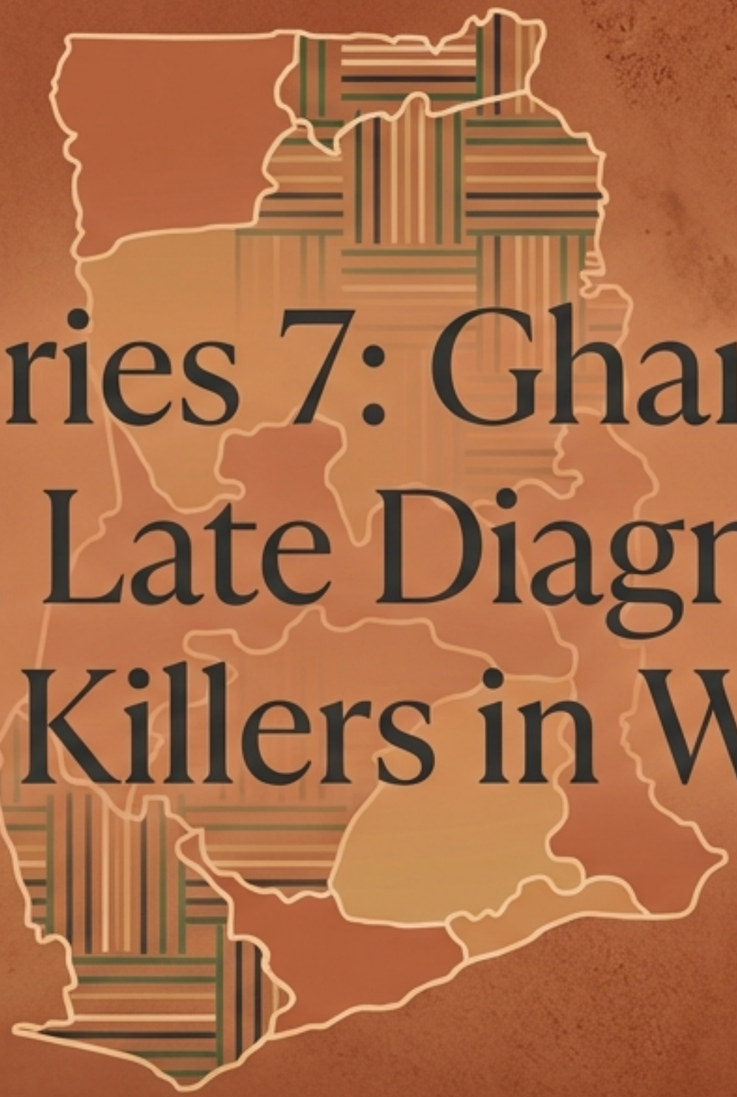
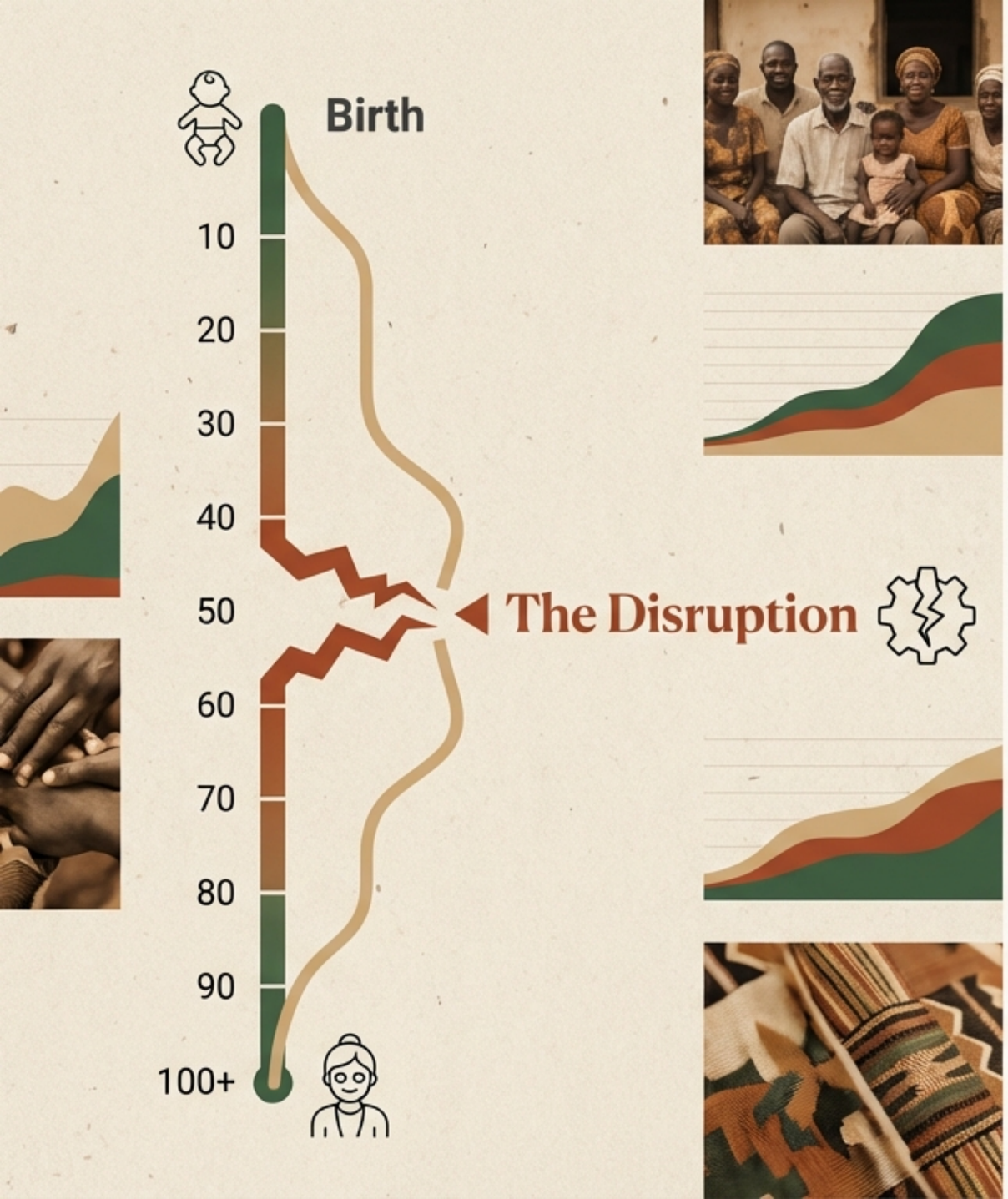


