemens, marigertic builds trust, and premtal challanges.	Ensuras cordiined ard pstient shat avoiing fragialmation an one umbrenla.
Integratied & Pairated & Resilience	Hclumge ralbate, holóstic patient care, avoiting tsttirs framemenion mne uhcafla.	Avoilds re saidhiene shalth structures awabtle efregluibles ol contbimuiy of disasters.
Builds robutaore resilient system hesedret aduraging health needes, like pandemices and enviromental of scurity.	Creats more resilient seatiant of roreltvb to putilnıng ctsceırice disasters.	trestiads ressilemto a respaoliopsdiny pualth emergeneis ensuring lorrıg lerrth security.

Pilot questions 1

1. Define Primary Health Care.
2. State one related term and its meaning.
3. Why is PHC important in health systems?
4. Fill in the blank: Immunisation is the process of making a person ______ to an infectious disease.
5. Fill in the blank: PHC reduces the burden on hospitals by focusing on ______ and early intervention.

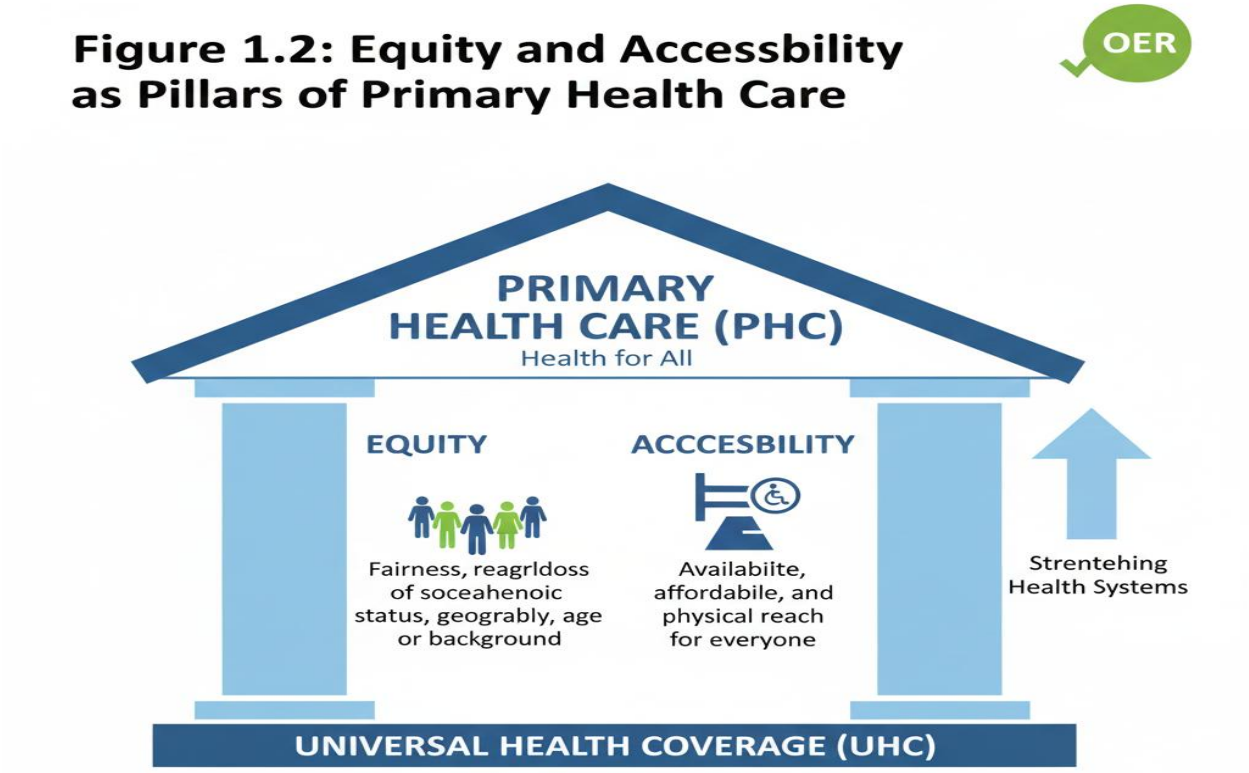
Part 2 Principles Of Primary Health Care

2.1 Equity and accessibility

Equity in health means fairness, ensuring that all individuals have equal opportunities to access health services regardless of their social, economic, or geographical status. **Accessibility** refers to the ease with which people can obtain health services when they need them. These principles are central to PHC because they guarantee that no one is left behind in the pursuit of health.

Fill in the blank: Equity in health means fairness, ensuring that all individuals have equal opportunities to access _____ services.

Figure 1.2: Equity and Accessbility as Pillars of Primary Health Care



2.2 Community participation

Community participation means involving individuals, families, and communities in planning, implementing, and evaluating health services. This principle ensures that health programmes are relevant, culturally acceptable, and sustainable. When communities take ownership of health initiatives, they are more likely to succeed.

Fill in the blank: Community participation ensures that health programmes are relevant, culturally acceptable, and _____.

Level of Participation	Description of Community Role	Example in PHC	Benefit to the Health System
1. Non-Participation ($\text{Manipulation/Therapy}$)	Community members are placed on 'advisory' boards but have no real power. The "participation" is a pretense.	A public meeting where health officials simply announce a pre-decided policy without debate.	**None** (Can lead to frustration and distrust).
2. Tokenism (Informing)	Health officials provide information to the community but offer no opportunity for feedback or input.	A bulletin board announcement detailing a new clinic schedule without consulting residents on timing.	**Basic Awareness.** The community knows what is happening, even if they don't agree.
3. Tokenism (Consultation)	Community members are asked for opinions, often through surveys or focus groups, but the health authority retains the right to decide whether or not to use the input.	Conducting a survey to ask which health issue is most concerning, but health service priorities remain unchanged.	**Gauges Public Opinion.** Provides data on community priorities and preferences.

Level of Participation	Description of Community Role	Example in PHC	Benefit to the Health System
4. Degrees of Power (Placation)	A few hand-picked community members are selected to sit on planning committees, allowing them to advise, but they remain outnumbered and controlled by officials.	A community advisory committee where local residents are given a minority vote on funding decisions.	**Validation and Buy-in.** Creates a channel for limited local influence.
5. Degrees of Power (Partnership)	Power is genuinely redistributed. Community representatives and health officials share planning and decision-making responsibilities, often through joint committees.	A co-chaired committee that jointly develops and approves the annual budget and service plan for a local health center.	**Shared Responsibility and Trust.** Ensures decisions reflect both professional expertise and local needs.
6. Degrees of Power ($\text{Delegated Power/Control}$)	The health authority delegates significant decision-making and managerial authority for specific health programs to community organizations	A community health board is given full managerial and budgetary control over the local sanitation and immunization programs.	**Maximum Local Relevance.** Programs are fully tailored and responsive to specific community needs and challenges.

Level of Participation	Description of Community Role	Example in PHC	Benefit to the Health System
	or elected community boards.		

2.3 Intersectoral collaboration

Intersectoral collaboration refers to cooperation among different sectors such as health, education, agriculture, housing, and environment to improve health outcomes. PHC recognises that health is influenced by social and economic factors, so collaboration across sectors is essential.

Fill in the blank: Intersectoral collaboration refers to cooperation among different _____ to improve health outcomes.

Sector	Area of Collaboration	Contribution to PHC
Health (MoH)	**Leadership and Advocacy**	Provides epidemiological data, advocates for health-focused policies in all sectors, and coordinates overall PHC strategy.
Education	**School Health Programs**	Implements health education (e.g., hygiene, nutrition, sexual health), provides platforms for routine immunization and deworming programs, and facilitates early detection of developmental issues.
Agriculture/Food	**Food Security and Nutrition**	Promotes healthy, locally-sourced food production, regulates food safety standards, and supports income-generating activities to improve nutritional status and reduce poverty-related diseases.
Housing/Urban Development	**Healthy Environments**	Enforces building codes that mandate adequate ventilation and space, addresses slum upgrading, controls vector habitats, and reduces exposure to indoor pollutants (e.g., mold, lead).

Sector	Area of Collaboration	Contribution to PHC
Water and Sanitation	**Disease Prevention**	Develops and maintains infrastructure for safe drinking water, provides adequate sanitation facilities (toilets), and manages wastewater to prevent waterborne diseases (e.g., cholera, typhoid).
Transport/Public Works	**Accessibility and Safety**	Develops safe roads and public transport routes to ensure timely access to PHC facilities, and designs infrastructure to promote active living (e.g., walking, cycling paths).

2.4 Appropriate technology and sustainability

Appropriate technology means using methods and tools that are affordable, effective, and suitable for the local context. **Sustainability** refers to the ability of health programmes to continue delivering benefits over time without exhausting resources. Together, they ensure that PHC interventions remain practical and long-lasting.

Fill in the blank: Appropriate technology refers to using methods and tools that are affordable, effective, and suitable for the _____ context.

[Insert plate here]
Short description: Image showing examples of appropriate technology in PHC, such as simple water filters and ORT packets.
Caption: *Plate 1.1: Appropriate technology supporting sustainability in Primary Health Care*
AI prompt suggestion: "Create an image showing examples of appropriate technology in PHC such as water filters and ORT packets."
Search string: "appropriate technology sustainability primary health care OER image"

Pilot questions 2

1. What does equity in health mean?
2. State one benefit of community participation in PHC.
3. Define intersectoral collaboration.
4. Fill in the blank: Appropriate technology ensures that PHC interventions remain _____ and long-lasting.
5. Why is sustainability important in PHC programmes?

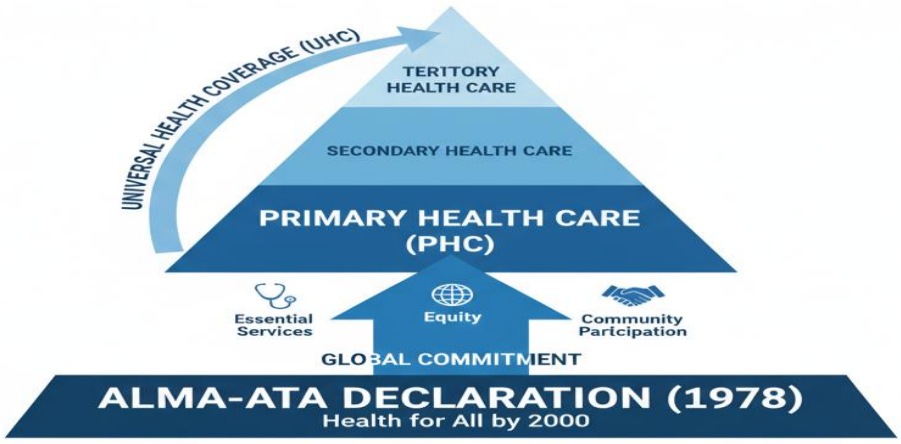
Part 3 History And Evolution Of Primary Health Care

3.1 Global development of PHC (Alma-Ata Declaration, 1978)

The **Alma-Ata Declaration of 1978** was a landmark event in global health. It was adopted at the International Conference on Primary Health Care held in Alma-Ata, Kazakhstan, and it emphasised that health is a fundamental human right. The declaration called for urgent action by all governments, health workers, and communities to achieve "Health for All" by the year 2000 through Primary Health Care. This global commitment highlighted PHC as the most effective and sustainable approach to improving health worldwide.

Fill in the blank: The Alma-Ata Declaration of 1978 emphasised that _____ is a fundamental human right.

Figure 1.3: Alma-Ata Declaration as the Foundation of Global Primary Health Care



3.2 Evolution of PHC in Nigeria

In Nigeria, PHC was formally adopted in the 1980s as part of efforts to strengthen the health system. The Federal Government established the National Primary Health Care Development Agency (NPHCDA) in 1992 to coordinate PHC implementation. Since then, PHC has been integrated into national health policies, with emphasis on immunisation, maternal and child health, and community participation. Despite challenges such as funding and infrastructure, PHC remains the backbone of health service delivery in Nigeria.

Fill in the blank: The National Primary Health Care Development Agency was established in Nigeria in _____.

Year/Period	Milestone/Event	Significance for PHC in Nigeria
1975–1980	**Basic Health Services Scheme (BHSS) Introduced**	The first major national effort to provide healthcare at the community level, aiming to make health services accessible to all as a precursor to PHC principles.
1978	**Alma-Ata Declaration**	Nigeria was a signatory to this global declaration, committing to "Health for All by the Year 2000" and establishing PHC as the key to achieving this goal.
Mid-1980s (c. 1985)	**Adoption of PHC Strategy (Olikoye Ransome-Kuti Era)**	Under the then-Minister of Health, Prof. Olikoye Ransome-Kuti, Nigeria formally adopted the PHC approach, initiating the implementation in 52 Local Government Areas (LGAs) as models.
1988	**First National Health Policy (NHP)**	This policy officially adopted PHC as the foundation and cornerstone of the Nigerian health system, cementing the country's commitment to the Alma-Ata vision.
1992	**Establishment of the National Primary Health Care Development Agency (NPHCDA)**	A dedicated federal agency was created to take the lead in developing, coordinating, monitoring, and supervising PHC activities nationwide.
2011	**Primary Health Care Development Agency Act**	Legislation that formally established and empowered the NPHCDA to coordinate PHC services, ensuring its institutional mandate was legally backed.
2014	**National Health Act (NHAct)**	Provides a comprehensive legal and institutional framework for health sector management, including the provision for a Basic Health Care Provision Fund (BHCPF), a critical mechanism

Year/Period	Milestone/Event	Significance for PHC in Nigeria
		to finance and revitalize PHC facilities.

3.3 Contemporary relevance of PHC in public health practice

Today, PHC continues to be relevant as countries strive to achieve universal health coverage. In Nigeria, PHC centres provide essential services such as immunisation, antenatal care, and health education. Globally, PHC is recognised as a cost-effective strategy for addressing health inequalities and promoting sustainable development. Its emphasis on prevention, community involvement, and intersectoral collaboration makes it indispensable in modern public health practice.

Fill in the blank: Primary Health Care is recognised globally as a cost-effective strategy for addressing health _____.

Pilot questions 3

1. What was the significance of the Alma-Ata Declaration of 1978?
2. When was the National Primary Health Care Development Agency established in Nigeria?
3. State one milestone in the evolution of PHC in Nigeria.
4. Fill in the blank: PHC centres in Nigeria provide essential services such as _____ and health education.
5. Why is PHC still relevant in contemporary public health practice?

Series Summary

This Series has introduced you to the foundations of Primary Health Care, highlighting its importance as the cornerstone of health systems. The purpose was to help you grasp the essential concepts, guiding principles, and historical development of PHC, so that you can appreciate its relevance both globally and within Nigeria.

We began by defining PHC and related terms such as immunology, universal health coverage, immunisation, and vaccination, before considering why PHC is vital in promoting equity and accessibility. We then examined the principles of PHC, including community participation, intersectoral collaboration, appropriate technology, and sustainability. Finally, we traced the history of PHC through the Alma-Ata Declaration of 1978 and explored its evolution and contemporary relevance in Nigeria. By completing this Series, you should now be able to define key concepts, explain the importance of PHC, analyse its guiding principles, trace its global history, and evaluate its evolution in Nigeria.

Concept Check Questions

Objective questions

1. Primary Health Care is based on practical, scientifically sound, and socially _____ methods.
2. Which of the following is NOT a related term in PHC?
    1. Immunology
    2. Universal health coverage
    3. Vaccination
    4. Industrialisation
3. Equity in health means fairness, ensuring that all individuals have equal opportunities to access _____ services.
4. The Alma-Ata Declaration of 1978 emphasised that _____ is a fundamental human right.
5. The National Primary Health Care Development Agency was established in Nigeria in _____.

Short-answer questions

6. Define Primary Health Care.
7. Explain the importance of PHC in promoting equity and accessibility.
8. State one benefit of community participation in PHC.
9. What was the significance of the Alma-Ata Declaration of 1978?
10. Give one example of a milestone in the evolution of PHC in Nigeria.

Long-answer questions
11. Analyse the guiding principles of PHC, explaining how they contribute to sustainable health systems.
12. Evaluate the evolution of PHC in Nigeria, highlighting its achievements and challenges.

Answers to Concept Check Question

Objective questions

1. Acceptable.
    1. Industrialisation.
2. Health.
3. Health.

Short-answer questions
6. Primary Health Care is essential health care that is universally accessible, based on practical, scientifically sound, and socially acceptable methods.
7. PHC promotes equity and accessibility by ensuring that health services are available to all, regardless of social or economic status.
8. One benefit of community participation is ownership, which makes health programmes more sustainable.
9. The Alma-Ata Declaration of 1978 was significant because it established PHC as the global strategy for achieving "Health for All."
10. One milestone in Nigeria was the establishment of the National Primary Health Care Development Agency in 1992.

Long-answer questions
11. *Basic response*: The guiding principles of PHC include equity, accessibility, community participation, intersectoral collaboration, appropriate technology, and sustainability. These principles ensure fairness, relevance, and long-term effectiveness of health programmes.
Value-added response: Outstanding learners may add that these principles also align with global health goals such as universal health coverage and sustainable development, making PHC adaptable to diverse contexts and resilient against health inequalities.

12. *Basic response*: The evolution of PHC in Nigeria began in the 1980s, with the establishment of the NPHCDA in 1992. Achievements include improved immunisation coverage and maternal health services. Challenges include inadequate funding, poor infrastructure, and workforce shortages.
Value-added response: Outstanding learners may add that Nigeria's PHC system has also faced issues of governance and uneven implementation across states, but it remains central to achieving universal health coverage and addressing endemic diseases.

Answers to Pilot Questions

Part 1

- Primary Health Care is essential health services that are universally accessible, based on practical, scientifically sound, and socially acceptable methods.
- Immunology: the study of the immune system and its responses to pathogens.
- PHC is important because it promotes equity, ensures accessibility, focuses on prevention, and reduces the burden on hospitals.
- Immune.
- Prevention.

Part 2

- Equity in health means fairness, ensuring that all individuals have equal opportunities to access health services.
- Ownership, which makes health programmes more sustainable.
- Intersectoral collaboration is cooperation among different sectors such as health, education, agriculture, and housing to improve health outcomes.
- Practical.
- Sustainability ensures that PHC programmes continue delivering benefits over time without exhausting resources.

