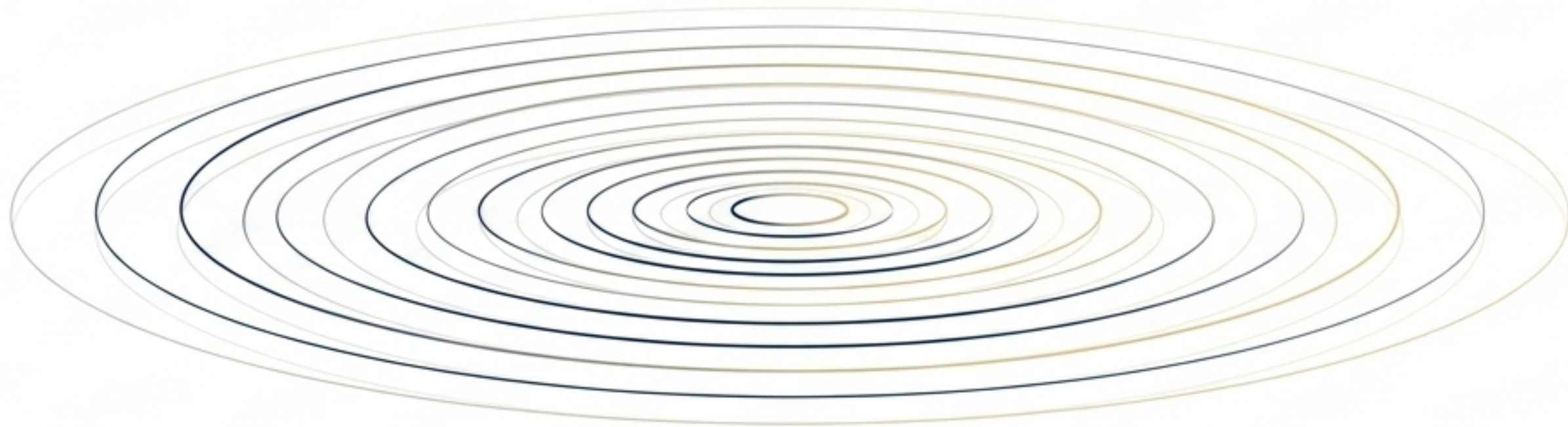


# Noncommunicable Disease and the Worlds We Conserve

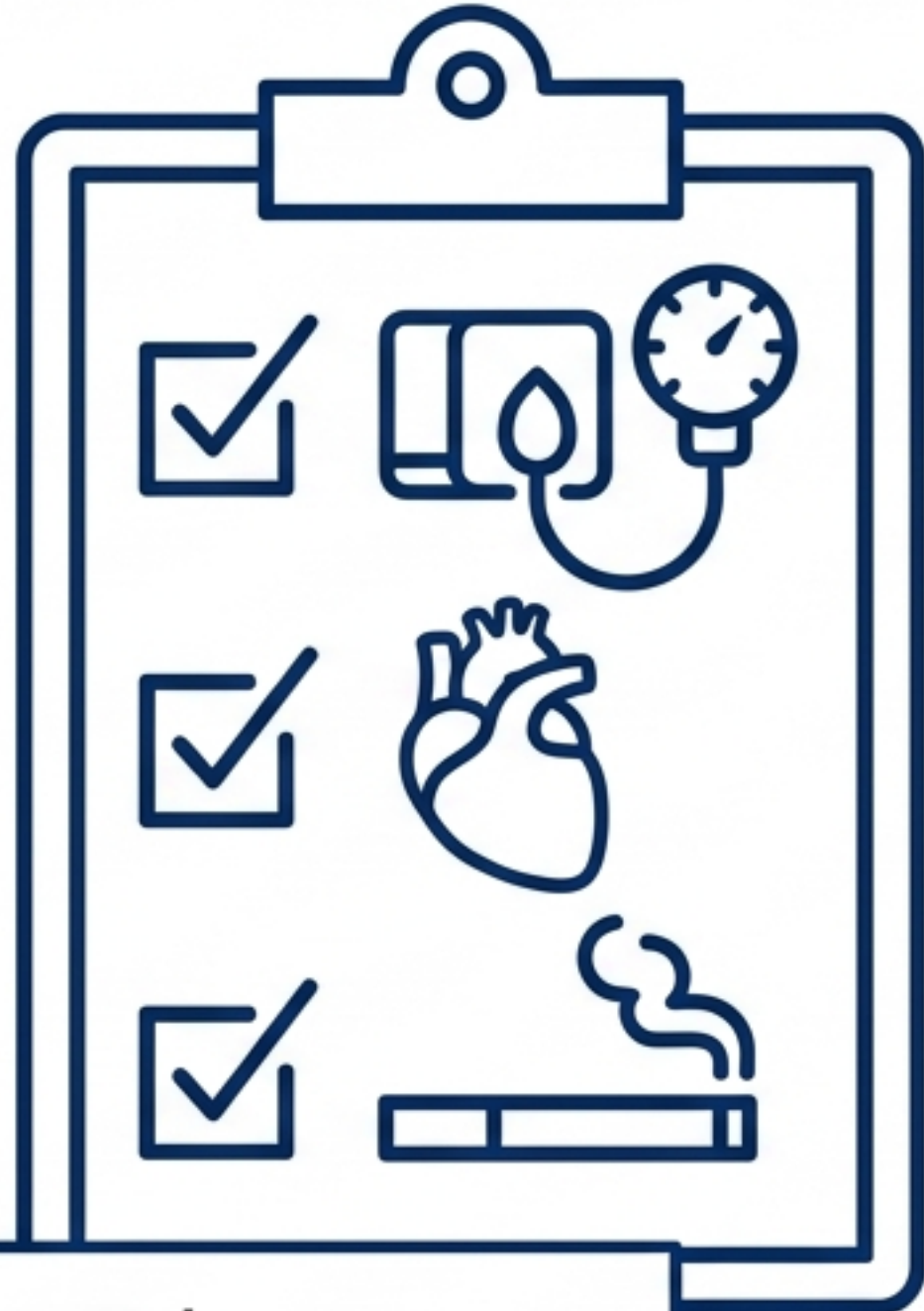
A Maturana-Informed Framework for Organism–Niche  
Coherence, Clinical Care, and Public Health