Series 7: Ghana Stroke, Late Diagnosis & The Silent Killers in West Africa

Presenter Role: AMHG Editorial Strategy & Public Health Systems Analysis



The Afro Mosaic Framework: A Lifespan Lens

The Philosophy:
We examine the Black lifespan not as isolated medical events, but as a cumulative journey from birth to 100+.

The Disruption:
In Ghana, this journey is increasingly interrupted in productive adulthood (ages 40–60) by preventable crises.

The Pivot:
We move beyond "genetic destiny" to understand how systems, policy, and access shape how long and how well we live.

The Goal:
To equip families with the systems-literacy needed to protect their elders and future generations.

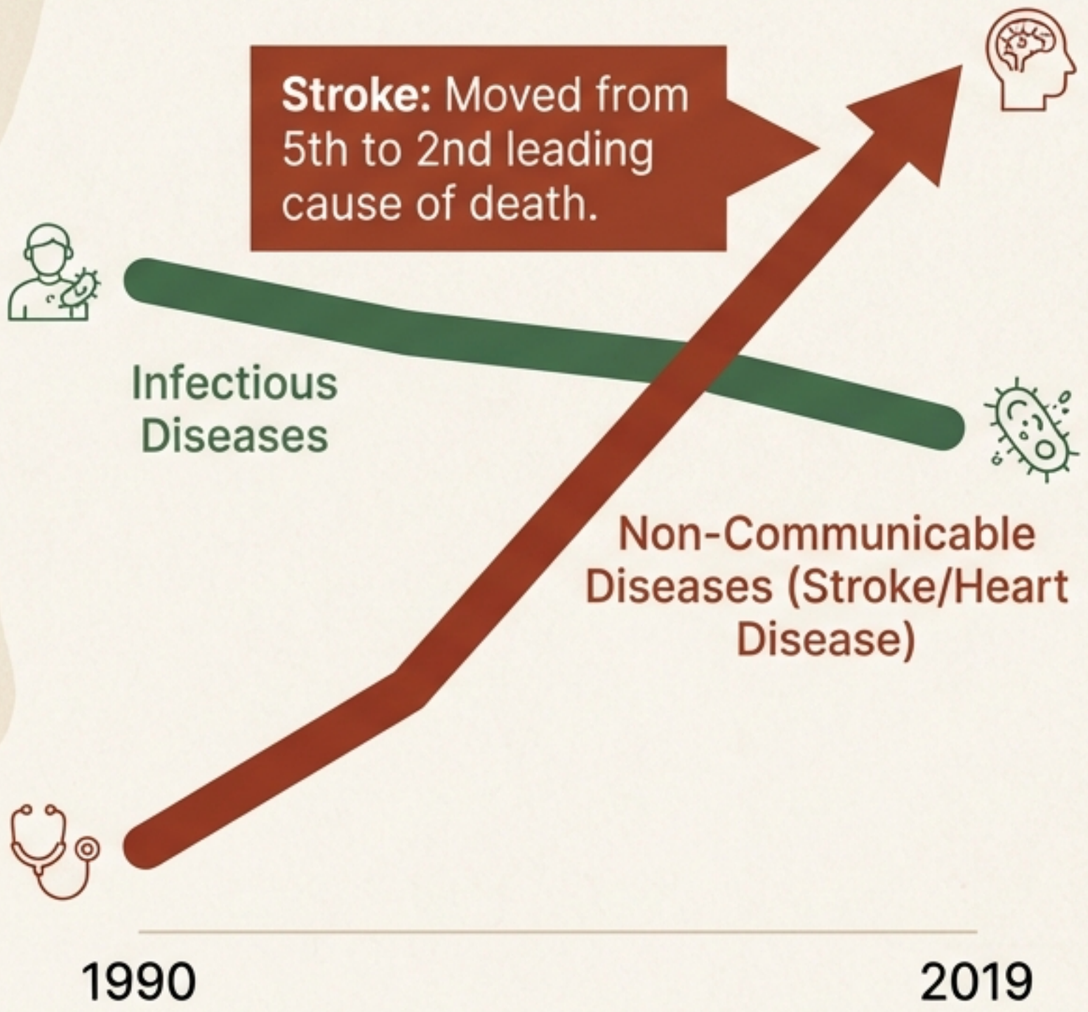
The “Epidemiological Transition” in Ghana