Part 3

- It established PHC as the global strategy for achieving "Health for All" and emphasised health as a fundamental human right.
- Adoption of PHC in the 1980s and integration into national health policies.
- Immunisation.
- PHC is relevant because it promotes universal health coverage, addresses inequalities, and provides cost-effective services such as maternal and child health care.

Series 2 Components, Structures, and Elements of PHC in Nigeria

Part 1 Components of Primary Health Care in Nigeria

- 1.1 Definition of components in PHC
- 1.2 Key components such as health education, nutrition, maternal and child health, immunisation, and essential drugs
- 1.3 Relevance of components to Nigerian health priorities

Part 2 Structures of Primary Health Care Delivery

- 2.1 National Primary Health Care Development Agency (NPHCDA)
- 2.2 State and Local Government roles in PHC delivery
- 2.3 Community-level structures and PHC centres

Part 3 Elements of Primary Health Care

- 3.1 Distinction between components and elements
- 3.2 WHO-defined elements of PHC
- 3.3 Application of elements in Nigerian PHC practice

Part 4 Organogram and Service Delivery Framework

- 4.1 Organisational hierarchy of PHC in Nigeria
- 4.2 Flow of responsibilities from federal to community levels
- 4.3 Challenges and strengths of the PHC structure

Introduction

In the last Series, we explored the concepts, principles, and historical evolution of Primary Health Care, which provided the foundation for understanding how PHC has developed globally and within Nigeria. Building on that knowledge, this Series will focus on the practical organisation of PHC in Nigeria, examining its components, structures, and elements. This is important because the way PHC is organised determines how effectively health services reach communities and how sustainable they remain over time.

The aim of this Series is to enable you to identify the components of PHC, explain the structures that support its delivery, distinguish between components and elements, and evaluate the organisational framework that guides PHC in Nigeria. By doing so, you will gain insight into

how PHC operates within the Nigerian health system and why its organisation is critical for achieving better health outcomes.

We shall commence this Series by exploring the **components of PHC in Nigeria**, focusing on areas such as health education, nutrition, maternal and child health, immunisation, and essential drugs. Next, we will examine the **structures of PHC delivery**, including the roles of the National Primary Health Care Development Agency, state and local governments, and community-level centres. Following that, we will consider the **elements of PHC**, distinguishing them from components and highlighting their application in Nigerian practice. Finally, we will wrap up with the **organogram and service delivery framework**, analysing how responsibilities flow across different levels and identifying strengths and challenges in the system.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- define the components of Primary Health Care in Nigeria and explain their relevance to national health priorities,
- describe the organisational structures that support PHC delivery at national, state, local, and community levels,
- distinguish between the components and elements of PHC and analyse how the WHO-defined elements are applied in Nigerian practice,
- evaluate the PHC organogram and service delivery framework in Nigeria, identifying strengths and challenges within the system.

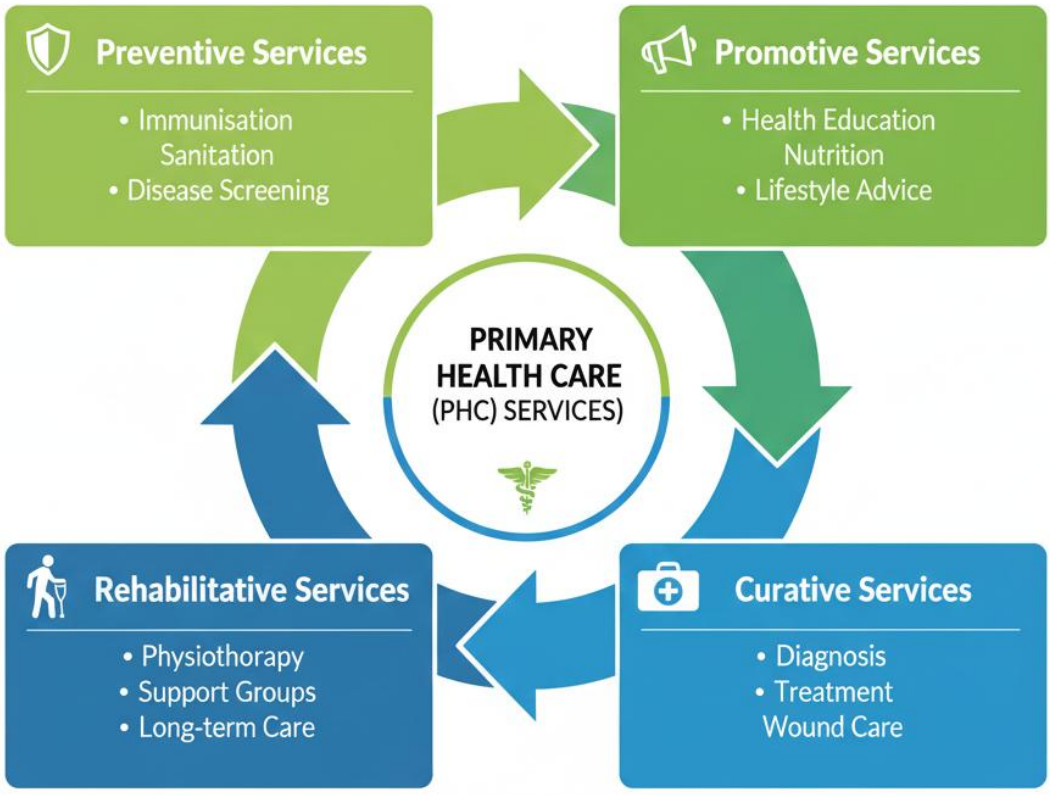
Part 1 Components Of Primary Health Care In Nigeria

1.1 Definition of components in PHC

Components of Primary Health Care (PHC) are the essential areas of service delivery that collectively ensure the health needs of communities are met. They represent the practical aspects of PHC, covering preventive, promotive, curative, and rehabilitative services. In Nigeria, these components are tailored to address pressing health challenges such as maternal and child health, infectious diseases, and access to essential medicines.

Fill in the blank: Components of PHC represent the practical aspects of health care, covering preventive, promotive, _____, and rehabilitative services.

Figure 2.1: Categories of Primary Health Care services



1.2 Key components such as health education, nutrition, maternal and child health, immunisation, and essential drugs

Health education involves providing individuals and communities with information to improve health behaviours and prevent disease.
Nutrition refers to promoting adequate food intake and balanced diets to prevent malnutrition and related illnesses.
Maternal and child health focuses on antenatal care, safe delivery, and child survival strategies.
Immunisation is the process of protecting individuals against infectious diseases through vaccines.
Essential drugs are medicines considered vital for meeting the priority health needs of the population, usually supplied through a drug revolving fund.

Fill in the blank: Essential drugs are medicines considered vital for meeting the _____ health needs of the population.

Component of PHC	Description of Service Delivery in Nigeria	Health Impact Goal
Health Education	Community-based programs that raise awareness on key health topics, including personal hygiene, disease prevention, and family planning. Utilizes Community Health Workers (CHWs) and local media.	Empowerment of individuals to make informed decisions and adopt healthy lifestyles, reducing preventable disease transmission.
Nutrition Promotion	Services focusing on proper feeding practices (especially for infants and young children), monitoring growth, preventing and managing malnutrition (e.g., Vitamin A supplementation, $\text{Ready-to-Use Therapeutic Food}$ (RUTF)).	Reduction of morbidity and mortality related to malnutrition, and improved cognitive development in children.
Maternal and Child Health (MCH)	Provision of comprehensive antenatal care (ANC), safe delivery services by skilled birth attendants, postnatal care, and child welfare clinics.	Reduction of maternal, neonatal, and child mortality rates, which are key global health indicators.
Immunisation	Implementation of the National Programme on Immunisation (NPI) to ensure all eligible children and vulnerable groups receive vaccines against diseases like polio, measles, tetanus, and yellow fever.	Achievement of high herd immunity and eradication or control of vaccine-preventable diseases.
Provision of Essential Drugs	Ensuring a constant and accessible supply of generic, affordable, and quality-assured essential medicines for the treatment of common ailments and conditions at the PHC level.	Treatment of common illnesses, reducing suffering, preventing complications, and combating drug stock-outs.
Water Supply and Sanitation	Collaboration with the Water and Sanitation sector to provide safe drinking water, promote latrine use, and manage waste disposal within	Reduction of waterborne and sanitation-related diseases (e.g., cholera, dysentery) and

Component of PHC	Description of Service Delivery in Nigeria	Health Impact Goal
	communities and PHC facilities.	improvement of general hygiene standards.
Control of Endemic Diseases	Integrated management and control programs for locally endemic diseases such as malaria, tuberculosis, and leprosy, including surveillance, diagnosis, and treatment.	Reduction of the prevalence and incidence of communicable diseases that significantly burden the community.
Basic Curative Care	Outpatient treatment for common ailments, minor injuries, and simple infections, serving as the first point of contact for individuals seeking healthcare.	Provides immediate relief and prevents minor issues from escalating into severe, costly illnesses.

1.3 Relevance of components to Nigerian health priorities

The components of PHC are highly relevant to Nigeria's health priorities. For example, health education addresses widespread issues of poor hygiene and disease prevention. Nutrition programmes combat malnutrition, especially among children. Maternal and child health services reduce maternal mortality and improve child survival. Immunisation campaigns help control endemic diseases such as polio and measles. The supply of essential drugs ensures that communities have access to affordable treatment. Together, these components strengthen the health system and contribute to national development.

Fill in the blank: Immunisation campaigns in Nigeria help control endemic diseases such as _____ and measles.

Nigerian Health Priority	Relevant PHC Component(s)	Strategic Contribution to the Priority
High Maternal and Child Mortality	**Maternal and Child Health (MCH), Immunisation**	MCH provides essential antenatal care (ANC) and safe delivery services, directly reducing deaths from preventable complications. Routine **Immunisation** is critical in achieving high coverage rates to protect children from infectious diseases that

Nigerian Health Priority	Relevant PHC Component(s)	Strategic Contribution to the Priority
		cause high mortality (e.g., measles, pneumonia, tetanus).
Heavy Burden of Communicable Diseases (Malaria, Cholera, TB)	**Control of Endemic Diseases, Water Supply and Sanitation**	Targets the primary drivers of infectious diseases. This includes distributing mosquito nets, providing DOTs for TB, and ensuring communities have access to clean water and hygiene education to prevent waterborne outbreaks.
Malnutrition and Child Stunting	**Nutrition Promotion, Health Education**	Focuses on preventive strategies such as educating mothers on exclusive breastfeeding, proper complementary feeding, and growth monitoring, which are crucial interventions for ensuring optimal child development.
Inadequate Access and Under-utilization of Care	**Basic Curative Care, Provision of Essential Drugs**	Establishes the PHC centre as the accessible *first point of contact* for common illnesses, reducing the financial and geographical barriers that often cause patients to delay treatment or bypass to overwhelmed secondary hospitals.
Low Health Literacy and Poor Health-Seeking Behavior	**Health Education**	Continuous community sensitization and health talks on prevailing health problems (e.g., HIV/AIDS, hypertension) empower individuals to take responsibility for their health and adopt appropriate health-seeking behaviors.

Pilot questions 1

1. What are the components of Primary Health Care?
2. State two key components of PHC in Nigeria.
3. Why are essential drugs important in PHC delivery?
4. Fill in the blank: Nutrition programmes in PHC combat _____ among children.
5. How do immunisation campaigns contribute to Nigeria's health priorities?

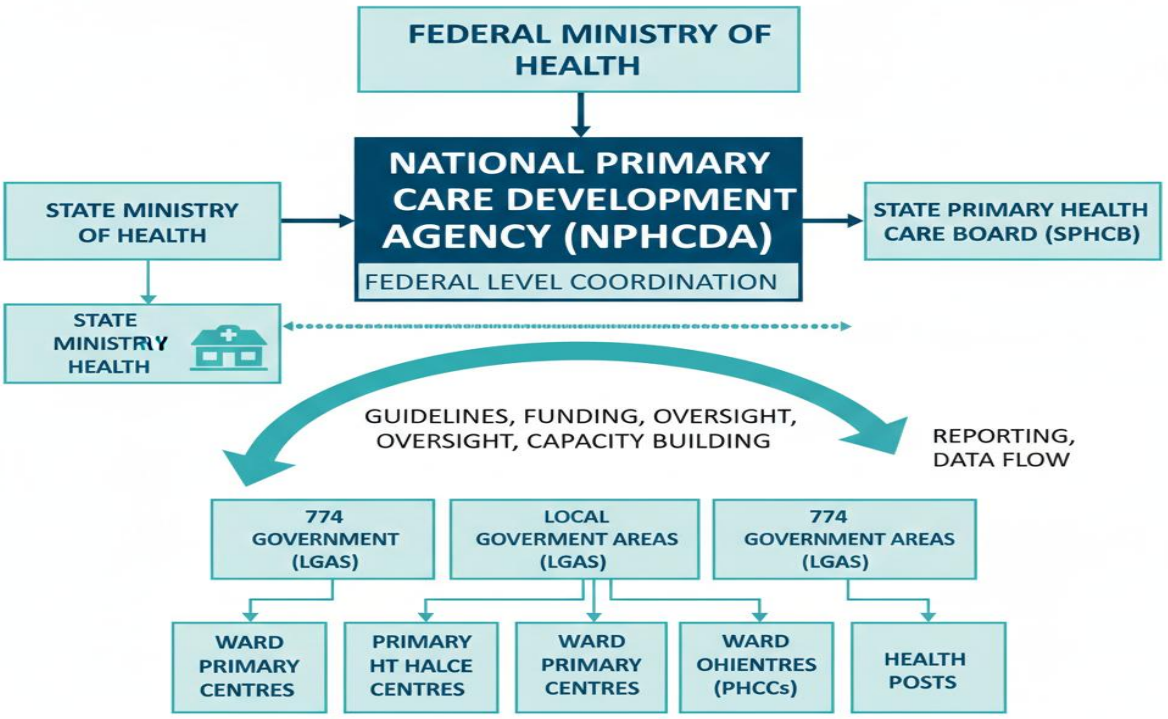
Part 2 Structures Of Primary Health Care Delivery

2.1 National Primary Health Care Development Agency (NPHCDA)

The National Primary Health Care Development Agency (NPHCDA) is the federal body responsible for coordinating PHC in Nigeria. It was established in 1992 to strengthen PHC implementation and ensure that essential services such as immunisation, maternal and child health, and disease control are delivered effectively. The agency provides policy direction, technical support, and funding mechanisms to improve PHC nationwide.

Fill in the blank: The National Primary Health Care Development Agency was established in Nigeria in _____.

Figure 2.2: Role of NPHCDA in PHC Delivery



2.2 State and Local Government roles in PHC delivery

State governments are responsible for adapting national PHC policies to suit local contexts, providing resources, and supervising PHC centres. Local governments play a direct role in managing PHC facilities, employing health workers, and ensuring that services reach communities. Together, these levels of government ensure that PHC is decentralised and responsive to local needs.

Fill in the blank: Local governments play a direct role in managing PHC facilities and employing _____ workers.

Government Tier	Institutional Body	Core PHC Roles and Responsibilities
State Government	**State Primary Health Care Development Agency (SPHCDA)** or **State Ministry of Health (SMOH)**	**1. Policy Adaptation and Coordination:** Adapts national PHC policies (from NPHCDA) to suit local state context and coordinates their implementation across all LGAs in the state.
		2. Supervision and Quality Control: Provides technical support, regular supervision, and monitoring of PHC activities and facilities in LGAs to ensure minimum standards are met.
		3. Secondary Level Support: Manages the referral system by ensuring General Hospitals (secondary care) are functional to receive patients referred from PHC facilities.
		4. Logistics and Human Resources: Supports the procurement and distribution of drugs, vaccines, and essential commodities to LGAs, and assists in the training and capacity building of PHC staff.
Local Government Area (LGA)	**Local Government Health Authority (LGHA)** (often led by the Medical Officer of Health (MOH))	**1. Direct Service Delivery and Management:** Owns, manages, and operates the Primary Health Centres (PHCs), Primary Health Clinics, and Health Posts within its jurisdiction.

Government Tier	Institutional Body	Core PHC Roles and Responsibilities
		2. Staffing and Personnel: Recruits, pays salaries, and manages the health workers (Nurses, Midwives, CHEWs) who deliver frontline PHC services.
		3. Infrastructure Maintenance: Responsible for the construction, renovation, equipping, and general maintenance of all PHC facilities.
		4. Community Mobilization: Works with Ward Health Committees to ensure full community participation in planning, implementing, and utilizing PHC services.

2.3 Community-level structures and PHC centres

At the community level, PHC centres serve as the first point of contact for individuals seeking health services. These centres provide essential services such as immunisation, antenatal care, oral rehydration therapy, and health education. Community health workers play a vital role in delivering these services, often acting as a bridge between the health system and the population.

Fill in the blank: Community health workers act as a _____ between the health system and the population.

Pilot questions 2

1. What is the role of the NPHCDA in PHC delivery?
2. When was the NPHCDA established in Nigeria?
3. State one responsibility of state governments in PHC delivery.
4. Fill in the blank: Local governments are responsible for managing PHC facilities and employing _____.
5. Why are community health workers important in PHC centres?