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27 May 2026

# We know the associations, but we misdiagnose the conservation.



## The Achievement:

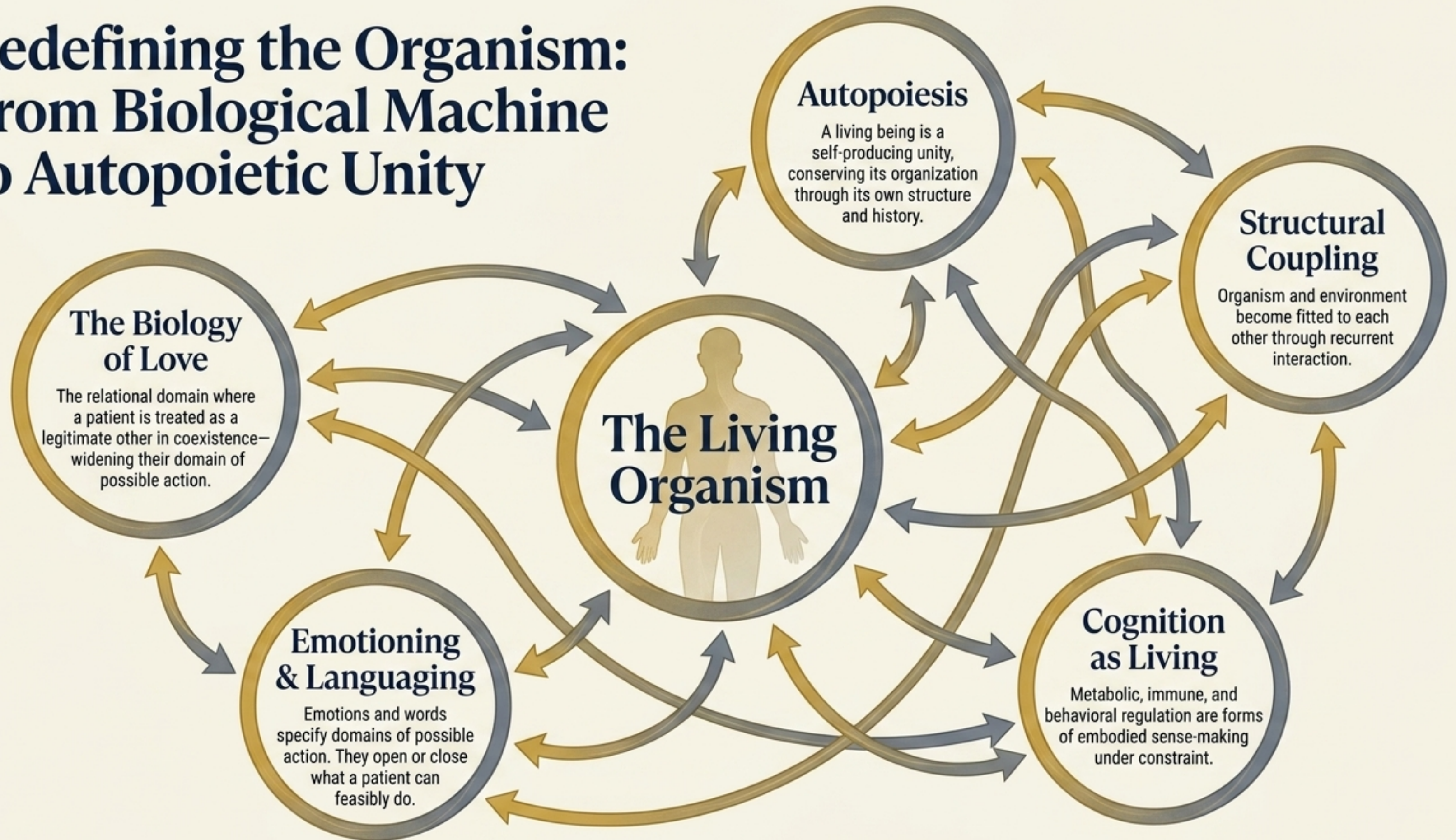
The Risk-Factor model is indispensable. It identifies exposures, allowing us to detect, monitor, and treat.

Risk factors are necessary indicators. They are not yet explanations of the world that conserves them.