A Shift in Burden: Ghana is moving from infectious diseases (malaria/flu) to Non-Communicable Diseases (NCDs) as a leading cause of death.

Ranking the Risk: According to Institute for Health Metrics and Evaluation data, stroke has surged in lethality over the last three decades.

Cumulative Exposure: Stroke is not a sudden accident; it is the result of decades of unmanaged system exposure.

Premature Loss: NCDs drive 85% of premature deaths in low-middle income countries.



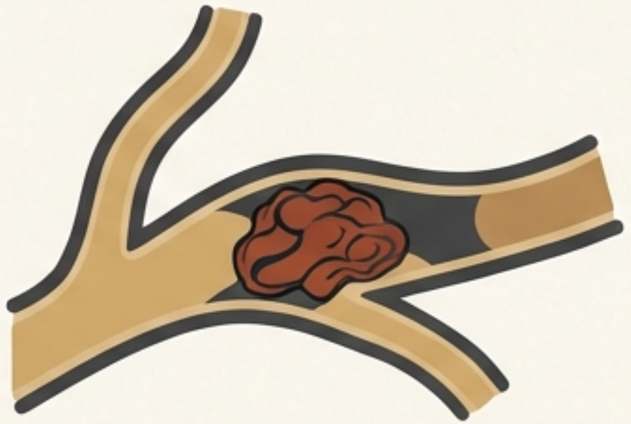
29%
Probability of Dying from NCDs (ages 30-70)

The Mechanics of a Crisis

The Event: A sudden interruption of blood supply to the brain, depriving tissue of oxygen and nutrients.

The Critical Factor: 'Time is Brain.' Every minute of delay results in permanent loss of function.

The Reality: This is a physical emergency requiring immediate infrastructure support, not just rest or home remedies.



Ischemic Stroke

The Blockage. Rising in Ghana due to lifestyle changes.

Hemorrhagic Stroke

The Bleed. Historically common and highly lethal (up to 41% mortality).