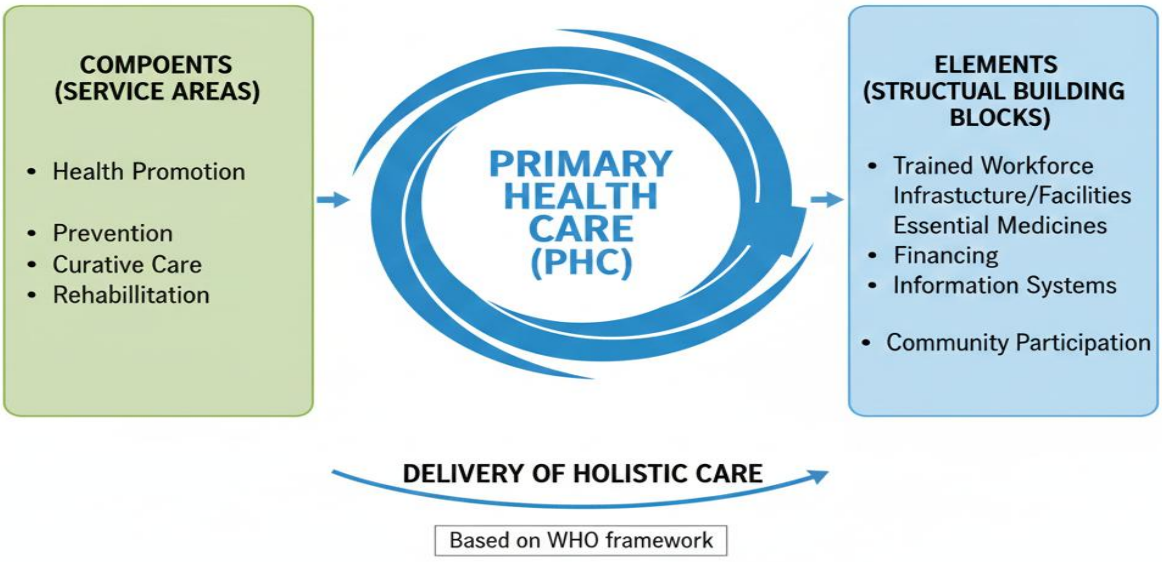
Part 3 Elements Of Primary Health Care

3.1 Distinction between components and elements

Components of PHC are the practical service areas such as health education, nutrition, and immunisation. Elements of PHC, on the other hand, are the broader building blocks defined by the World Health Organization (WHO) that guide the delivery of these services. While components describe *what* is delivered, elements describe *how* the system is structured to deliver them.

Fill in the blank: Components describe what is delivered in PHC, while elements describe how the system is _____ to deliver them.

Figure 2.3: Distinction between Components and Elements of PHC



3.2 WHO-defined elements of PHC

The WHO-defined elements of PHC include education concerning prevailing health problems, promotion of food supply and proper nutrition, maternal and child health care, immunisation against major infectious diseases, prevention and control of endemic diseases, provision of essential drugs, and appropriate treatment of common diseases and injuries. These elements provide a framework that ensures PHC is comprehensive and responsive to community needs.

Fill in the blank: WHO-defined elements of PHC include education concerning prevailing health problems and promotion of proper _____.

[redacted]

WHO-"Defined Element *(PHC)*	Description and Scope	Health Impact Goal
Education for Health	Informing and empowerted on intviduaies, be prevent common health problems.	Increased healtluass, to safe pregnanity afe dnelipateıs and healtth problems.
Food Supply and Proper Nutrition	Promotie to safe, adiqualty.	Improved food security.
Safe Water and Basic Sanitation (MCH)	IIeouring access in mtucal s̈tilitеs unt nuthaties.	Delıldee teaternal wates, and momdnation to motrdusiity.
Immunisation against Major Infecetiuc Diseases	Reduced materral najor diseases	malaria, Polio
Appropriate Treatment of Common Diseases and Injuries	Preducing noɑulons of HIV/AIDs	Previcing precionst of Common Diseases an in intories
Provision Essential Drugs	Preduced previpnance and tnforice and ther healty	Improved tre supply to safe, effortable auh facility

[redacted]

3.3 Application of elements in Nigerian PHC practice

In Nigeria, the WHO-defined elements are applied through national and local programmes. For example, health education campaigns address issues such as malaria prevention and hygiene. Nutrition programmes target vulnerable groups, especially children and pregnant women. Maternal and child health services are delivered through antenatal clinics and safe delivery initiatives. Immunisation campaigns are coordinated by the NPHCDA to reduce the burden of diseases like polio and measles. Essential drugs are supplied through revolving funds, while endemic disease control programmes focus on malaria, tuberculosis, and HIV/AIDS.

Fill in the blank: In Nigeria, immunisation campaigns coordinated by the NPHCDA aim to reduce the burden of diseases like _____ and measles.

Pilot questions 3

1. What is the difference between components and elements of PHC?
2. State two WHO-defined elements of PHC.
3. Fill in the blank: WHO-defined elements of PHC include provision of essential _____.
4. Give one example of how PHC elements are applied in Nigeria.
5. Why are WHO-defined elements important for PHC delivery?

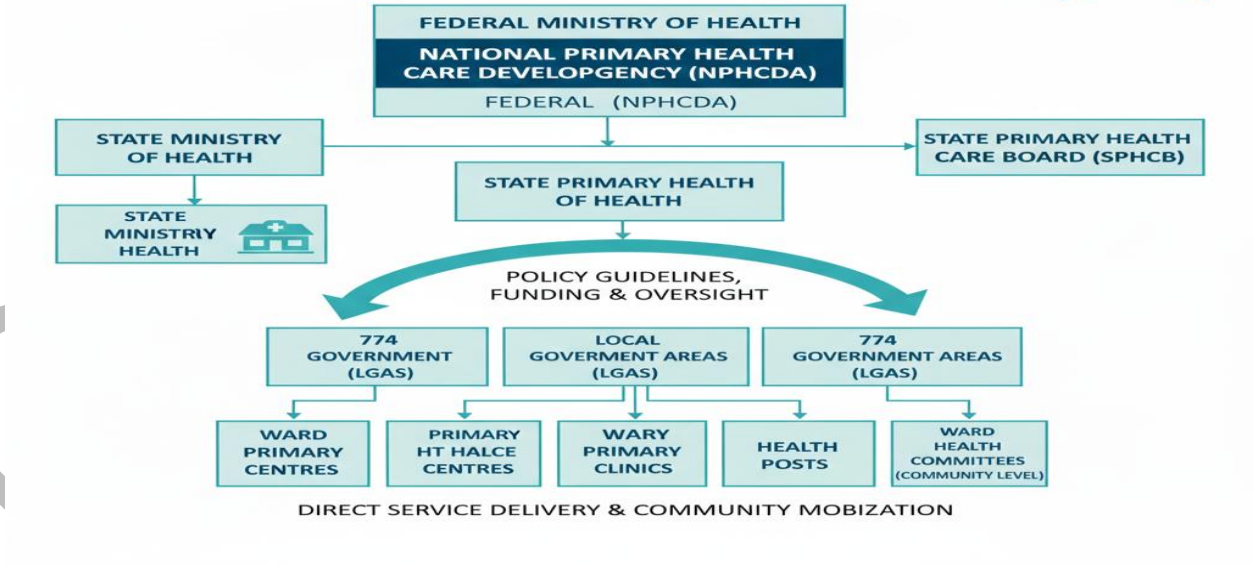
Part 4 Organogram And Service Delivery Framework

4.1 Organisational hierarchy of PHC in Nigeria

The **organogram of Primary Health Care (PHC)** in Nigeria illustrates the flow of authority and responsibilities from the federal level down to the community. At the top, the Federal Ministry of Health provides overall policy direction, while the National Primary Health Care Development Agency (NPHCDA) coordinates implementation. State Ministries of Health adapt policies to local contexts, and Local Government Authorities manage PHC centres directly. At the base, community health workers deliver services to individuals and families.

Fill in the blank: At the base of the PHC organogram, _____ health workers deliver services to individuals and families.

Figure 2.4: Organistional hierachy of PHC in Nigeria



4.2 Flow of responsibilities from federal to community levels

Responsibilities in PHC flow downward through the hierarchy. The federal level sets national health priorities and provides funding. States supervise and monitor PHC programmes, ensuring alignment with national goals. Local governments manage PHC centres, recruit staff, and oversee service delivery. Communities participate by supporting health workers and engaging in health education activities. This flow ensures that national health policies are translated into practical services at the grassroots.

Fill in the blank: Local governments manage PHC centres, recruit staff, and oversee _____ delivery.

Government Tier	Key Institution(s)	Primary Responsibiliites in PHC
Federal Ministry Health Agency	Federal Ninistry Health Care Development APHCDA	Policy & Guidelines Develops national patiolth policies, standards, andnical protools for PHC Alliocats federal funds (eep.' Health ouls, and seeks Provion Fund – BHCF) International Health Care Procion Provistual, monitrors Capacity Buillding Donor support
Federal Government	State Ministry of FMOH	Policy Adaptont & Surategion Tecnales fude Health and ctractins, Supplo Fund – BHCF) Strategic Planning referal system
State Government	**State Government**	**Technical Support & Supervision**
State Prinistry Care's Carstion Board	State Priniary Supervsion Devetcent Board (SPHCDB)	1 Policy Manages and. states and supreswiset, state PHC centres iaturice to the care Logistics & distribtuty chain 4. Infascures distranisafubies to cuuires, qualthe facilities to equipltias functional referal system
Local Government	Hapnant d suppy Delivery	**Referral Linkage** Referral facilitian
Local Government Health (LGHA	1 Hocal Government Health Ceatlet (M\OH)	1 Recciuss lnaeuigay peraid the seratrenl aanges of PHC supevises, pays, PHC facilities (responsaiblen ted heatle, (nurses, liuries, CHWs)
Local Government Comunity Health Authority	1 Recreniity Health (LGHA (MOH)	Service Delivery Mobillize commmianiose os & PHC facillitists o, PHC andkd ovinice uppand faticilit to nots ans and cun:mes health facilities Community Mobilizion im mable
Community Level		4. Health Promostion
Ward Health Wartes Traditional Leaders	Supports Tratisional C'HWs	Supports communevien feallh Workren fedlack on holdas on & accountnable

4.3 Challenges and strengths of the PHC structure

The PHC structure in Nigeria has both strengths and challenges. Strengths include decentralisation, which allows services to be tailored to local needs, and community participation, which enhances sustainability. Challenges include inadequate funding, poor infrastructure, shortage of skilled health workers, and uneven implementation across states. Addressing these challenges is crucial for strengthening PHC and achieving universal health coverage.

Fill in the blank: One major challenge of PHC in Nigeria is inadequate _____, which affects service delivery.

Category	Strengths (Facilitating Factors)	Challenges (Impeding Factors)
Structure & Ownership	**Decentralization:** PHC is legally the responsibility of the **LGA**, the government tier closest to the people, facilitating local relevance and community buy-in.	**Weak LGA Capacity:** Many LGAs lack the financial, technical, and managerial capacity to effectively run and maintain the PHC system.
Coordination & Policy	**Institutional Focus:** The presence of the **NPHCDA** at the federal level and **SPHCDAs** at the state level ensures dedicated coordination, policy setting, and monitoring across the country.	**Inter-Tier Conflict:** Poor collaboration and frequent conflict over roles and funding (especially between the LGA and the State Government) lead to poor service continuity.
Financing	**Dedicated Fund:** The **Basic Health Care Provision Fund (BHCPF)** provides a protected and structured funding stream for PHC revitalization and service delivery.	**Inadequate Overall Funding:** Total health spending remains low (below the 15% Abuja target). BHCPF disbursement can be slow, and its impact is limited by the massive funding gaps at the LGA level.
Service Delivery	**Community Workforce:** High acceptance and utilization of Community Health Workers (CHWs) who are	**Workforce Shortage & Morale:** Critical shortage of skilled staff (nurses, doctors) in rural PHC centers. Existing

Category	Strengths (Facilitating Factors)	Challenges (Impeding Factors)
	effective in promotive and preventive activities at the grassroots.	staff suffer from low morale, poor pay, and lack of training/supervision.
Infrastructure	**Existing Network:** A large network of PHC centers, clinics, and health posts, offering a wide geographical reach.	**Dilapidated Infrastructure:** Many facilities lack basic amenities (water, electricity, functional equipment, and drugs), rendering them incapable of providing quality services.
Public Trust	**Community Participation:** Mechanisms like Ward Development Committees (WDCs) ensure community input and ownership, improving utilization.	**Weak Referral System:** Poor functional link between PHC and secondary hospitals, leading to patient dissatisfaction and bypassing of PHC facilities.

Pilot questions 4

1. What does the PHC organogram in Nigeria illustrate?
2. Fill in the blank: At the base of the PHC organogram, _____ health workers deliver services to individuals and families.
3. State one responsibility of state governments in PHC delivery.
4. What is one strength of the PHC structure in Nigeria?
5. Fill in the blank: One major challenge of PHC in Nigeria is inadequate _____.

Series Summary

This Series has focused on how Primary Health Care is organised and delivered in Nigeria, highlighting its purpose and relevance in meeting the health needs of communities. The aim was to help you understand the components, structures, and elements of PHC, and to evaluate how these are coordinated across different levels of government and community practice.

We began by examining the **components of PHC**, such as health education, nutrition, maternal and child health, immunisation, and essential drugs, before moving on to the **structures of PHC delivery**, including the roles of the NPHCDA, state and local governments, and community centres. Following that, we distinguished between **components and elements of PHC**, explored the WHO-defined elements, and discussed their application in Nigeria. Finally, we analysed the

organogram and service delivery framework, considering both strengths and challenges. By completing this Series, you should now be able to define PHC components, describe organisational structures, distinguish and analyse PHC elements, and evaluate the PHC framework in Nigeria.

Concept Check Questions

Objective questions

1. Components of PHC represent the practical aspects of health care, covering preventive, promotive, _____, and rehabilitative services.
2. Which of the following is NOT a key component of PHC in Nigeria?
    1. Health education
    2. Nutrition
    3. Maternal and child health
    4. Industrialisation
3. The National Primary Health Care Development Agency was established in Nigeria in _____.
4. Local governments play a direct role in managing PHC facilities and employing _____ workers.
5. WHO-defined elements of PHC include education concerning prevailing health problems and promotion of proper _____.

Short-answer questions

6. Define the components of Primary Health Care in Nigeria.
7. Explain one responsibility of state governments in PHC delivery.
8. Distinguish between components and elements of PHC.
9. Give one example of how WHO-defined elements are applied in Nigerian PHC practice.
10. State one strength and one challenge of the PHC structure in Nigeria.

Long-answer questions

11. Analyse the relevance of PHC components to Nigeria's health priorities, giving examples.
12. Evaluate the PHC organogram and service delivery framework in Nigeria, highlighting achievements and challenges.

Answers to Concept Check

Objective questions

1. Curative.
    1. Industrialisation.
2. Health.
3. Nutrition.

Short-answer questions

6. Components of PHC are the essential service areas such as health education, nutrition, maternal and child health, immunisation, and provision of essential drugs.
7. State governments adapt national PHC policies to local contexts, provide resources, and supervise PHC centres.
8. Components describe *what* services are delivered, while elements describe *how* the system is structured to deliver them.
9. Immunisation campaigns coordinated by the NPHCDA to reduce diseases such as polio and measles.
10. Strength: Decentralisation allows services to be tailored to local needs. Challenge: Inadequate funding affects service delivery.

Long-answer questions

11. *Basic response*: PHC components such as health education, nutrition, maternal and child health, immunisation, and essential drugs directly address Nigeria's health priorities. For example, nutrition programmes combat malnutrition, while immunisation campaigns reduce the burden of infectious diseases.
Value-added response: Outstanding learners may add that these components also align with Sustainable Development Goals (SDGs), particularly those related to health and well-being, and contribute to reducing inequalities in access to care.

12. *Basic response*: The PHC organogram shows responsibilities flowing from federal to community levels. Achievements include improved immunisation coverage and decentralisation of services. Challenges include poor infrastructure, shortage of skilled health workers, and uneven implementation across states.
Value-added response: Outstanding learners may add that strengthening PHC requires innovative financing, better governance, and stronger community engagement to achieve universal health coverage and sustainable health outcomes.

Answers to Pilot Questions

Part 1

- Preventive, promotive, curative, and rehabilitative services.
- Health education and nutrition (examples of key components).
- Essential drugs are important because they meet the priority health needs of the population and ensure access to affordable treatment.
- Malnutrition.
- Immunisation campaigns reduce the burden of diseases such as polio and measles.

Part 2

- The NPHCDA coordinates PHC implementation, provides policy direction, technical support, and funding mechanisms.
- State governments adapt national PHC policies, provide resources, and supervise PHC centres.
- Health workers.
- Community health workers are important because they act as a bridge between the health system and the population.

Part 3

- Components describe *what* services are delivered, while elements describe *how* the system is structured to deliver them.
- Education concerning prevailing health problems and promotion of proper nutrition (examples).
- Essential drugs.
- Immunisation campaigns coordinated by the NPHCDA to reduce diseases such as polio and measles.
- WHO-defined elements are important because they ensure PHC is comprehensive and responsive to community needs.

Part 4

- The PHC organogram illustrates the flow of authority and responsibilities from federal to community levels.
- Community health workers.
- State governments supervise and monitor PHC programmes to ensure alignment with national goals.
- Decentralisation, which allows services to be tailored to local needs.
- Funding.

Series 3 Essential Interventions in PHC – ORT, Immunisation, Cold Chain, and Drug Supply

Part 1 Oral Rehydration Therapy (ORT)

- 1.1 Definition and importance of ORT
- 1.2 Composition and preparation of ORS
- 1.3 Application of ORT in diarrhoeal disease management

Part 2 Immunisation

- 2.1 Definition and purpose of immunisation
- 2.2 Types of vaccines used in Nigeria
- 2.3 National immunisation schedule and coverage strategies

Part 3 Cold Chain System

- 3.1 Definition and importance of the cold chain
- 3.2 Components of the cold chain (storage, transport, monitoring)
- 3.3 Challenges and solutions in maintaining the cold chain in Nigeria

Part 4 Drug Supply in PHC

- 4.1 Definition of essential drugs
- 4.2 Drug supply systems in Nigeria (including revolving drug fund)
- 4.3 Challenges and strategies for effective drug supply

Introduction

In the last Series, we examined the components, structures, and elements of Primary Health Care in Nigeria, which showed how PHC is organised and delivered across different levels. Building on that foundation, this Series turns to the practical interventions that make PHC effective in saving lives and improving health outcomes. These interventions are especially relevant in Nigeria, where diarrhoeal diseases, vaccine-preventable illnesses, and access to essential medicines remain pressing challenges.

The aim of this Series is to equip you with the knowledge and skills to describe, explain, and evaluate key PHC interventions, including Oral Rehydration Therapy (ORT), immunisation, cold chain management, and drug supply systems, so that you can appreciate their role in addressing national health priorities.