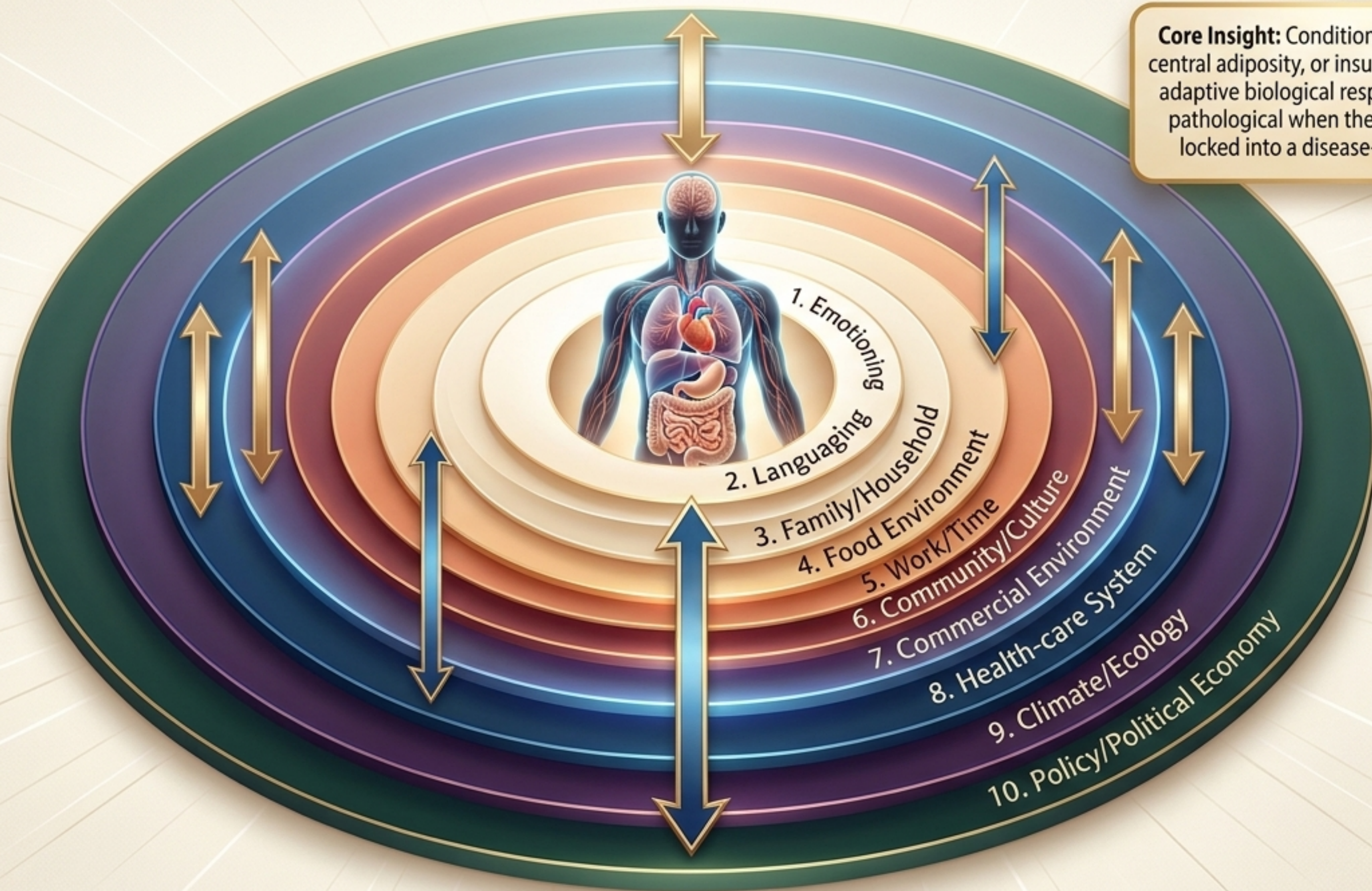


**The Limitation:** It names what is associated with disease without explaining how disease-producing patterns are conserved in everyday life. It unintentionally moralizes structural constraints into individual failures ("non-compliance").