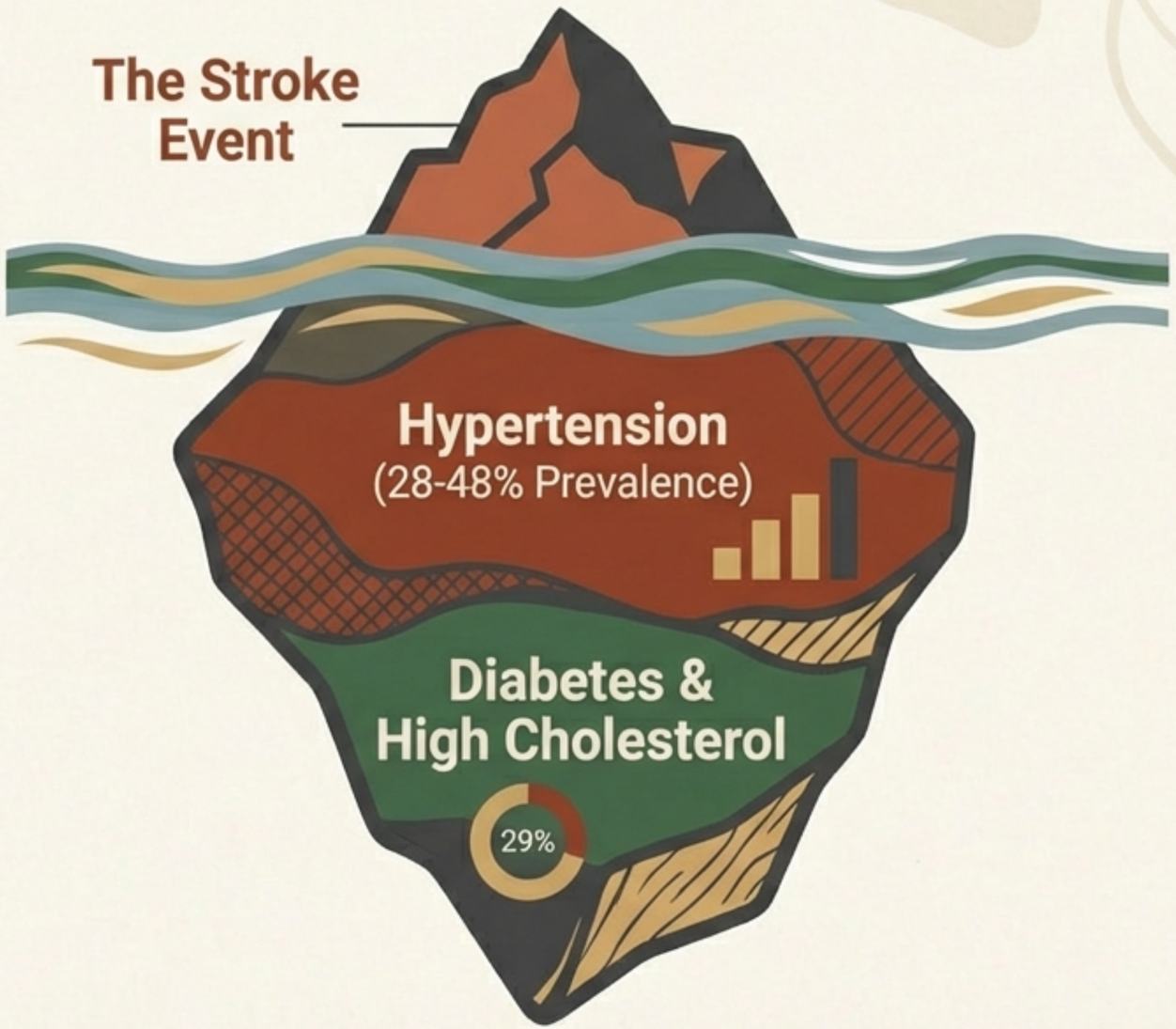
The Invisible Drivers: Hypertension & Diabetes

The Primary Driver: Hypertension (High Blood Pressure) is the #1 risk factor. Up to 89% of stroke survivors in Ghana had underlying hypertension.

The 'Silence': These conditions are asymptomatic for years. You cannot 'feel' high blood pressure until damage is done.

The Trap: Without routine screening, the first symptom of the disease is often the stroke itself.

Metabolic Risks: Diabetes (found in ~29% of survivors) compromises blood vessels over time, turning them fragile or blocked.