We shall commence this Series by exploring **Oral Rehydration Therapy (ORT)**, focusing on its definition, composition, and application in managing diarrhoeal diseases. Next, we will move on to **immunisation**, considering the types of vaccines used in Nigeria and the national immunisation schedule. Following that, we will study the **cold chain system**, examining its components, importance, and challenges in maintaining vaccine potency. Finally, we will wrap up with **drug supply in PHC**, analysing the role of essential drugs, the systems used to distribute them, and strategies for overcoming challenges in supply and access.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- define Oral Rehydration Therapy (ORT) and explain its importance in managing diarrhoeal diseases,
- demonstrate how Oral Rehydration Solution (ORS) is composed and prepared for use in PHC,
- explain the purpose of immunisation in PHC delivery,
- identify the types of vaccines used in Nigeria,
- outline the national immunisation schedule and describe strategies for achieving coverage,
- define the cold chain system and analyse its role in maintaining vaccine potency,
- describe the components of the cold chain, including storage, transport, and monitoring,
- evaluate challenges in cold chain management and propose practical solutions relevant to Nigeria,
- define essential drugs and explain their role in PHC delivery,
- analyse drug supply systems in Nigeria, including the revolving drug fund, and assess their effectiveness

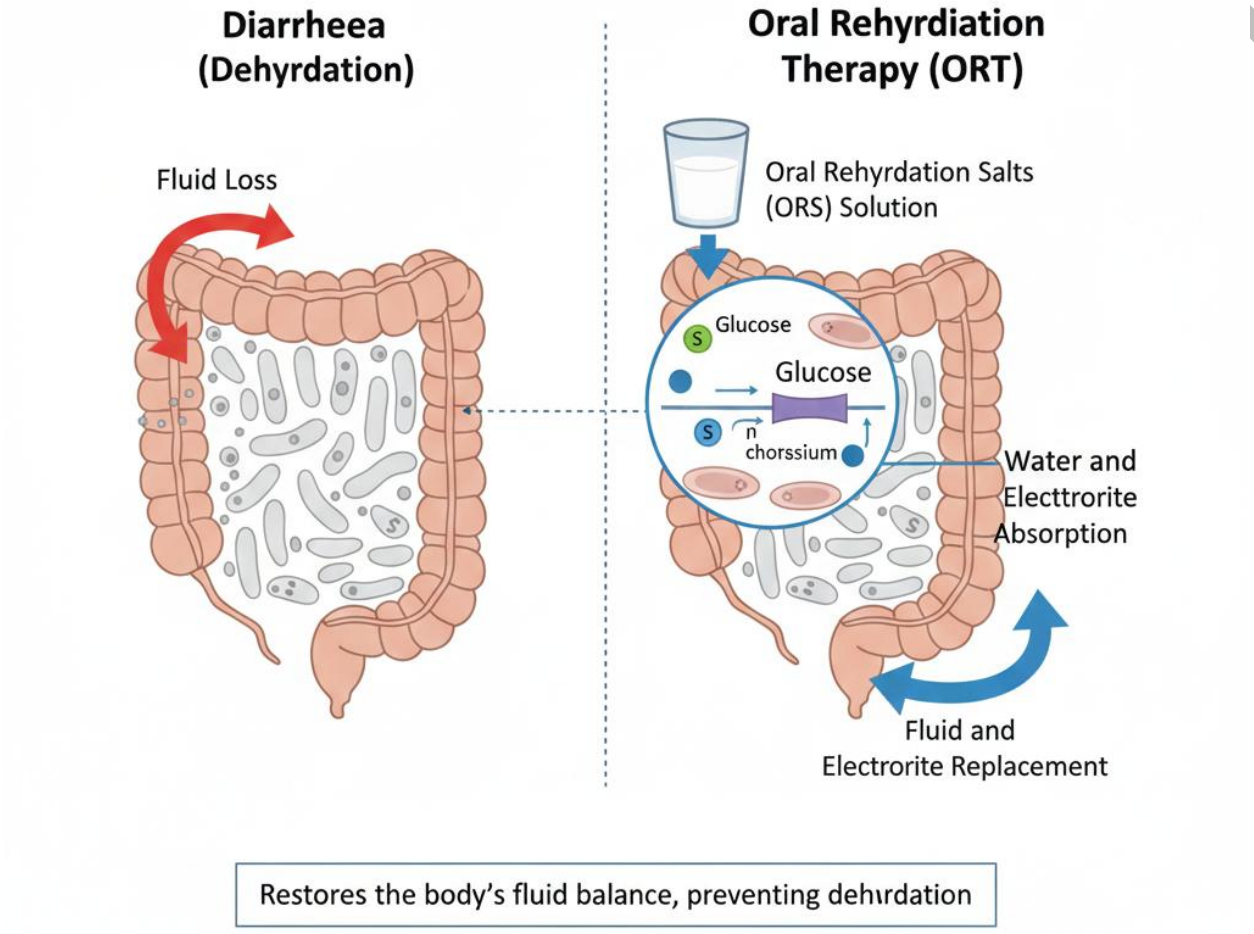
Part 1 Oral Rehydration Therapy (ORT)

1.1 Definition and importance of ORT

Oral Rehydration Therapy (ORT) is a simple, cost-effective medical intervention used to treat dehydration caused by diarrhoeal diseases. It involves the administration of a specially prepared solution of salts and glucose, known as Oral Rehydration Solution (ORS), which helps replace lost fluids and electrolytes. ORT is considered one of the most significant public health interventions of the 20th century because it has saved millions of lives, particularly among children under five years of age.

Fill in the blank: Oral Rehydration Therapy is used to treat dehydration caused by _____ diseases.

Figure 3.1: Mechanism of Oral Rehyrdration Therapy



3.2 Composition and preparation of ORS

Oral Rehydration Solution (ORS) is a mixture of clean water, glucose, and electrolytes such as sodium and potassium. The glucose facilitates the absorption of sodium and water in the intestines, thereby rehydrating the body. ORS can be prepared using commercially available sachets or through home-made recipes recommended by health authorities. Proper preparation is critical to ensure effectiveness and safety.

Fill in the blank: The glucose in ORS facilitates the absorption of _____ and water in the intestines.

Component	Concentration per Litre (mmol/L)	Function in Rehydration
Glucose (Anhydrous)	75	**Facilitates Sodium Absorption:** The glucose cotransport system in the small intestine is essential for drawing both water and sodium into the bloodstream. It provides energy for the body.
Sodium Chloride (NaCl)	75	**Restores Extracellular Volume:** Replaces the sodium lost in diarrheal stools. Sodium is the primary ion responsible for maintaining fluid volume outside of cells.
Potassium Chloride (KCl)	20	**Replaces Potassium Loss:** Diarrhea causes significant potassium depletion, which is crucial for muscle (including the heart) and nerve function. Replacement prevents hypokalemia.
Trisodium Citrate Dihydrate	10	**Corrects Acidosis:** The citrate anion is metabolized to bicarbonate in the liver, which helps correct the metabolic acidosis that often occurs due to severe fluid loss in diarrhea.

1.3 Application of ORT in diarrhoeal disease management

ORT is widely used in the management of diarrhoeal diseases, which are among the leading causes of child mortality in Nigeria. By preventing dehydration, ORT reduces the risk of severe complications and death. Health workers are trained to administer ORS promptly and educate caregivers on its use at home. Community-level awareness campaigns have also been effective in promoting ORT as a first-line treatment.

Fill in the blank: ORT reduces the risk of severe complications and _____ in children suffering from diarrhoeal diseases.

Pilot questions 1

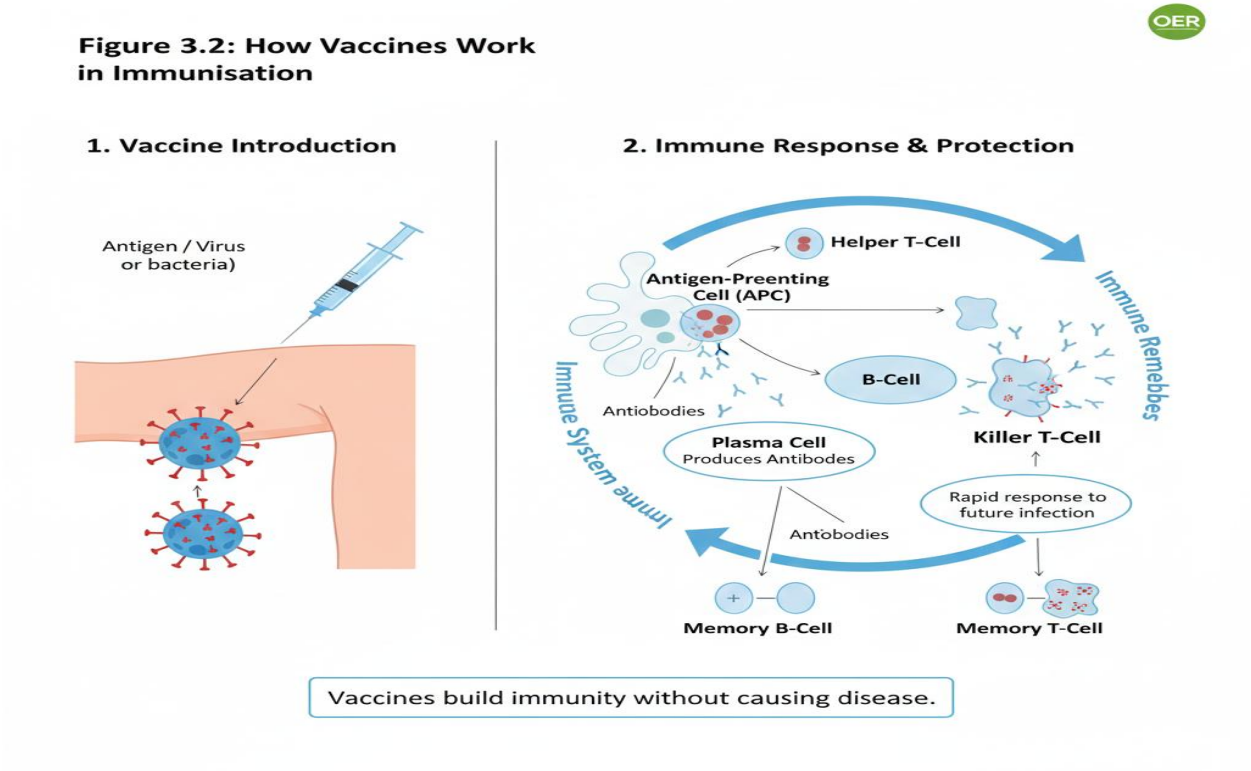
1. Define Oral Rehydration Therapy.
2. What is the importance of ORT in public health?
3. Fill in the blank: ORS is a mixture of clean water, glucose, and _____.
4. State one function of glucose in ORS.
5. Why is ORT considered a first-line treatment for diarrhoeal diseases?

Part 2 Immunisation

2.1 Definition and purpose of immunisation

Immunisation is the process of protecting individuals against infectious diseases by administering vaccines. A vaccine is a biological preparation that stimulates the body's immune system to recognise and fight specific pathogens. Immunisation is one of the most effective public health interventions, preventing illness, disability, and death from diseases such as measles, polio, and tuberculosis.

Fill in the blank: Immunisation protects individuals against infectious diseases by administering _____.



2.2 Types of vaccines used in Nigeria

Nigeria uses several types of vaccines in its immunisation programme. These include **live attenuated vaccines** (weakened forms of pathogens, e.g. measles vaccine), **inactivated vaccines** (killed pathogens, e.g. polio vaccine), and **toxoid vaccines** (inactivated toxins, e.g. tetanus vaccine). Each type is designed to provide immunity safely and effectively.

Fill in the blank: The tetanus vaccine is an example of a _____ vaccine.

Vaccine Type	Description	Examples Used in Nigeria
Live Attenuated	Uses a weakened form of the germ that causes a disease. Creates a strong, long-lasting immune response.	**BCG** (Tuberculosis), **OPV** (Oral Polio Vaccine), **Measles**, **Yellow Fever**, **Rotavirus**
Inactivated (Killed)	Uses the killed version of the germ. Usually requires multiple doses or boosters.	**IPV** (Inactivated Polio Vaccine), **Fractional IPV**, **Hepatitis A**
Toxoid	Uses a toxin (harmful product) made by the germ. It creates immunity to the parts of the germ that cause a disease rather than the germ itself.	**Tetanus Toxoid** (TT), **Diphtheria** (often as part of the Pentavalent vaccine)
Subunit, Recombinant, & Conjugate	Uses specific pieces of the germ (like its protein, sugar, or casing). This creates a very strong response to key parts of the germ.	**Hepatitis B**, **PCV** (Pneumococcal Conjugate Vaccine), **Hib** (Haemophilus influenzae type b), **HPV**, **Meningitis (Men-A)**
Viral Vector	Uses a modified version of a different virus as a "vector" to deliver protection.	**Ebola vaccine**, **COVID-19** (AstraZeneca/Johnson & Johnson)

2.3 National immunisation schedule and coverage strategies

Nigeria follows a **national immunisation schedule** that specifies the age and timing for administering vaccines to children. For example, BCG is given at birth, while measles vaccine is administered at nine months. Coverage strategies include routine immunisation at health facilities, outreach campaigns, and supplementary immunisation activities. These strategies aim to achieve high coverage and protect communities from outbreaks.

Fill in the blank: In Nigeria, the measles vaccine is administered at _____ months of age.

Age	Vaccines Administered
At Birth	BCG, OPV0, Hepatitis B (Birth dose)
6 Weeks	Pentavalent 1, OPV1, PCV 1, Rotavirus 1
10 Weeks	Pentavalent 2, OPV2, PCV 2, Rotavirus 2
14 Weeks	Pentavalent 3, OPV3, PCV 3, IPV (Injected Polio)
5 Months	**Malaria Vaccine (Dose 1)** — *New 2024/2025 rollout*
6 Months	Malaria Vaccine (Dose 2), Vitamin A (1st Dose)
7 Months	Malaria Vaccine (Dose 3)
9 Months	Measles 1, Yellow Fever, Meningitis (Men-A)
12 Months	Vitamin A (2nd Dose)
15 Months	Measles 2, Malaria Vaccine (Booster/Dose 4)
9–14 Years	**HPV Vaccine** (Single dose for girls)

Pilot questions 2

1. Define immunisation.
2. Fill in the blank: Immunisation protects individuals against infectious diseases by administering _____.
3. State one type of vaccine used in Nigeria and give an example.
4. At what age is the measles vaccine administered in Nigeria?
5. What are two strategies used to improve immunisation coverage in Nigeria?

Part 3 Cold Chain System

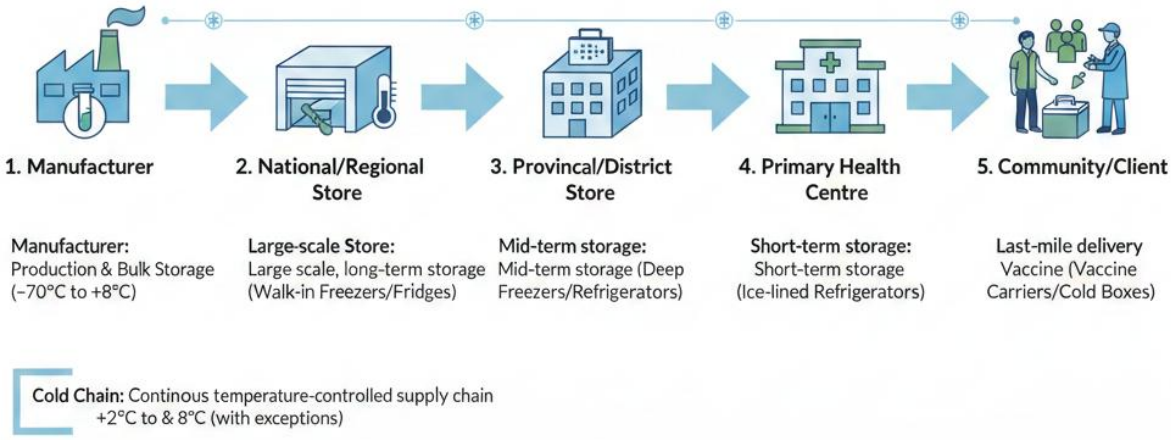
3.1 Definition and importance of the cold chain

The **cold chain system** refers to the continuous process of storing, transporting, and handling vaccines at recommended low temperatures from the point of manufacture until they are administered. This system is essential because vaccines are sensitive biological products that can lose their potency if exposed to heat or freezing. Maintaining the cold chain ensures that

immunisation programmes are effective and that communities receive vaccines that are safe and reliable.

Fill in the blank: The cold chain system ensures that vaccines retain their _____ until they are administered.

Figure 3.3: Flow of Vaccines Through the Cold Chain System



3.2 Components of the cold chain (storage, transport, monitoring)

The cold chain system has three main components. **Storage** involves keeping vaccines in refrigerators or cold rooms at health facilities. **Transport** refers to moving vaccines safely using cold boxes, vaccine carriers, or refrigerated vehicles. **Monitoring** ensures that temperatures are consistently maintained using devices such as thermometers and data loggers. Each component must function properly to prevent vaccine wastage and maintain public trust in immunisation programmes.

Fill in the blank: Monitoring in the cold chain system ensures that _____ are consistently maintained during vaccine storage and transport.

Component	Function	Equipment Examples
Storage	Maintaining vaccines at the correct temperature for extended periods at different administrative levels.	**Walk-in Cold Rooms (WICRs)**, Walk-in Freezer Rooms (WIFRs), Solar Direct Drive (SDD) Refrigerators, Ice-lined Refrigerators (ILRs), and Chest Freezers.
Transport	Moving vaccines between levels of the supply chain while maintaining a controlled environment.	**Refrigerated Vans/Trucks**, Cold Boxes (large and small), and Vaccine Carriers (used for the "last mile" to villages).
Monitoring	Continuously checking and recording temperatures to ensure no "heat excursions" or freezing has occurred.	**Stem Thermometers**, Fridge-tags, 30-day Temperature Recorders (30DTR), Freeze Indicators (e.g., Freeze-tag®), and Vaccine Vial Monitors (VVMs).