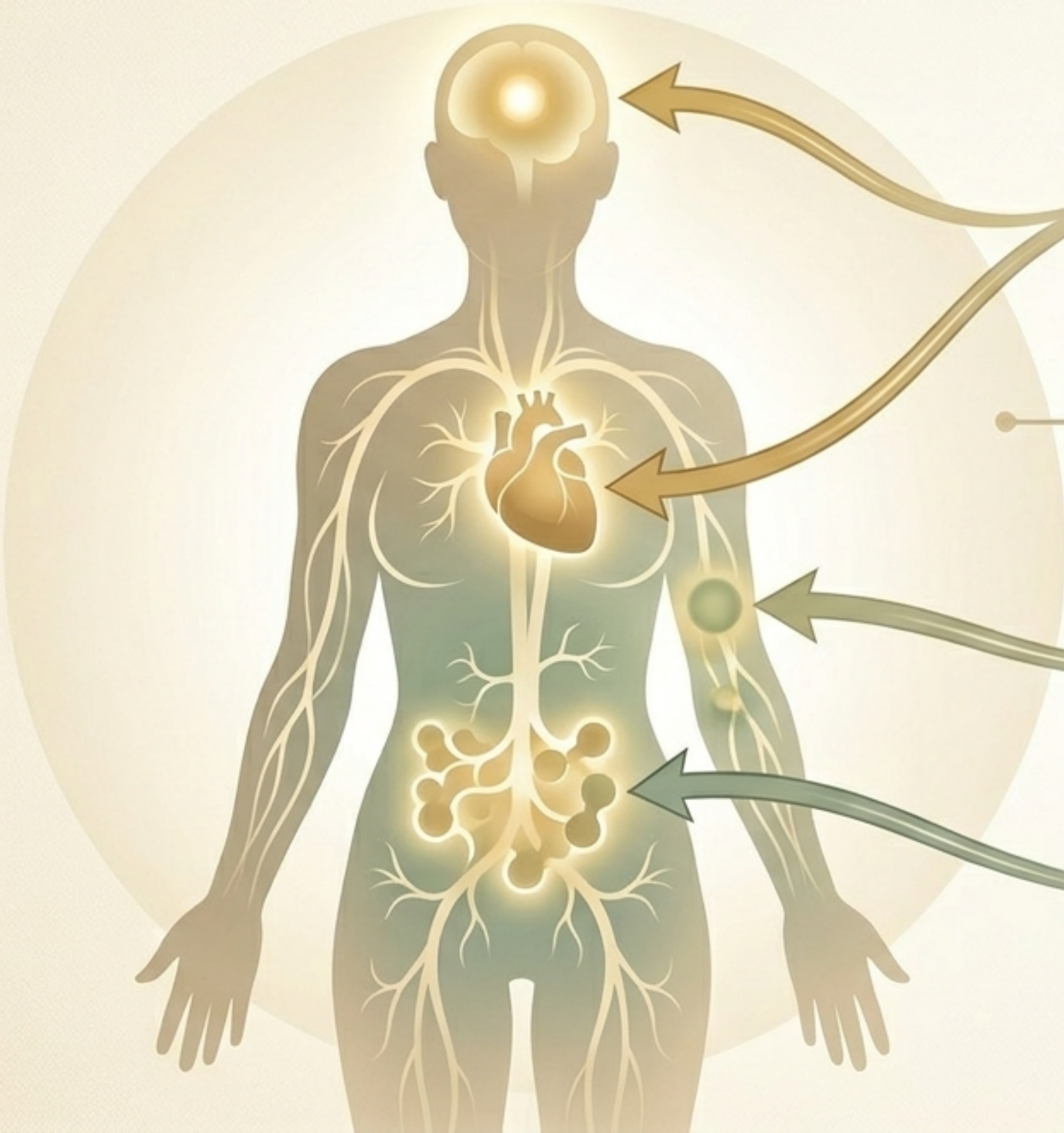
# Redefining the Organism: From Biological Machine to Autopoietic Unity



# NCDs are Diseases of Conserved Maladaptive Coherence



# The Body as a Recorder of Lived Exposure



**Neuroendocrine / HPA-Axis:**

Persistent insecurity, vigilance, and overwork alter sympathetic-parasympathetic balance, influencing blood pressure and glucose.

**Allostatic Load:**

Chronic environmental perturbation generates cumulative physiological wear.




**Immune-Metabolic Coupling:**

Diet, adiposity, sleep disruption, and social adversity drive chronic systemic inflammation.