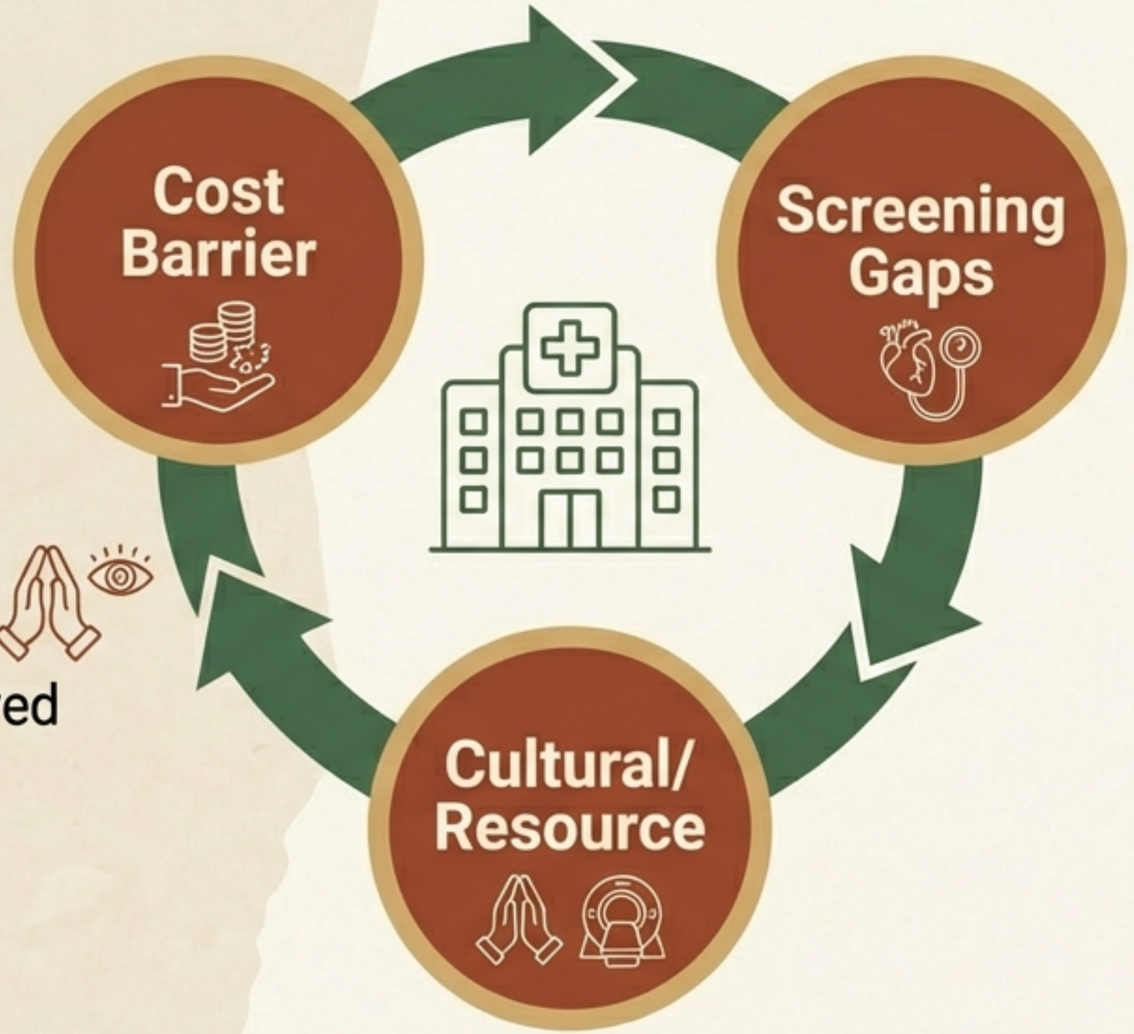
Barriers to Care: It's Not Just "Stubbornness"

The Cost Barrier

Financial dependence is a primary driver of non-adherence. A Tema General Hospital study found **40-50% of patients** cited cost as a major barrier.

Cultural Interpretation

Symptoms are often viewed through spiritual lenses, leading to delays while families seek alternative assistance first.



Screening Gaps

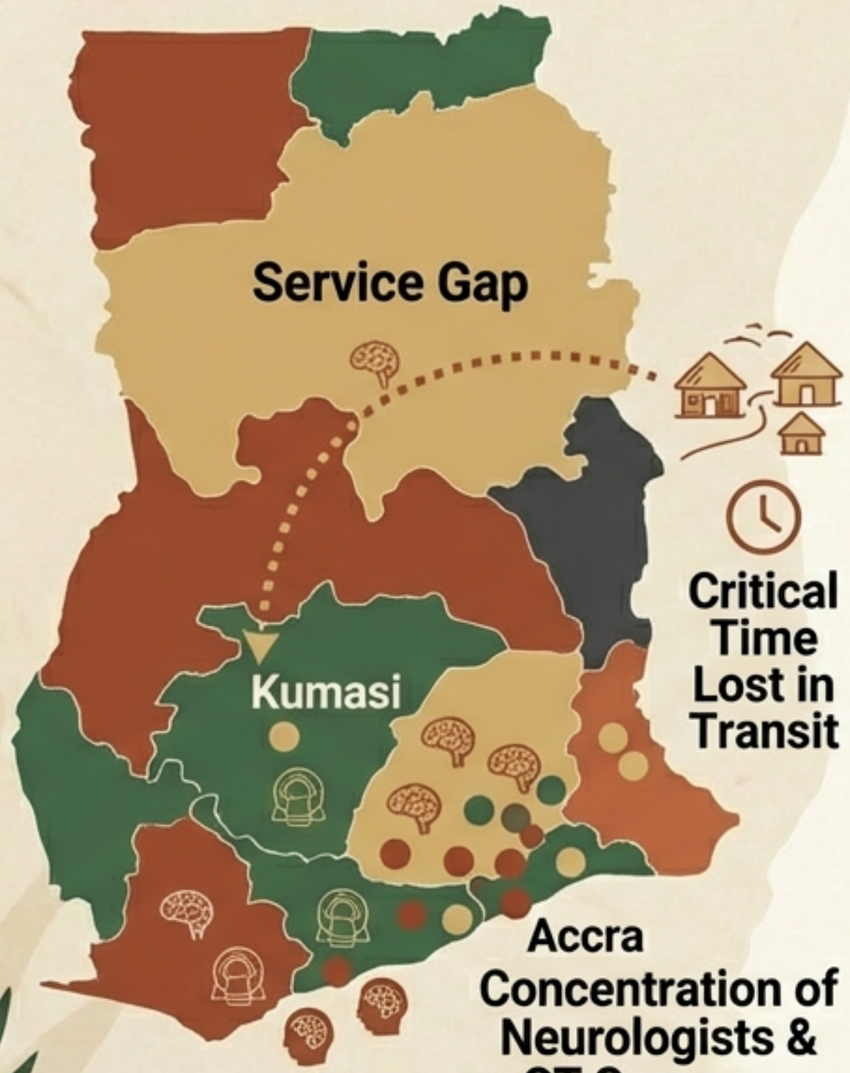
Routine BP checks are often "opportunistic"—occurring only when a patient visits for another illness.