3.3 Challenges and solutions in maintaining the cold chain in Nigeria

Nigeria faces several challenges in maintaining the cold chain system. These include unreliable electricity supply, inadequate equipment, poor maintenance, and limited trained personnel. Solutions involve investing in solar-powered refrigerators, strengthening training for health workers, and improving monitoring systems. International partnerships and government initiatives have also supported the expansion of cold chain infrastructure to ensure vaccines remain potent across diverse regions.

Fill in the blank: One major challenge in maintaining the cold chain system in Nigeria is unreliable _____ supply.

Key Challenges	Strategic Solutions
Unreliable Electricity: Constant power outages in many regions can lead to vaccine spoilage due to rising temperatures in electric fridges.	**Solar Direct Drive (SDD) Refrigerators:** Widespread deployment of solar-powered units that work without batteries or national grid reliance.
Poor Road Infrastructure: Difficult terrain and "hard-to-reach" areas make the transport of vaccines slow and physically demanding.	**Optimized Logistics:** Use of rugged cold boxes, motorcycles for last-mile delivery, and in some pilot areas, **medical delivery drones**.
Equipment Maintenance: Specialized cooling equipment often breaks down and lacks nearby technicians or spare parts.	**Training & Local Maintenance:** Training local "Cold Chain Officers" and technicians at the LGA level for routine maintenance and rapid repair.
Human Error: Improper packing of vaccine carriers (e.g., placing vials directly on ice) can accidentally freeze and destroy vaccines.	**Continuous Training:** Regular workshops on "Conditioning" ice packs and the use of the **Shake Test** to identify freeze-damaged vaccines.
Monitoring Gaps: Difficulty in tracking temperature history during transit between state stores and rural clinics.	**Remote Temperature Monitoring (RTM):** Using digital loggers (like Fridge-tags) and SMS-based alerts that notify supervisors if a fridge gets too warm.

Pilot questions 3

1. Define the cold chain system.
2. Fill in the blank: The cold chain system ensures that vaccines retain their _____ until they are administered.
3. State the three main components of the cold chain system.
4. Give one example of equipment used in vaccine transport.
5. Fill in the blank: One major challenge in maintaining the cold chain system in Nigeria is unreliable _____ supply.

Part 4 Drug Supply In PHC

4.1 Definition of essential drugs

Essential drugs are medicines that meet the priority health needs of the population. They are selected based on public health relevance, evidence of efficacy and safety, and cost-effectiveness. In Primary Health Care (PHC), essential drugs ensure that communities have access to affordable and reliable treatment for common diseases. Their availability is a cornerstone of effective PHC delivery.

Fill in the blank: Essential drugs are selected based on public health relevance, evidence of efficacy and safety, and _____.

Figure 3.4: Criteria for Selecting Essential Drugs

4.2 Drug supply systems in Nigeria (including revolving drug fund)

Nigeria employs several systems to ensure the supply of essential drugs. One key system is the **Revolving Drug Fund (RDF)**, which involves selling drugs at affordable prices and using the revenue to replenish stock. This system helps maintain continuous availability of medicines in PHC centres. Other supply mechanisms include government procurement, donor support, and partnerships with international organisations.

Fill in the blank: The Revolving Drug Fund involves selling drugs at affordable prices and using the revenue to _____ stock.

Table 3.4: Drug Supply Systems in Nigeria

Government Procurement	Description	Key Features/Source
Federal & State Ministries of Health allocate budget for bulk purchase essential medicines	Central Medical Stores; Tenders & facilties	Central Medical Stores; Primarrly for public health facilities
Donor Support & Grants International partners fund specific disease programs (e.pl, HIV, Malaria TB)	Global Fund Gavi USAID	USAID Direct shipments or in-county ant Tied to specific health initiatives
Revolling Drug Fund (RDF) A self-sustaning system where drug sales revened to used of reprnelih stock	Community-Based User-fees covenue to used of specith initiuck	User-fees cover costs Improves availabille in rural areas Prevents stockouts

Important Notes:
The RDF is crucial for rural health clinics. Challenges include corruption and ensuring quality control.

4.3 Challenges and strategies for effective drug supply

Drug supply in Nigeria faces challenges such as inadequate funding, poor logistics, counterfeit medicines, and weak monitoring systems. Strategies to address these include strengthening procurement processes, improving distribution networks, enforcing regulations against counterfeit drugs, and enhancing community participation in monitoring. Effective drug supply ensures that PHC centres can provide timely treatment and build trust within communities.

Fill in the blank: One major challenge of drug supply in Nigeria is the circulation of _____ medicines.

Key Challenges	Strategic Solutions
Counterfeit & Substandard Drugs: The prevalence of "fake drugs" in the open market poses a severe risk to public health and erodes trust.	**Regulatory Enforcement (NAFDAC):** Strengthening the "War against Fake Drugs," using Mobile Authentication Service (MAS) text-message codes on packaging.
Fragmented Logistics: Inconsistent supply chains and poor road networks lead to frequent "stock-outs" in rural Primary Health Centres (PHCs).	**Supply Chain Integration:** Moving toward a "Push-Pull" hybrid system where data-driven forecasting prevents overstocking or empty shelves.
Funding Gaps: Fluctuating currency exchange rates and limited health budgets make the procurement of imported medicines expensive.	**Revolving Drug Funds (RDF):** Ensuring that revenue from sold drugs is "locked" and reinvested solely into purchasing new stock to maintain a continuous cycle.
Inadequate Storage: Lack of climate-controlled warehousing leads to the degradation of heat-sensitive medications before they reach patients.	**Pharma-grade Infrastructure:** Investing in "Mega-Wholesales" and regional hubs equipped with 24/7 power and temperature monitoring.
Weak Inventory Management: Manual record-keeping often leads to drugs expiring on the shelf before they can be used.	**Digital Logistics Management (LMIS):** Transitioning to electronic platforms to track drug batches, expiry dates, and consumption rates in real-time.

Pilot questions 4

1. Define essential drugs.
2. Fill in the blank: Essential drugs are selected based on public health relevance, evidence of efficacy and safety, and _____.
3. What is the Revolving Drug Fund and how does it work?
4. State one challenge of drug supply in Nigeria.
5. Fill in the blank: One major challenge of drug supply in Nigeria is the circulation of _____ medicines.

Series Summary

This Series has focused on the essential interventions that make Primary Health Care effective in Nigeria. Its purpose was to highlight practical measures that directly save lives and improve community health, particularly in addressing diarrhoeal diseases, vaccine-preventable illnesses, and access to essential medicines.

We began by examining **Oral Rehydration Therapy (ORT)**, looking at its definition, composition, and application in managing diarrhoeal diseases. Then we explored **immunisation**, considering the types of vaccines used in Nigeria and the national immunisation schedule. Following that, we studied the **cold chain system**, analysing its components, importance, and the challenges of maintaining vaccine potency. Finally, we discussed **drug supply in PHC**, defining essential drugs, reviewing supply systems such as the revolving drug fund, and identifying strategies for overcoming challenges. By completing this Series, you should now be able to define and demonstrate ORT, explain immunisation and identify vaccine, analyse the cold chain system and evaluate its challenges, and assess drug supply systems in Nigeria.

Concept Check Questions

Objective questions

1. Oral Rehydration Therapy is used to treat dehydration caused by _____ diseases.
2. The glucose in ORS facilitates the absorption of _____ and water in the intestines.
3. Immunisation protects individuals against infectious diseases by administering _____.
4. The tetanus vaccine is an example of a _____ vaccine.
5. In Nigeria, the measles vaccine is administered at _____ months of age.
6. The cold chain system ensures that vaccines retain their _____ until they are administered.
7. Monitoring in the cold chain system ensures that _____ are consistently maintained.
8. One major challenge in maintaining the cold chain system in Nigeria is unreliable _____ supply.
9. Essential drugs are selected based on public health relevance, evidence of efficacy and safety, and _____.
10. The Revolving Drug Fund involves selling drugs at affordable prices and using the revenue to _____ stock.

Short-answer questions

11. Define Oral Rehydration Therapy.
12. State one function of glucose in ORS.
13. Explain the purpose of immunisation in PHC delivery.
14. Identify one type of vaccine used in Nigeria and give an example.
15. Outline the national immunisation schedule for measles.
16. Define the cold chain system.

17. Describe one component of the cold chain system.
18. Suggest one solution to the challenge of unreliable electricity in cold chain management.
19. Define essential drugs.
20. Explain how the Revolving Drug Fund works in Nigeria.

Long-answer questions
21. Analyse the importance of ORT in reducing child mortality in Nigeria.
22. Evaluate the effectiveness of Nigeria's immunisation programme, highlighting achievements and challenges.
23. Assess the role of the cold chain system in maintaining vaccine potency and propose strategies for improvement.
24. Critically examine drug supply systems in Nigeria, including the Revolving Drug Fund, and discuss their strengths and weaknesses.

Answers to Concept Check Questions

Objective questions

1. Diarrhoeal.
2. Sodium.
3. Vaccines.
4. Toxoid.
5. Nine.
6. Potency.
7. Temperatures.
8. Electricity.
9. Cost-effectiveness.
10. Replenish.

Short-answer questions
11. ORT is the administration of a solution of salts and glucose to treat dehydration caused by diarrhoea.
12. Glucose facilitates the absorption of sodium and water in the intestines.
13. Immunisation prevents illness, disability, and death by stimulating the immune system to fight pathogens.
14. Live attenuated vaccine, e.g. measles vaccine.
15. Measles vaccine is administered at nine months of age.
16. The cold chain system is the continuous process of storing, transporting, and handling vaccines at recommended low temperatures.
17. Storage, using refrigerators or cold rooms at health facilities.
18. Use of solar-powered refrigerators.
19. Essential drugs are medicines that meet the priority health needs of the population.
20. The Revolving Drug Fund sells drugs at affordable prices and uses the revenue to replenish stock.

Long-answer questions

21. *Basic response*: ORT is vital in reducing child mortality by preventing dehydration, a major cause of death in diarrhoeal diseases. It is simple, affordable, and effective.
    Value-added response: Outstanding learners may add that ORT aligns with global child survival strategies, contributes to achieving Sustainable Development Goal 3, and reduces hospital admissions, thereby easing the burden on health systems.
22. *Basic response*: Nigeria's immunisation programme has achieved successes such as polio eradication and improved measles coverage, but challenges remain including vaccine hesitancy and logistical difficulties.
    Value-added response: Outstanding learners may add that integrating immunisation with maternal and child health services, strengthening surveillance, and leveraging digital tools can further improve coverage and sustainability.
23. *Basic response*: The cold chain system maintains vaccine potency through proper storage, transport, and monitoring. Challenges include unreliable electricity and inadequate equipment.
    Value-added response: Outstanding learners may add that innovative solutions such as solar refrigeration, mobile monitoring apps, and regional cold chain hubs can enhance resilience and efficiency.
24. *Basic response*: Drug supply systems in Nigeria include government procurement, donor support, and the Revolving Drug Fund. Strengths include affordability and sustainability, while weaknesses include counterfeit drugs and poor logistics.
    Value-added response: Outstanding learners may add that strengthening regulatory frameworks, adopting digital inventory systems, and fostering community oversight can improve transparency and ensure equitable access to essential medicines.

Answers to Pilot Questions

Part 1 Oral Rehydration Therapy (ORT)

- ORT is the administration of a solution of salts and glucose to treat dehydration caused by diarrhoeal diseases.
- It is important because it prevents severe complications and death, especially among children under five.
- ORS is a mixture of clean water, glucose, and electrolytes such as sodium and potassium.
- Glucose facilitates the absorption of sodium and water in the intestines.
- ORT is considered a first-line treatment for diarrhoeal diseases because it is simple, affordable, and effective.

Part 2 Immunisation

- Immunisation is the process of protecting individuals against infectious diseases by administering vaccines.

- Vaccines stimulate the immune system to recognise and fight pathogens.
- Types of vaccines used in Nigeria include live attenuated (e.g. measles), inactivated (e.g. polio), and toxoid (e.g. tetanus).
- The measles vaccine is administered at nine months of age.
- Strategies for improving coverage include routine immunisation, outreach campaigns, and supplementary immunisation activities.

Part 3 Cold Chain System

- The cold chain system is the continuous process of storing, transporting, and handling vaccines at recommended low temperatures.
- It ensures vaccines retain their potency until they are administered.
- The three main components are storage, transport, and monitoring.
- An example of transport equipment is a vaccine carrier.
- One major challenge in Nigeria is unreliable electricity supply, which can be addressed with solar-powered refrigerators.

Part 4 Drug Supply in PHC

- Essential drugs are medicines that meet the priority health needs of the population.
- They are selected based on public health relevance, evidence of efficacy and safety, and cost-effectiveness.
- The Revolving Drug Fund involves selling drugs at affordable prices and using the revenue to replenish stock.
- One challenge of drug supply in Nigeria is the circulation of counterfeit medicines.
- Strategies include strengthening procurement, improving distribution, enforcing regulations, and enhancing community monitoring.

Series 4 Disease Surveillance, Endemic Disease Control, and Reproductive Health Services

Part 1 Disease Surveillance

- 1.1 Definition and importance of disease surveillance
- 1.2 Methods of surveillance (active, passive, sentinel, community-based)
- 1.3 Application of surveillance in PHC and outbreak response

Part 2 Endemic Disease Control

- 2.1 Definition of endemic diseases in Nigeria
- 2.2 Strategies for control (prevention, treatment, vector control, health education)
- 2.3 Case examples: malaria, tuberculosis, and neglected tropical diseases

Part 3 Reproductive Health Services

- 3.1 Definition and scope of reproductive health in PHC
- 3.2 Maternal and child health services (antenatal, delivery, postnatal care)
- 3.3 Family planning and adolescent reproductive health
- 3.4 Challenges and opportunities in reproductive health delivery in Nigeria

Introduction

In the last Series, we examined essential interventions in Primary Health Care such as Oral Rehydration Therapy, immunisation, cold chain management, and drug supply. These interventions highlighted the practical measures that strengthen PHC delivery and directly save lives. Building on that foundation, this Series turns to broader health system functions that protect communities and sustain long-term health improvements. Disease surveillance, endemic disease control, and reproductive health services are critical to ensuring that PHC remains responsive to both immediate threats and ongoing health needs in Nigeria.

The aim of this Series is to equip you with the knowledge and skills to describe, explain, and evaluate the role of surveillance, endemic disease control, and reproductive health services in PHC, and to appreciate how these functions contribute to reducing disease burden and improving population health.

We shall commence this Series by exploring **disease surveillance**, focusing on its definition, importance, and methods, as well as its application in outbreak response. Next, we will move on to **endemic disease control**, considering the definition of endemic diseases in Nigeria, strategies for prevention and treatment, and case examples such as malaria and tuberculosis. Finally, we will conclude with **reproductive health services**, examining maternal and child health, family

planning, adolescent reproductive health, and the challenges and opportunities in delivering these services within PHC.

Series Learning Outcomes

Upon completing this Series, you should be able to:

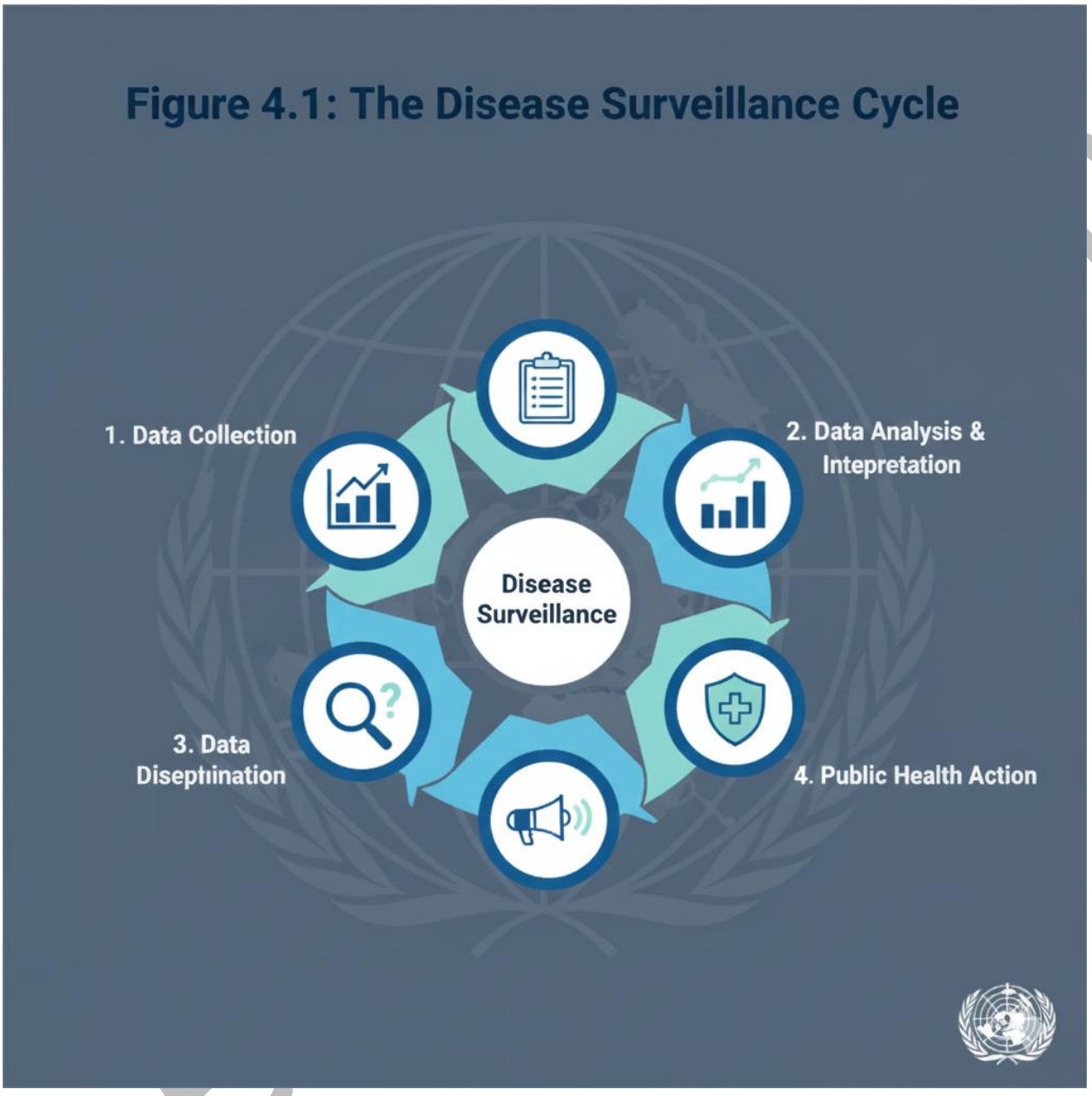
- define disease surveillance and explain its importance in Primary Health Care,
- describe methods of disease surveillance, including active, passive, sentinel, and community-based approaches,
- analyse the application of surveillance in PHC and outbreak response,
- define endemic diseases within the Nigerian context,
- explain strategies for endemic disease control such as prevention, treatment, vector control, and health education,
- evaluate case examples of endemic disease control in Nigeria, including malaria, tuberculosis, and neglected tropical diseases,
- define reproductive health services in PHC and outline their scope,
- describe maternal and child health services, including antenatal, delivery, and postnatal care,
- explain family planning and adolescent reproductive health services within PHC,
- evaluate challenges and opportunities in delivering reproductive health services in Nigeria.

Part 1 Disease Surveillance

1.1 Definition and importance of disease surveillance

Disease surveillance is the systematic collection, analysis, interpretation, and dissemination of health data to monitor the occurrence and spread of diseases. It enables health authorities to detect outbreaks early, track trends, and plan effective interventions. In Primary Health Care (PHC), surveillance is vital for protecting communities, guiding resource allocation, and ensuring timely responses to public health threats.

Fill in the blank: Disease surveillance involves the systematic collection, analysis, interpretation, and _____ of health data.



1.2 Methods of surveillance (active, passive, sentinel, community-based)

There are several methods of disease surveillance used in PHC. **Active surveillance** involves health workers actively seeking information about diseases through visits and investigations. **Passive surveillance** relies on routine reporting from health facilities. **Sentinel surveillance** uses selected sites or groups to monitor specific diseases. **Community-based surveillance** engages community members to report unusual health events. Each method has strengths and limitations, and they are often combined to provide a comprehensive picture of disease patterns.

Fill in the blank: Passive surveillance relies on routine _____ from health facilities.

Table 4.1: Methods of Disease Surveillance

Surveillance Type	Definition	Kata Analysis & Interpeation
Active Surveillance	Proactive, systematic search for cases by health perchase. Used during outbreaks	Outbreak investigations; Door-door case findng, Contact tracing for Eboa, Polio/Fo type
Passive Surveillance	Routine reporting from cases health facilities to the next adrımost common level.	Weekly reportings from clinics "Cirlact tracing for (hospitarce level. The common
Sentienl Surveillance	Intensive data collection from few, sentiities to few, selected sites (hospitallss) monitor trends	Monitoring influenza strains in sclinics (inspectie hospitalls Drug-resitant TB survelllance in reference labs
Community-Based Surveillance (CBS)	Engaging local communities detecto report events. Crucias in rural tal areas	Volunteer-led alert systems Reporting unsuoous/deaths to local to local health workers

Important Note:

Nigeria uses combicatı ıtiation of these methods, with IDSR being national framework that both passive both active components.

OPEN HEALTHY RESOURCY

1.3 Application of surveillance in PHC and outbreak response

Surveillance data is applied in PHC to identify priority health problems, guide interventions, and evaluate programme effectiveness. During outbreaks, surveillance enables rapid detection, confirmation, and response to limit spread. For example, Nigeria's polio eradication programme relied heavily on surveillance to detect cases and mobilise vaccination campaigns. Effective surveillance requires trained personnel, reliable reporting systems, and community participation.

Fill in the blank: Surveillance data is applied in PHC to identify priority health problems, guide interventions, and _____ programme effectiveness.

Pilot questions 1

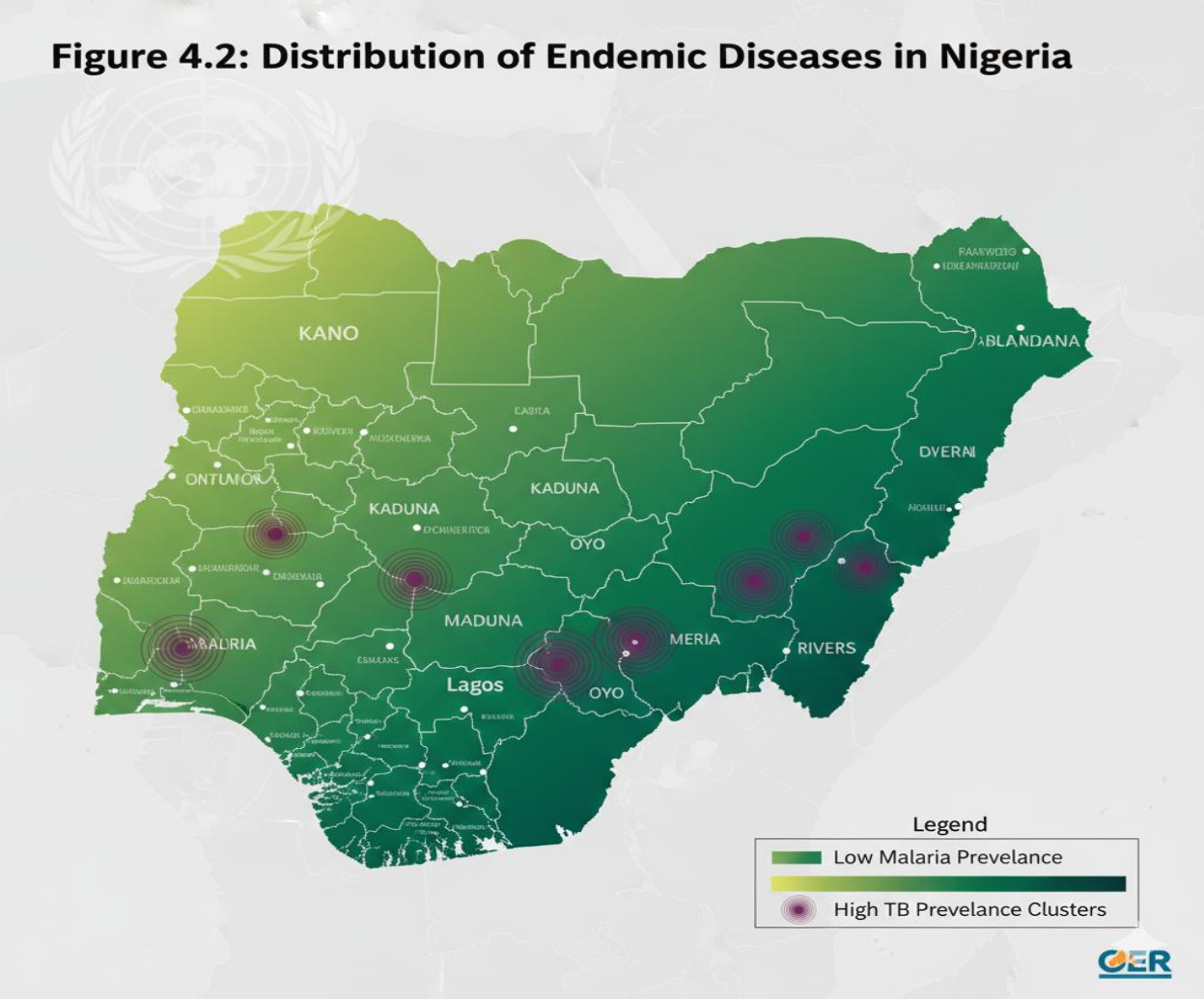
1. Define disease surveillance.
2. Fill in the blank: Disease surveillance involves the systematic collection, analysis, interpretation, and _____ of health data.
3. State one difference between active and passive surveillance.
4. Fill in the blank: Passive surveillance relies on routine _____ from health facilities.
5. Explain how surveillance data is applied in outbreak response.

Part 2 Endemic Disease Control

2.1 Definition of endemic diseases in Nigeria

Endemic diseases are illnesses that are consistently present within a specific geographic area or population. In Nigeria, examples include malaria, tuberculosis, and certain neglected tropical diseases. These conditions pose ongoing health challenges because they persist over time and require sustained control measures. Recognising endemic diseases is important for planning effective Primary Health Care interventions.

Fill in the blank: Endemic diseases are illnesses that are consistently present within a specific _____ or population.



2.2 Strategies for control (prevention, treatment, vector control, health education)

Controlling endemic diseases requires a combination of strategies. **Prevention** includes vaccination, sanitation, and use of insecticide-treated nets. **Treatment** involves timely diagnosis and provision of effective medicines. **Vector control** targets organisms that transmit diseases, such as mosquitoes. **Health education** empowers communities with knowledge to adopt healthy behaviours and reduce risks. These strategies must be integrated into PHC to achieve sustainable results.

Fill in the blank: Vector control targets organisms that _____ diseases, such as mosquitoes.

Table 4.2: Strategies for Endemic Disease Control

Strategy	Description	Key Intervetions	Example Diseases
Prevention	Measures to reduce disease populations.	Vaccination campaigns, chemproplhyis, isrproven, safe water.	Measles, Meningitis,
Providing timely and effective mediation to infected individuals.	Providing timely and effectiion to infected individuals.	Access essential anti-malarial drugs, anti-malarial antibotics, DOTS for TB.	Measles, Meningitis, Polio
Vector Control	Cnsemg then cclaud ousatiees	Malaria, Tuberrosias (TB), HIV/AIDS	Malaria, Tuberusias (TB), Typtoid
Controlling the carriers that transmit diseases	Instoling the carriers (vectors) that that transmit ciseasee	Insecicite-treated bed nets (ITNS) indor residual spraving, IRS), environmental cleanp.	Malaria, Dengue Fever, Yellow Fever
Health Education communileg with knowlege change	Public awareness campaigns with knowledge for safe sexual practices, antentinal care education	Public awareness campaigns hygiene promotion, safe antentnal ducation	All endemic diseases, especially HIV/AIDS, Malaria, Diarheal diseases

Important Note: An integratroach combining these strategies is most effective for to-lormg control.

2.3 Case examples: malaria, tuberculosis, and neglected tropical diseases

Malaria remains one of the leading causes of morbidity and mortality in Nigeria, controlled through insecticide-treated nets, indoor spraying, and antimalarial drugs. Tuberculosis control relies on early detection, treatment with anti-TB drugs, and monitoring adherence. Neglected tropical diseases such as onchocerciasis and lymphatic filariasis are addressed through mass drug administration and community-based interventions. These examples highlight the importance of tailored approaches for different diseases.

Fill in the blank: Tuberculosis control relies on early detection, treatment with anti-TB drugs, and monitoring _____.

Pilot questions 2

1. Define endemic diseases.
2. Fill in the blank: Endemic diseases are illnesses that are consistently present within a specific _____ or population.
3. List two strategies for controlling endemic diseases.
4. Fill in the blank: Vector control targets organisms that _____ diseases, such as mosquitoes.
5. Give one example of a neglected tropical disease in Nigeria.

Part 3 Reproductive Health Services

3.1 Definition and scope of reproductive health in PHC

Reproductive health services refer to the care and interventions that ensure people have a safe and satisfying reproductive life. In Primary Health Care (PHC), these services cover maternal health, child health, family planning, and adolescent reproductive health. The scope includes promoting safe pregnancies, preventing sexually transmitted infections, and supporting informed choices about reproduction.

Fill in the blank: Reproductive health services in PHC cover maternal health, child health, family planning, and _____ reproductive health.

3.2 Maternal and child health services (antenatal, delivery, postnatal care)

Maternal and child health services are central to reproductive health. **Antenatal care** involves monitoring the health of the mother and foetus during pregnancy. **Delivery care** ensures safe

childbirth through skilled attendance. **Postnatal care** supports recovery of the mother and health of the newborn. These services reduce maternal and infant mortality and are a priority in PHC.

Fill in the blank: _____ care supports recovery of the mother and health of the newborn after childbirth.

3.3 Family planning and adolescent reproductive health

Family planning services help individuals and couples decide freely and responsibly the number and spacing of their children. Methods include contraceptives, counselling, and education. **Adolescent reproductive health** focuses on providing young people with information and services to prevent early pregnancies, sexually transmitted infections, and unsafe practices. These services empower communities and promote healthier futures.

Fill in the blank: Family planning services help individuals and couples decide freely and responsibly the number and _____ of their children.

Method Category	Examples	Brief Description
Barrier Methods	Male and female condoms, Diaphragms	These physically block sperm from entering the uterus. Condoms are unique as they also provide dual protection against pregnancy and Sexually Transmitted Infections (STIs), including HIV.
Hormonal Methods	Oral contraceptive pills, Injectables (e.g., Depo-Provera), Implants	These use synthetic hormones to prevent the ovaries from releasing eggs (ovulation) and thicken cervical mucus to make it difficult for sperm to reach an egg.
Intrauterine Devices (IUD)	Copper T (IUCD)	A small, flexible T-shaped device inserted into the uterus by a trained health worker. It prevents fertilization by interfering with sperm movement and survival.
Natural Methods	Calendar (Rhythm) method, Lactational Amenorrhea Method (LAM), Withdrawal	These involve tracking the woman's fertile window or using physiological states (like exclusive breastfeeding) to avoid pregnancy without the use of drugs or devices.

3.4 Challenges and opportunities in reproductive health delivery in Nigeria

Reproductive health services in Nigeria face challenges such as inadequate funding, cultural barriers, limited access in rural areas, and shortage of trained personnel. Opportunities include integrating reproductive health into PHC, expanding community outreach, and leveraging technology for education and service delivery. Addressing these challenges can improve maternal and child health outcomes and strengthen PHC systems.

Fill in the blank: One major challenge in reproductive health delivery in Nigeria is inadequate _____.

Key Challenges	Strategic Opportunities
Cultural & Religious Barriers: Deep-seated beliefs and the need for spousal consent can limit a woman's autonomy in seeking family planning or facility-based delivery.	**Community & Faith Leader Engagement:** Partnering with traditional and religious leaders to advocate for safe motherhood and child spacing within their communities.
Inadequate Funding: High out-of-pocket costs for emergency obstetric care often prevent the poorest families from accessing life-saving services.	**Basic Health Care Provision Fund (BHCPF):** The federal government's initiative to provide a guaranteed fund for PHCs to offer free essential services to vulnerable groups.
Human Resource Shortages: A lack of skilled birth attendants (midwives and doctors) in rural areas leads to a reliance on unskilled traditional birth attendants.	**Task-Shifting & Task-Sharing:** Training Community Health Extension Workers (CHEWs) to safely perform specific tasks traditionally reserved for higher-level clinicians.
Geographical Access: Many women live far from the nearest PHC, making transport difficult during labor, especially at night.	**Mobile Outreach & Drones:** Using mobile clinics to reach remote settlements and piloting drone technology for the rapid delivery of blood and life-saving medicines.
Commodity Stock-outs: Frequent shortages of contraceptives and essential maternal medicines (like oxytocin) disrupt service continuity.	**Digital Logistics Management:** Implementing electronic tracking systems to monitor stock levels in real-time and trigger automatic replenishment.

Pilot questions 3

1. Define reproductive health services in PHC.
2. Fill in the blank: Reproductive health services in PHC cover maternal health, child health, family planning, and _____ reproductive health.
3. State the three main components of maternal and child health services.
4. Fill in the blank: Family planning services help individuals and couples decide freely and responsibly the number and _____ of their children.
5. Mention one challenge and one opportunity in reproductive health delivery in Nigeria.

Series Summary

This Series has highlighted the importance of strengthening Primary Health Care through disease surveillance, endemic disease control, and reproductive health services. Its purpose was to show how these functions protect communities from ongoing health threats, support outbreak response, and promote healthier lives across different population groups.

We began with disease surveillance, examining its definition, importance, and methods, and how it guides PHC interventions and outbreak management. We then moved on to endemic disease control, where strategies such as prevention, treatment, vector control, and health education were discussed, supported by case examples like malaria and tuberculosis. Finally, we explored reproductive health services, covering maternal and child health, family planning, adolescent health, and the challenges and opportunities in delivering these services in Nigeria. By completing this Series, you should now be able to define, describe, and analyse surveillance, explain and evaluate strategies for endemic disease control, and outline, describe, and assess reproductive health services in PHC.

Concept Check Question

Objective questions

1. Disease surveillance involves the systematic collection, analysis, interpretation, and _____ of health data.
2. Passive surveillance relies on routine _____ from health facilities.
3. Surveillance data is applied in PHC to identify priority health problems, guide interventions, and _____ programme effectiveness.
4. Endemic diseases are illnesses that are consistently present within a specific _____ or population.
5. Vector control targets organisms that _____ diseases, such as mosquitoes.
6. Tuberculosis control relies on early detection, treatment with anti-TB drugs, and monitoring _____.
7. Reproductive health services in PHC cover maternal health, child health, family planning, and _____ reproductive health.
8. _____ care supports recovery of the mother and health of the newborn after childbirth.
9. Family planning services help individuals and couples decide freely and responsibly the number and _____ of their children.
10. One major challenge in reproductive health delivery in Nigeria is inadequate _____.

Short-answer questions

11. Define disease surveillance.
12. State one difference between active and passive surveillance.
13. Explain how surveillance data is applied in outbreak response.

14. Define endemic diseases in the Nigerian context.
15. List two strategies for controlling endemic diseases.
16. Give one example of a neglected tropical disease in Nigeria.
17. Define reproductive health services in PHC.
18. State the three main components of maternal and child health services.
19. Mention one family planning method used in PHC.
20. Suggest one opportunity for improving reproductive health delivery in Nigeria.

Long-answer questions

21. Analyse the importance of disease surveillance in PHC and outbreak response.
22. Evaluate strategies for endemic disease control in Nigeria, using malaria and tuberculosis as examples.
23. Assess the scope of reproductive health services in PHC and discuss their role in reducing maternal and child mortality.
24. Critically examine family planning and adolescent reproductive health services in Nigeria, highlighting challenges and opportunities.