Resource Scarcity

24-hour CT scan services are available in only **~18.2%** of hospitals.

Archives of Physiotherapy

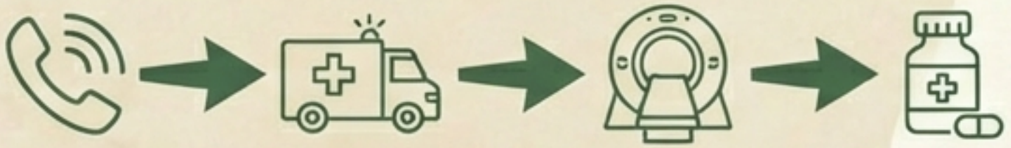
Geography Determines Destiny



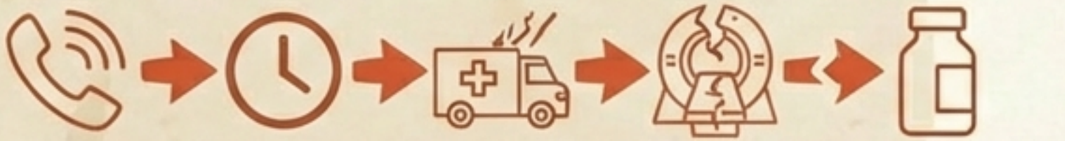
- **Urban Concentration:** Specialists (neurologists) and Stroke Units are heavily concentrated in Accra (e.g., Korle-Bu) and Kumasi.
- **The Northern Gap:** Significant scarcity of stroke care services exists in the Northern regions compared to the South.
- **Rural Reality:** Reliance on under-resourced health centers that lack diagnostic imaging equipment (CT/MRI).
- **The Commute:** Patients in rural areas face longer travel times, missing the critical "golden hour" for intervention.

The Infrastructure of Survival

Ideal



Reality



Ambulance Network: While the National Ambulance Service is growing, response times remain a critical bottleneck.

Diagnostic Delays: Even upon arrival, faulty or occupied CT scanners delay the diagnosis needed to distinguish between a bleed and a clot.

Workforce Shortage: “Brain Drain” has reduced the number of nurses, physiotherapists, and specialists available.

Thrombolysis Access: Clot-busting drugs are time-sensitive and often unavailable or unaffordable in general district hospitals.

Systems, Not Genetics

Structural Exposure

Rising stroke rates correlate with urbanization, processed food availability, and physical inactivity—systemic changes, not just personal choices.

Policy Gaps

NCDs account for ~45% of deaths, yet historical funding prioritized infectious diseases.

Protection Failure

The lack of *functional* primary care screening means the system fails to protect citizens before the crisis.

Access Inequity

Private facilities offer advanced acute care, creating a survival gap based on wealth.