Answers to Concept Check Questions

Objective questions

1. Dissemination
2. Reports
3. Evaluate
4. Geographic area
5. Transmit
6. Adherence
7. Adolescent
8. Postnatal
9. Spacing
10. Funding

Short-answer questions

11. Disease surveillance is the systematic collection, analysis, interpretation, and dissemination of health data to monitor diseases.
12. Active surveillance involves health workers actively seeking information, while passive surveillance relies on routine facility reports.
13. Surveillance data guides rapid detection, confirmation, and response to outbreaks.
14. Endemic diseases are illnesses consistently present in Nigeria, such as malaria and tuberculosis.
15. Strategies include prevention (e.g. vaccination), treatment, vector control, and health education.
16. Onchocerciasis (river blindness).
17. Reproductive health services are interventions that ensure safe and satisfying reproductive life, covering maternal, child, family planning, and adolescent health.
18. Antenatal care, delivery care, and postnatal care.

19. Contraceptives such as oral pills or intrauterine devices.
20. Integration of reproductive health into PHC and use of technology for outreach.

Long-answer questions

21. *Basic response*: Disease surveillance is important in PHC because it enables early detection of outbreaks, guides interventions, and monitors health trends.
    Value-added response: Outstanding learners may add that surveillance supports global health security, informs policy decisions, and strengthens Nigeria's capacity to respond to emerging diseases such as Ebola or COVID-19.
22. *Basic response*: Strategies for endemic disease control include prevention, treatment, vector control, and health education. Malaria is controlled through insecticide-treated nets and antimalarial drugs, while tuberculosis is managed through early detection and adherence to treatment.
    Value-added response: Outstanding learners may add that integrating community-based interventions, strengthening laboratory capacity, and addressing social determinants such as poverty and housing are critical for sustainable control.
23. *Basic response*: Reproductive health services in PHC include maternal and child health care, family planning, and adolescent health. These services reduce maternal and child mortality by ensuring safe pregnancies, skilled delivery, and postnatal support.
    Value-added response: Outstanding learners may add that reproductive health services also contribute to gender equality, empower women, and align with Sustainable Development Goals on health and well-being.
24. *Basic response*: Family planning and adolescent reproductive health services help prevent early pregnancies, reduce sexually transmitted infections, and support informed choices. Challenges include cultural barriers and inadequate funding, while opportunities lie in community outreach and integration into PHC.
    Value-added response: Outstanding learners may add that leveraging digital health platforms, engaging youth-led organisations, and strengthening policy frameworks can enhance service delivery and uptake.

Answers to Pilot Questions

Part 1 Disease Surveillance

- Disease surveillance is the systematic collection, analysis, interpretation, and dissemination of health data to monitor diseases.
- It involves methods such as active surveillance (health workers actively seeking information), passive surveillance (routine reports from health facilities), sentinel surveillance (selected sites monitoring specific diseases), and community-based surveillance (community members reporting unusual events).
- Surveillance data is applied in PHC to identify health problems, guide interventions, and evaluate programme effectiveness, especially during outbreaks.

Part 2 Endemic Disease Control

- Endemic diseases are illnesses consistently present within a specific geographic area or population.
- Strategies for control include prevention (e.g. vaccination, sanitation), treatment (timely diagnosis and medicines), vector control (targeting organisms that transmit diseases), and health education (empowering communities with knowledge).
- Examples include malaria (controlled through insecticide-treated nets and antimalarial drugs), tuberculosis (managed through early detection and adherence to treatment), and neglected tropical diseases such as onchocerciasis and lymphatic filariasis (addressed through mass drug administration).

Part 3 Reproductive Health Services

- Reproductive health services in PHC cover maternal health, child health, family planning, and adolescent reproductive health.
- Maternal and child health services include antenatal care, delivery care, and postnatal care, which reduce maternal and infant mortality.
- Family planning services help individuals and couples decide freely and responsibly the number and spacing of their children, using methods such as contraceptives and counselling.
- Adolescent reproductive health services provide young people with information and support to prevent early pregnancies and sexually transmitted infections.
- Challenges in Nigeria include inadequate funding, cultural barriers, and limited access in rural areas, while opportunities include integrating reproductive health into PHC, expanding outreach, and leveraging technology.

Series 5 Resources, Participatory Techniques, SWOT Analysis, and the Basic Healthcare Provision Fund

Part 1 Resources in Primary Health Care

- 1.1 Definition and types of resources (human, financial, material)
- 1.2 Importance of resource management in PHC
- 1.3 Challenges in resource allocation and utilisation

Part 2 Participatory Techniques in PHC

- 2.1 Definition and importance of community participation
- 2.2 Techniques for participation (focus groups, community meetings, participatory rural appraisal)
- 2.3 Benefits and limitations of participatory approaches

Part 3 SWOT Analysis in PHC

- 3.1 Definition of SWOT analysis
- 3.2 Application of SWOT in PHC planning and evaluation
- 3.3 Case example of SWOT analysis in a PHC programme

Part 4 The Basic Healthcare Provision Fund (BHCPF)

- 4.1 Definition and objectives of BHCPF
- 4.2 Funding sources and allocation mechanisms
- 4.3 Role of BHCPF in strengthening PHC in Nigeria
- 4.4 Challenges and opportunities in BHCPF implementation

Introduction

In the last Series, we explored disease surveillance, endemic disease control, and reproductive health services, all of which highlighted how Primary Health Care responds to immediate and long-term health needs. To build on that foundation, this Series turns to the resources and planning tools that make PHC delivery sustainable and effective. By examining how resources are managed, how communities participate, and how analytical tools such as SWOT are applied, alongside the role of the Basic Healthcare Provision Fund, you will gain insight into the systems that strengthen PHC in Nigeria.

The aim of this Series is to equip you with the knowledge and skills to describe, apply, and evaluate resource management, participatory techniques, SWOT analysis, and the Basic

Healthcare Provision Fund, so that you can appreciate their contribution to effective PHC planning and implementation.

We shall commence this Series by exploring resources in PHC, focusing on their types, importance, and challenges in allocation. Next, we will move on to participatory techniques, considering how communities are engaged through methods such as focus groups and participatory rural appraisal. Following that, we will examine SWOT analysis, looking at its definition, application, and case examples in PHC programmes. Finally, we will conclude with the Basic Healthcare Provision Fund, discussing its objectives, funding sources, role in strengthening PHC, and the challenges and opportunities in its implementation.

Series Learning Outcomes

Upon completing this Series, you should be able to:

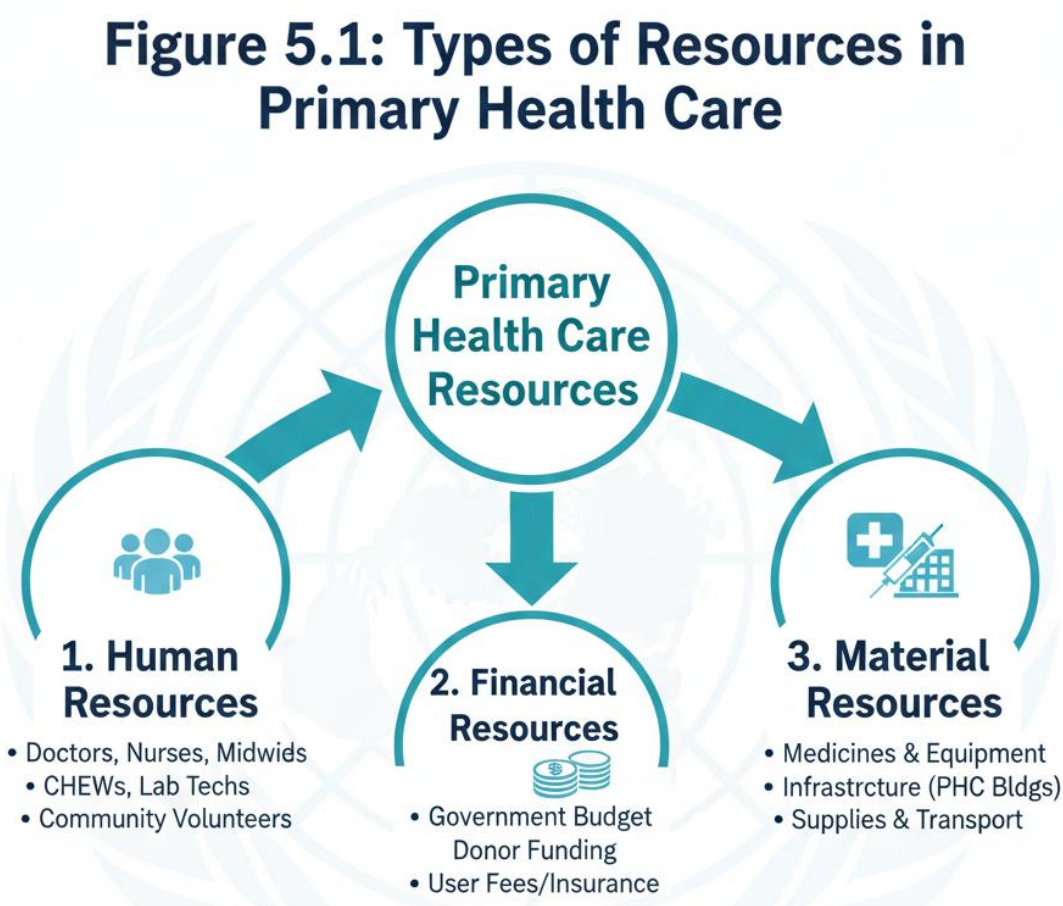
- define the different types of resources in Primary Health Care, including human, financial, and material,
- explain the importance of effective resource management in PHC delivery,
- analyse common challenges in resource allocation and utilisation within PHC systems,
- define participatory techniques and explain their role in community engagement for PHC,
- describe specific participatory methods such as focus groups, community meetings, and participatory rural appraisal,
- evaluate the benefits and limitations of participatory approaches in PHC programmes,
- define SWOT analysis and explain its relevance to PHC planning and evaluation,
- apply SWOT analysis to assess the strengths, weaknesses, opportunities, and threats of a PHC programme,
- analyse a case example of SWOT analysis in PHC to demonstrate practical application,
- define the Basic Healthcare Provision Fund (BHCPF) and state its objectives,
- describe the funding sources and allocation mechanisms of the BHCPF,
- evaluate the role of the BHCPF in strengthening PHC in Nigeria, and
- analyse the challenges and opportunities in implementing the BHCPF.

Part 1 Resources In Primary Health Care

1.1 Definition and types of resources

Resources in Primary Health Care (PHC) refer to the inputs required to deliver effective health services. These include **human resources** (health workers such as doctors, nurses, and community health officers), **financial resources** (funds allocated for PHC activities), and **material resources** (infrastructure, equipment, and supplies). Each type of resource plays a vital role in ensuring that PHC functions efficiently and meets the needs of the population.

Fill in the blank: Resources in PHC include human, financial, and _____ resources.



1.2 Importance of resource management in PHC

Resource management is the process of planning, allocating, and utilising resources effectively to achieve health goals. In PHC, proper management ensures that health workers are available, funds are used wisely, and materials are maintained. Effective resource management improves service delivery, reduces wastage, and enhances community trust in health systems.

Fill in the blank: Effective resource management in PHC improves service delivery, reduces _____, and enhances community trust.

Benefit Area	Description
Improved Service Delivery	Proper management ensures that health workers are available, equipment is functional, and medicines are in stock, leading to timely and high-quality care for patients.
Reduced Wastage	Efficient tracking of supplies prevents drugs from expiring on the shelf and ensures that financial budgets are spent on high-priority health needs rather than administrative overhead.
Enhanced Community Trust	When a facility is well-managed and consistently has the resources to treat patients, the community is more likely to utilize its services and participate in health programs.
Sustainability	Strategic financial planning and the maintenance of material assets (like solar panels or ambulances) ensure that the PHC can continue operating long-term without constant "emergency" funding.
Staff Motivation	A well-resourced environment reduces burnout. When health workers have the "tools for the trade"—from gloves to diagnostic kits—their job satisfaction and performance increase.

1.3 Challenges in resource allocation and utilisation

Despite its importance, resource allocation in PHC faces challenges. These include inadequate funding, shortage of trained personnel, poor infrastructure, and inequitable distribution of resources between urban and rural areas. Addressing these challenges requires strong governance, community involvement, and innovative approaches such as public-private partnerships.

Fill in the blank: One major challenge in resource allocation in PHC is inequitable distribution between urban and _____ areas.

Table 5.1: Common Challenges in PHC Resource Allocation & Utiliation

Challenge	Description	Impact on Health Services
Inadɯgate Funding	Insufficient budget allocation from government and and donors	Leads to drug stock-outs, poor equipment maintnance, and low staff morale
Shortage of Skilled Personnel	Lack to doctors, nurses, and CHEWS, in rural areas	Results in long waiting times, burnt, reduced quality of care
	Lack in doctors, nurses, CHEWs, especially in rural areas	Compraises hygiene, limits of provision (e.pcr deters patients
Poor Infrastructure	Dialipated buildings, urlelisable power, and lack of clean water	Compraises hygiene, limits service (e.. cold chain), and dters patients
Equitatble Distribution in urban areas, neglating rual PHCS	Resources concetrated in urban negelcting rural PHCS PHCS	Widens hesalth disparties and reduces access for vuluntable populations

Important Note:
Addressing these challenges requires integrated planning, increased investmet, and transparent governance to strengthen the PHC system in Nigeria.

Pilot questions 1

1. Define resources in Primary Health Care.
2. Fill in the blank: Resources in PHC include human, financial, and _____ resources.
3. Explain the importance of resource management in PHC.
4. Fill in the blank: Effective resource management in PHC improves service delivery, reduces _____, and enhances community trust.
5. List two challenges in resource allocation and utilisation in PHC.
6. Fill in the blank: One major challenge in resource allocation in PHC is inequitable distribution between urban and _____ areas.

Part 2 Participatory Techniques In Primary Health Care

2.1 Definition and importance of community participation

Community participation refers to the active involvement of individuals and groups in planning, implementing, and evaluating health programmes. In PHC, it ensures that services are tailored to local needs, fosters ownership, and strengthens sustainability. Participation also builds trust between health providers and communities, making interventions more effective.

Fill in the blank: Community participation in PHC fosters ownership, strengthens sustainability, and builds _____ between providers and communities.

Figure 5.2: Cycle of Community Participation in PHC

2.2 Techniques for participation (focus groups, community meetings, participatory rural appraisal)

Several techniques are used to facilitate participation. **Focus groups** gather small groups to discuss health issues and provide insights. **Community meetings** involve larger gatherings where decisions are made collectively. **Participatory rural appraisal (PRA)** uses visual tools such as maps and charts to help communities analyse their own health situations. These techniques empower communities to contribute meaningfully to PHC.

Fill in the blank: Participatory rural appraisal uses visual tools such as maps and _____ to help communities analyse health situations.

Technique	Definition	Typical Examples / Activities
Focus Group Discussions (FGD)	A structured discussion with a small, homogenous group of people (usually 6–12) to gain deep insights into specific health issues or perceptions.	Discussing barriers to maternal health services with a group of young mothers or exploring hygiene practices with local food vendors.
Community Meetings (Town Halls)	Large, open forums where the entire community is invited to share information, identify problems, and propose collective solutions.	A village meeting to discuss the location of a new water point or to introduce a new immunization campaign to the community.
Participatory Rural Appraisal (PRA)	A set of participatory tools and methods used to enable local people to analyze their own realities, plan, and take action.	**Social Mapping:** Villagers drawing a map of their community to identify households with high disease burdens. **Trend Lines:** Charting the history of disease outbreaks over the last decade.

2.3 Benefits and limitations of participatory approaches

Participatory approaches offer several benefits. They enhance relevance of health programmes, increase community ownership, and improve accountability. However, limitations include potential conflicts, time-consuming processes, and difficulties in sustaining participation. Effective facilitation and clear communication are essential to maximise benefits while minimising challenges.

Fill in the blank: One limitation of participatory approaches in PHC is that they can be _____-consuming.

Benefits	Limitations
Increased Ownership: When community members help plan a project, they are more likely to support and maintain it long-term.	**Time-Consuming:** Building consensus and organizing meetings takes significantly longer than top-down decision-making.
Improved Relevance: Local knowledge ensures that health services address the community's actual needs and cultural context.	**Potential for Conflict:** Different groups within a community may have clashing interests or power struggles over resources.
Enhanced Accountability: Transparent participation makes health workers and local leaders more answerable to the people they serve.	**Sustainability Issues:** Initial enthusiasm can fade if participants do not see immediate "tangible" results or financial incentives.
Empowerment: It builds the capacity of community members to take charge of their own health and advocate for better services.	**Resource Intensive:** Requires skilled facilitators and can be costly to organize frequent community-wide engagements.

Pilot questions 2

1. Define community participation in PHC.
2. Fill in the blank: Community participation in PHC fosters ownership, strengthens sustainability, and builds _____ between providers and communities.
3. List two techniques for community participation in PHC.
4. Fill in the blank: Participatory rural appraisal uses visual tools such as maps and _____ to help communities analyse health situations.
5. Mention one benefit and one limitation of participatory approaches in PHC.
6. Fill in the blank: One limitation of participatory approaches in PHC is that they can be _____-consuming.

Part 3 SWOT Analysis In Primary Health Care

3.1 Definition of SWOT analysis

SWOT analysis is a strategic planning tool used to identify the **Strengths**, **Weaknesses**, **Opportunities**, and **Threats** of a programme or organisation. In PHC, it helps managers and communities assess internal and external factors that influence health service delivery. By systematically examining these four dimensions, decision-makers can design more effective interventions.

Fill in the blank: SWOT analysis is a strategic planning tool used to identify strengths, weaknesses, opportunities, and _____.

Figure 5.3: The Four Components of SWOT Analysis

3.2 Application of SWOT in PHC planning and evaluation

SWOT analysis is applied in PHC to guide planning and evaluation. **Strengths** may include trained health workers or strong community support. **Weaknesses** could be inadequate funding or poor infrastructure. **Opportunities** might involve new government policies or donor support, while **Threats** could include political instability or disease outbreaks. By identifying these factors, PHC managers can prioritise actions and allocate resources effectively.

Fill in the blank: In PHC, strengths may include trained health workers, while weaknesses could be inadequate _____.

Strengths (Internal)	Weaknesses (Internal)
* Strong community trust and engagement.	* Frequent stock-outs of essential medicines.
* Dedicated and well-trained nursing staff.	* Dilapidated physical infrastructure (e.g., leaking roofs).
* Central location within the community.	* Inadequate record-keeping or data management.
* Functional Cold Chain equipment for vaccines.	* Lack of reliable water and electricity supply.
Opportunities (External)	**Threats (External)**
* New government funding through the BHCPF.	* Economic downturn reducing household income.
* Partnerships with local NGOs for health outreach.	* Outbreak of a new infectious disease.
* Availability of mobile technology for data collection.	* Insecurity or civil unrest in the region.
* Introduction of health insurance schemes.	* Brain drain of skilled workers to urban hospitals.

3.3 Case example of SWOT analysis in a PHC programme

Consider a PHC centre in a rural Nigerian community. A SWOT analysis may reveal strengths such as dedicated staff and strong community trust, weaknesses like limited equipment, opportunities such as government funding, and threats including unreliable electricity supply. This analysis helps the centre plan improvements, advocate for resources, and prepare for risks.

Fill in the blank: One threat identified in a rural PHC SWOT analysis could be unreliable _____ supply.

Box 5.3: Case Example of SWOT Analysis in a Rural PHC Centre

Internal Factors	External Factors
Strengths: • Dedicated, long-serving staff • Strong community trust • Availabiity of solar power • Functional borewell for water	**Opportunities:** • New government funding for infrastructure • Partnership with an international NGO for training • Launch of community health insurance scheme • Mobile health (mMealth) initiatives
Weakenses: • Frequent drug stock-outs • Dilalipated maternity ward • Lack of skilled birth attendants (midiwes) • Poor data management system	**Threats** • Insecurity / banditry in the region • Economic recession reducing patient income • Outmigrration of young staff to cities • Local traditional healers discourcing modern medicine

Pilot questions 3

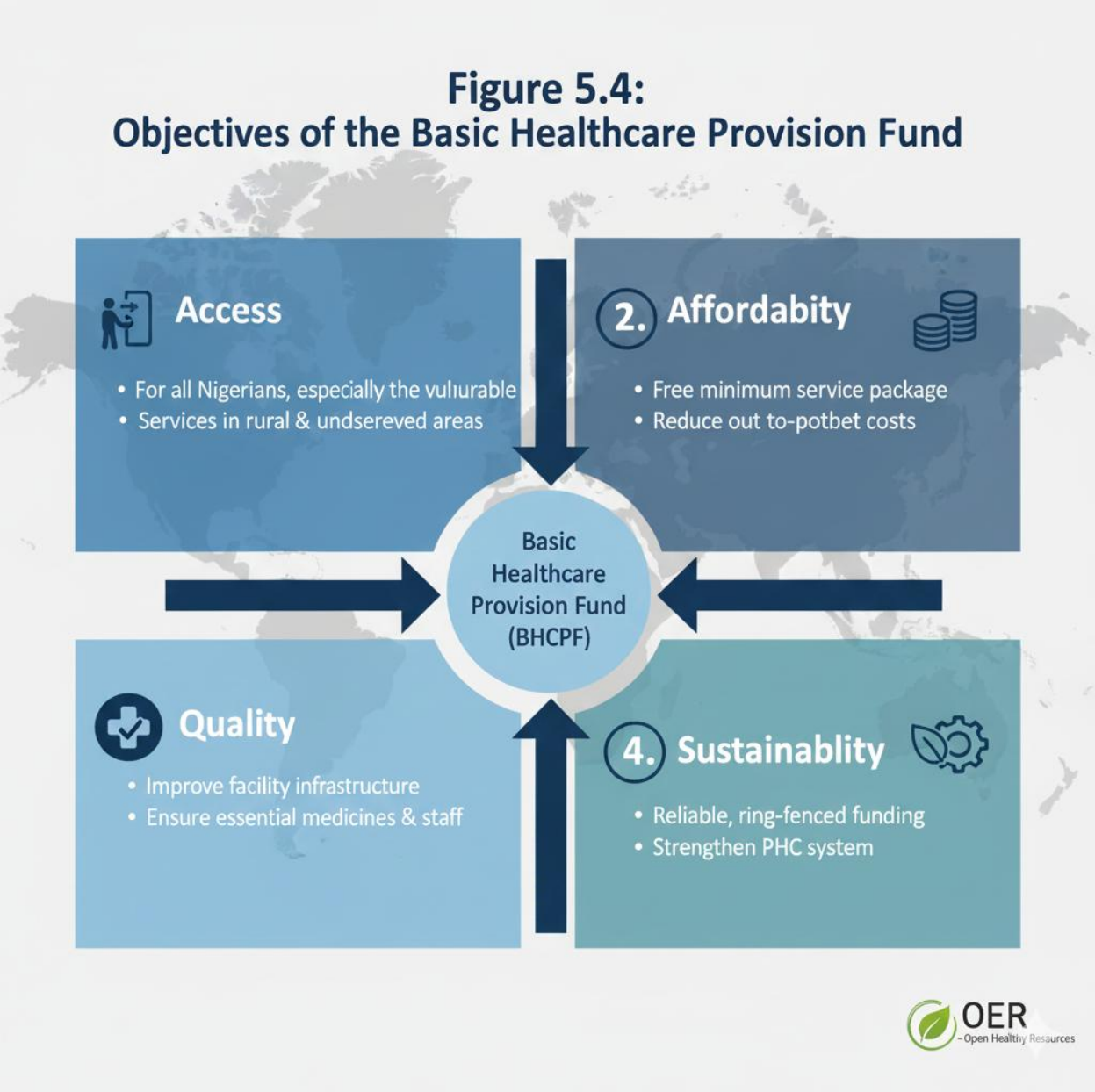
1. Define SWOT analysis in PHC.
2. Fill in the blank: SWOT analysis is a strategic planning tool used to identify strengths, weaknesses, opportunities, and _____.
3. Give one example of a strength and one example of a weakness in PHC.
4. Fill in the blank: In PHC, strengths may include trained health workers, while weaknesses could be inadequate _____.
5. Mention one opportunity and one threat in PHC planning.
6. Fill in the blank: One threat identified in a rural PHC SWOT analysis could be unreliable _____ supply.

Part 4 The Basic Healthcare Provision Fund (BHCPF)

4.1 Definition and objectives of BHCPF

The **Basic Healthcare Provision Fund (BHCPF)** is a financing mechanism established by the Nigerian government to strengthen Primary Health Care. Its main objectives are to increase access to essential health services, reduce financial barriers for vulnerable populations, and improve the overall quality of PHC delivery. By ensuring a steady flow of funds, the BHCPF supports the sustainability of health programmes across the country.

Fill in the blank: The BHCPF is a financing mechanism established by the Nigerian government to strengthen _____.



4.2 Funding sources and allocation mechanisms

The BHCPF is funded through a statutory allocation of at least one per cent of Nigeria's Consolidated Revenue Fund, supplemented by contributions from donors and development partners. Funds are allocated to PHC facilities, the National Health Insurance Authority, and other implementing agencies. This allocation mechanism ensures that resources reach frontline health services and benefit communities directly.

Fill in the blank: The BHCPF receives at least one per cent of Nigeria's _____ Revenue Fund.

Category	Specific Source / Agency	Allocation / Mechanism
Funding Sources	**Federal Government (CRF)**	Not less than **1% of the Consolidated Revenue Fund** (statutory transfer).
	Donor Partners	Grants from international organizations (e.g., World Bank, Gates Foundation, Global Fund).
	Other Sources	Private sector contributions and interest earned on the fund.
Primary Allocation (Gateways)	**NHIA Gateway (48.75%)**	Used for the **Basic Minimum Package of Health Services (BMPHS)** via capitation and fee-for-service to health providers.
	NPHCDA Gateway (45%)	Disbursed for facility upgrades, essential drugs, and human resources (Decentralized Facility Financing).
	NEMT Gateway (5%)	Set aside for **Emergency Medical Treatment** (e.g., ambulance services and emergency stabilization).
	NCDC Gateway (1.25%)	Allocated for **Public Health Security** and emergency outbreak responses.
Facility-Level Mechanism	**Direct Facility Financing (DFF)**	Funds are transferred directly from the NPHCDA Gateway to the **bank accounts of accredited PHC centres** to cover operational costs.

4.3 Role of BHCPF in strengthening PHC in Nigeria

The BHCPF plays a vital role in strengthening PHC by providing consistent funding for essential drugs, vaccines, and equipment, as well as supporting health worker training and facility upgrades. It helps reduce out-of-pocket spending, making healthcare more affordable for vulnerable groups. By stabilising PHC financing, the BHCPF contributes to achieving universal health coverage in Nigeria.

Fill in the blank: The BHCPF helps reduce _____ spending, making healthcare more affordable for vulnerable groups.

Plate 5.4

4.4 Challenges and opportunities in BHCPF implementation

Despite its promise, the BHCPF faces challenges such as delayed disbursement of funds, weak accountability systems, and limited awareness among communities. Opportunities include strengthening transparency, expanding community monitoring, and leveraging technology to track fund utilisation. Addressing these issues will ensure that the BHCPF achieves its objectives and contributes meaningfully to PHC improvement.

Fill in the blank: One challenge in BHCPF implementation is delayed _____ of funds.

Key Challenges	Strategic Opportunities
Delayed Disbursement: Complex administrative processes often lead to gaps between when funds are allocated and when they actually reach PHC bank accounts.	**Automation of Fund Flow:** Moving toward fully digital, real-time transfers to reduce human interference and bureaucratic bottlenecks.
Weak Accountability: Instances of fund mismanagement at the local level or poor documentation of how money was spent on facility upgrades.	**Community Oversight:** Strengthening **Ward Development Committees (WDCs)** to act as "watchdogs," ensuring funds are used for the intended supplies and repairs.
Limited Public Awareness: Many rural citizens are unaware of their rights to free services under the BHCPF, leading to low utilization.	**Mobile Technology (mHealth):** Using SMS alerts and local radio campaigns to inform communities when funds have arrived and what services are available.
Data Quality Issues: Poor record-keeping makes it difficult to verify the number of patients treated, which can delay performance-based payments.	**Electronic Medical Records (EMR):** Transitioning from paper registers to simple digital tablets for more accurate, real-time patient tracking and reporting.
Human Resource Gaps: Even with funding, some facilities lack the skilled midwives or nurses required to provide the "Basic Minimum Package" of care.	**Workforce Incentives:** Using a portion of BHCPF funds to provide performance-based bonuses to attract and retain staff in rural areas.

Pilot questions 4

1. Define the Basic Healthcare Provision Fund (BHCPF).
2. Fill in the blank: The BHCPF is a financing mechanism established by the Nigerian government to strengthen _____.
3. State the main funding source of the BHCPF.
4. Fill in the blank: The BHCPF receives at least one per cent of Nigeria's _____ Revenue Fund.
5. Explain one role of BHCPF in strengthening PHC.
6. Fill in the blank: The BHCPF helps reduce _____ spending, making healthcare more affordable for vulnerable groups.
7. Mention one challenge and one opportunity in BHCPF implementation.
8. Fill in the blank: One challenge in BHCPF implementation is delayed _____ of funds.

Series Summary

This Series has focused on the systems and tools that strengthen Primary Health Care by ensuring resources are well managed, communities are actively engaged, and planning is guided by evidence and strategy. Its purpose was to highlight how effective resource allocation, participatory approaches, analytical frameworks, and sustainable funding mechanisms contribute to the delivery of quality health services in Nigeria.

We began by examining resources in PHC, looking at their types, importance, and the challenges of allocation and utilisation. We then moved on to participatory techniques, where you explored methods such as focus groups, community meetings, and participatory rural appraisal, alongside their benefits and limitations. Following that, we studied SWOT analysis, considering its definition, application, and a case example in PHC planning. Finally, we concluded with the Basic Healthcare Provision Fund, reviewing its objectives, funding sources, role in strengthening PHC, and the challenges and opportunities in its implementation. By completing this Series, you should now be able to define, describe, apply, analyse, and evaluate these areas, equipping you with practical skills to support effective PHC delivery

Concept Check Questions

Objective questions

1. Resources in PHC include human, financial, and _____ resources.
2. Effective resource management in PHC improves service delivery, reduces _____, and enhances community trust.
3. One major challenge in resource allocation in PHC is inequitable distribution between urban and _____ areas.
4. Community participation in PHC fosters ownership, strengthens sustainability, and builds _____ between providers and communities.
5. Participatory rural appraisal uses visual tools such as maps and _____ to help communities analyse health situations.
6. One limitation of participatory approaches in PHC is that they can be _____consuming.
7. SWOT analysis is a strategic planning tool used to identify strengths, weaknesses, opportunities, and _____.
8. In PHC, strengths may include trained health workers, while weaknesses could be inadequate _____.
9. One threat identified in a rural PHC SWOT analysis could be unreliable _____ supply.
10. The BHCPF receives at least one per cent of Nigeria's _____ Revenue Fund.

Short-answer questions

11. Define resources in Primary Health Care.
12. Explain why resource management is important in PHC.
13. List two challenges in resource allocation and utilisation in PHC.

14. Define community participation in PHC.
15. Describe one participatory technique used in PHC.
16. State one benefit and one limitation of participatory approaches in PHC.
17. Define SWOT analysis in PHC.
18. Give one example each of a strength and a weakness in PHC.
19. Mention one opportunity and one threat in PHC planning.
20. Define the Basic Healthcare Provision Fund (BHCPF).
21. State one role of BHCPF in strengthening PHC.
22. Mention one challenge and one opportunity in BHCPF implementation.

Long-answer questions
23. Analyse the importance of resource management in PHC delivery.
24. Evaluate participatory techniques in PHC, highlighting their benefits and limitations.
25. Apply SWOT analysis to a PHC programme, giving examples of strengths, weaknesses, opportunities, and threats.
26. Assess the role of the BHCPF in strengthening PHC in Nigeria, including its funding sources and implementation challenges.

Answers to Concept Check Questions

Objective questions

1. Material
2. Wastage
3. Rural
4. Trust
5. Charts
6. Time
7. Threats
8. Funding
9. Electricity
10. Consolidated

Short-answer questions
11. Resources in PHC are the inputs required to deliver health services, including human, financial, and material.
12. Resource management ensures efficient use of inputs, improves service delivery, reduces wastage, and builds trust.
13. Challenges include inadequate funding, shortage of personnel, poor infrastructure, and inequitable distribution.
14. Community participation is the active involvement of individuals and groups in PHC planning, implementation, and evaluation.
15. Focus groups gather small groups to discuss health issues and provide insights.
16. Benefit: increased ownership. Limitation: time-consuming.
17. SWOT analysis is a tool for identifying strengths, weaknesses, opportunities, and threats in PHC.

18. Strength: trained health workers. Weakness: poor infrastructure.
19. Opportunity: donor support. Threat: political instability.
20. BHCPF is a financing mechanism established by the Nigerian government to strengthen PHC.
21. It provides consistent funding for essential drugs, vaccines, and equipment.
22. Challenge: delayed disbursement. Opportunity: improved transparency through community monitoring.

Long-answer questions

23. *Basic response*: Resource management is important in PHC because it ensures efficient use of human, financial, and material resources, improves service delivery, and reduces wastage.
    Value-added response: Outstanding learners may add that resource management also promotes equity, supports sustainability, and aligns PHC with national health priorities.
24. *Basic response*: Participatory techniques such as focus groups, community meetings, and PRA enhance relevance and ownership but can be time-consuming and difficult to sustain.
    Value-added response: Outstanding learners may add that participatory approaches also strengthen accountability, empower communities, and can be adapted using digital tools for wider engagement.
25. *Basic response*: A SWOT analysis of a PHC programme may show strengths like dedicated staff, weaknesses such as limited equipment, opportunities like government funding, and threats such as unreliable electricity.
    Value-added response: Outstanding learners may add that SWOT analysis can be integrated with other planning tools, used for advocacy, and linked to broader health system reforms.
26. *Basic response*: The BHCPF strengthens PHC by providing funding from Nigeria's Consolidated Revenue Fund, supporting essential supplies, and reducing out-of-pocket spending. Challenges include delayed disbursement and weak accountability.
    Value-added response: Outstanding learners may add that BHCPF offers opportunities for innovation, community monitoring, and alignment with universal health coverage goals, while also requiring stronger governance and transparency mechanisms.

Answers to Pilot Questions

Part 1 Resources in Primary Health Care

- Resources in PHC are the inputs required to deliver health services, including human, financial, and material.
- Effective resource management improves service delivery, reduces wastage, and enhances community trust.
- Challenges in resource allocation include inadequate funding, shortage of trained personnel, poor infrastructure, and inequitable distribution between urban and rural areas.

Part 2 Participatory Techniques in PHC

- Community participation is the active involvement of individuals and groups in PHC planning, implementation, and evaluation.
- Techniques include focus groups, community meetings, and participatory rural appraisal (which uses visual tools such as maps and charts).
- Benefits of participatory approaches include increased ownership, accountability, and relevance of health programmes. Limitations include potential conflicts, time-consuming processes, and difficulties in sustaining participation.

Part 3 SWOT Analysis in PHC

- SWOT analysis is a strategic planning tool used to identify strengths, weaknesses, opportunities, and threats.
- In PHC, strengths may include trained health workers, weaknesses could be inadequate funding or poor infrastructure, opportunities might involve donor support, and threats could include unreliable electricity supply or political instability.
- A case example of a rural PHC centre shows strengths such as dedicated staff, weaknesses like limited equipment, opportunities such as government funding, and threats including unreliable electricity.

Part 4 The Basic Healthcare Provision Fund (BHCPF)

- The BHCPF is a financing mechanism established by the Nigerian government to strengthen PHC.
- It receives at least one per cent of Nigeria's Consolidated Revenue Fund, supplemented by donor contributions.
- The BHCPF strengthens PHC by funding essential drugs, vaccines, equipment, and health worker training, while reducing out-of-pocket spending.
- Challenges include delayed disbursement of funds, weak accountability, and limited awareness. Opportunities include strengthening transparency, expanding community monitoring, and leveraging technology to track fund utilisation.