The Family Impact: A Caregiving Crisis

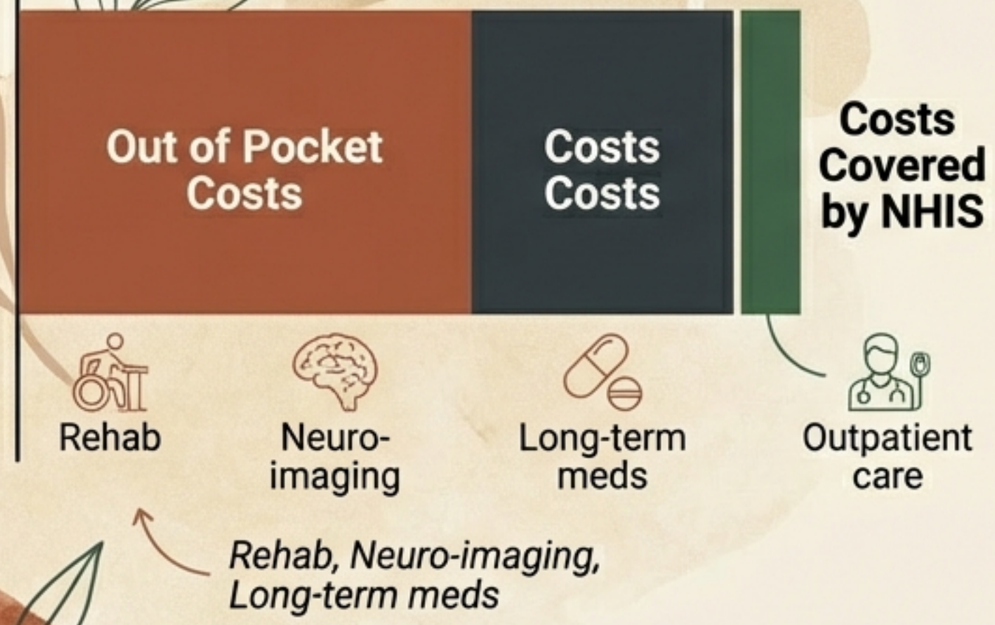
The Gendered Burden:
Stroke care predominantly falls on women (wives/daughters), daughters), disrupting their economic activity and education.

Dependency:
Over half of stroke survivors in Ghana are left dependent on others for daily activities.

Psychosocial Strain:
High rates of depression and anxiety among family caregivers due to a lack of formal support structures.

Disruption: When a breadwinner falls ill, the entire family unit faces instability, impacting school fees and nutritional security.

The Cost of Survival



Income Shock:

Stroke strips families of income at the peak of earning potential (40–60 years old).

NHIS Limitations:

National Health Insurance covers outpatient care but often excludes expensive rehabilitation, neuro-imaging, and long-term physiotherapy.

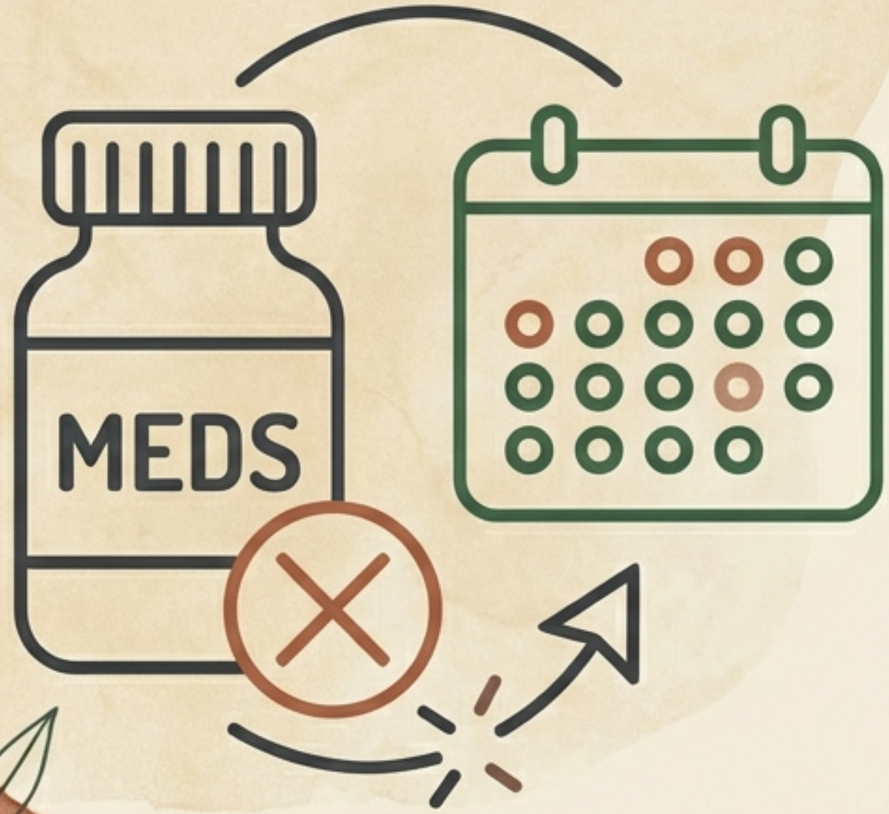
Out-of-Pocket Burden:

Families often sell assets to pay for acute care. Total patient cost can exceed GH₵ 4,600—a significant sum relative to average income.

Rehabilitation Costs:

High default rates in physiotherapy are directly linked to the inability to pay transport and session fees.

Where Primary Care Misses the Mark



The ‘Opportunistic’ Approach: Guidelines rely on checking BP *when* a patient visits for something else, rather than proactive community outreach.

Medication Continuity: Supply chain issues lead to “stock-outs” of essential hypertension meds at public clinics.

Counseling Deficit: Brief medical visits rarely allow time for the deep lifestyle counseling required for behavior change (WHO PEN model).

Data Voids: Lack of a comprehensive national stroke registry makes it hard to target prevention resources effectively.

Immediate Action Protocol (Ghana Context)

F  Face

A  Arms

S  Speech

T  Time

Contextual Criticality: In Ghana, ‘Time’ also means bypassing smaller clinics that lack CT scanners. Go immediately to the nearest *major** or regional hospital.

The Home Defense Strategy

Home BP Monitoring

Affordable automated cuffs are recommended. Know your numbers (Target: <140/90 mmHg for most adults).

Medication Adherence

Never stop BP meds without a doctor's order, even if you "feel fine." High default rates are dangerous.

Dietary Salt

Reduction of sodium in soups and stews is a high-impact, low-cost intervention.

Stress Factors

Monitor work stress and sleep quality (sleep apnea is a rising risk factor).

Empowering the Patient Voice

Rx Questions to Ask Your Provider:

1. What is my exact blood pressure reading today, and what is my target?
2. Does this facility have a functioning CT scanner? If not, where is the nearest one?
3. Can you screen me for diabetes and high cholesterol today?
4. Are there generic, NHIS-covered alternatives for these medications?
5. What are the warning signs that require immediate return to the hospital?

Mobilizing the Village

Faith-Based Screening: Churches and Mosques as sites for regular BP checks after service.

Market Outreach: Taking screening to market women and transport hubs where high-risk populations work.

Survivor Support: Groups like SASNET-Ghana provide ‘life after stroke’ dignity, reducing isolation.

Education: Dispelling myths that stroke is purely spiritual to ensure medical help is sought first.

Demanding Systemic Change

Infrastructure

275 Constituency-based Rehab Centers

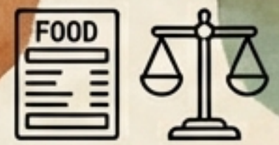
NHIS Reform

Coverage for Rehab & Diagnostics

Task Shifting

Nurse-led Hypertension Management

Regulation



Sodium & Trans-fat Control

Infrastructure: Demand for the proposed 275 constituency-based rehabilitation centers to decentralize care.

NHIS Reform: Advocacy to expand insurance coverage to include full stroke rehabilitation and diagnostics.

Task Shifting: Training nurses and community health officers to manage uncomplicated hypertension (WHO PEN model).

Reclaiming the Black Lifespan

The Shift: We must move from “Crisis Management” to “Lifespan Protection.”

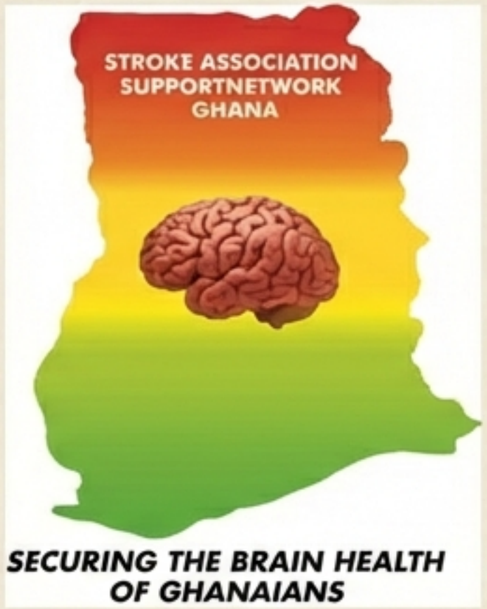
The Potential: 90% of strokes are linked to modifiable risk factors. Prevention is possible.

Disability Rights: We must view stroke survivors not as burdens, but as citizens with rights to accessibility, employment, and dignity.

Legacy: Protecting the cardiovascular health of parents secures the economic future of children.

Ghana as a Case Study

The Opportunity:
Ghana is positioning itself as a leader in NCD response through the 'CVD Score Card' project.



Collaborative Power:
Partnerships between the Ministry of Health, SASNET-Ghana, and the World Heart Federation show a path forward.

The Vision: A health system that prioritizes *prevention* infrastructure (primary care) over *crisis* infrastructure (ICUs).

The Call: Building a system where a diagnosis is a start, not an end.