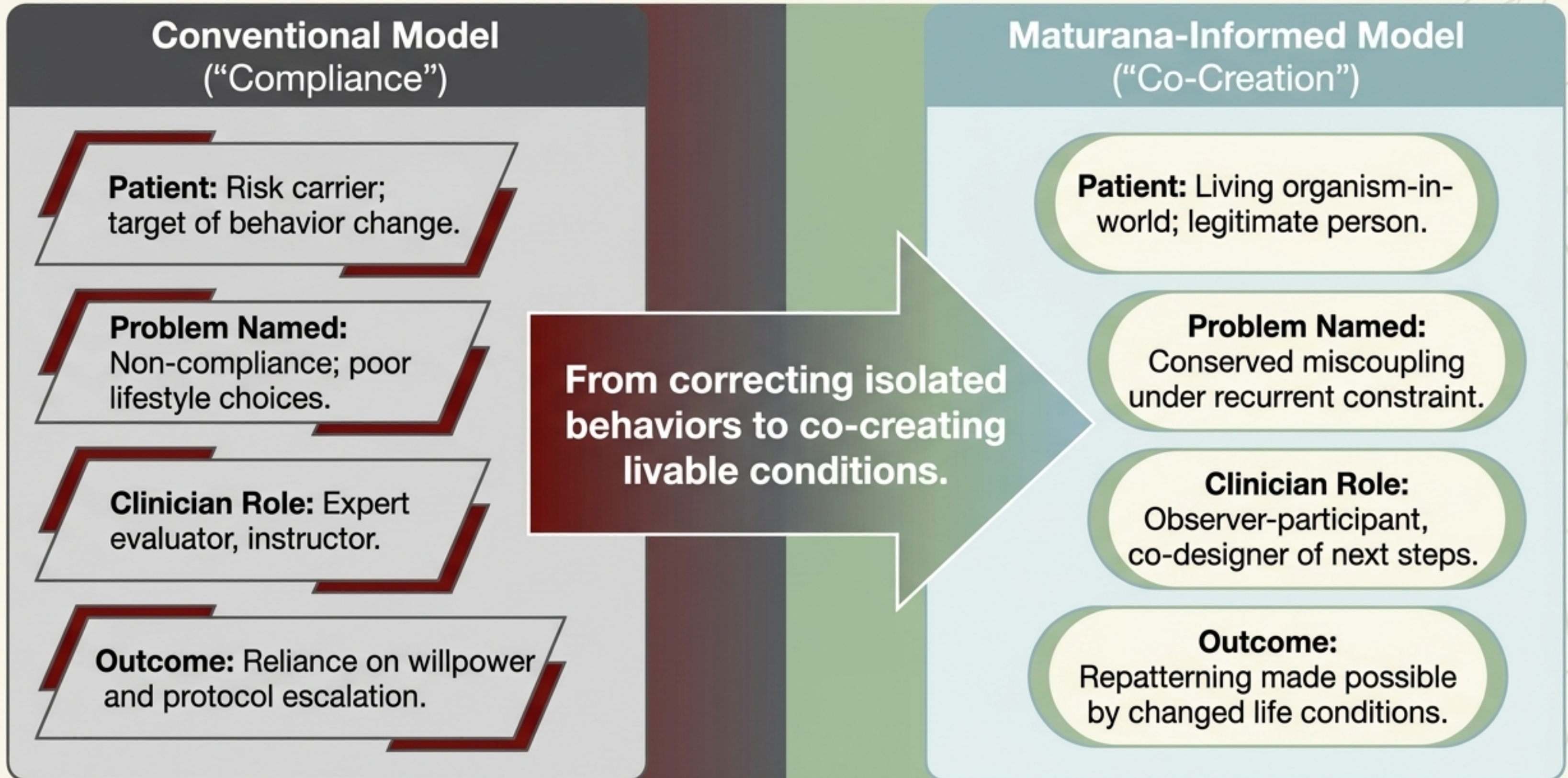
**Endothelial Function:**

The vascular system literally records lived exposures to food, air, stress, toxins, and care.

# Contextualizing Biology: Disease-Specific Re-Openings

	Biomedical Account	Organism-Niche Account	Clinical Re-Opening Question
	Vascular tone, sympathetic activation	A life of vigilance (chronic stress, poor sleep, caregiving burden)	What would reduce this person's need to remain physiologically mobilized?
	Insulin resistance, adiposity	Metabolic coupling to ultra-processed food, low movement, commercial diet environments	What conditions would make stable glycemia easier to conserve in daily life?
	Asthma, COPD, inflammation	Breath as organism-atmosphere coupling (smoke, mold, climate-related air quality)	What would make safer breathing possible in this person's environment?

# Reframing the Clinical Encounter



# The CARE Method: A Maturana-Informed Clinical Sequence

## **C** Contextualize the condition

- What is the patient's lived world? (Daily routines, time pressures, financial constraints, emotional field).

## **E** Embed and evaluate

- What support will conserve the new pattern? (Use community resources; treat setbacks as information, not failure).



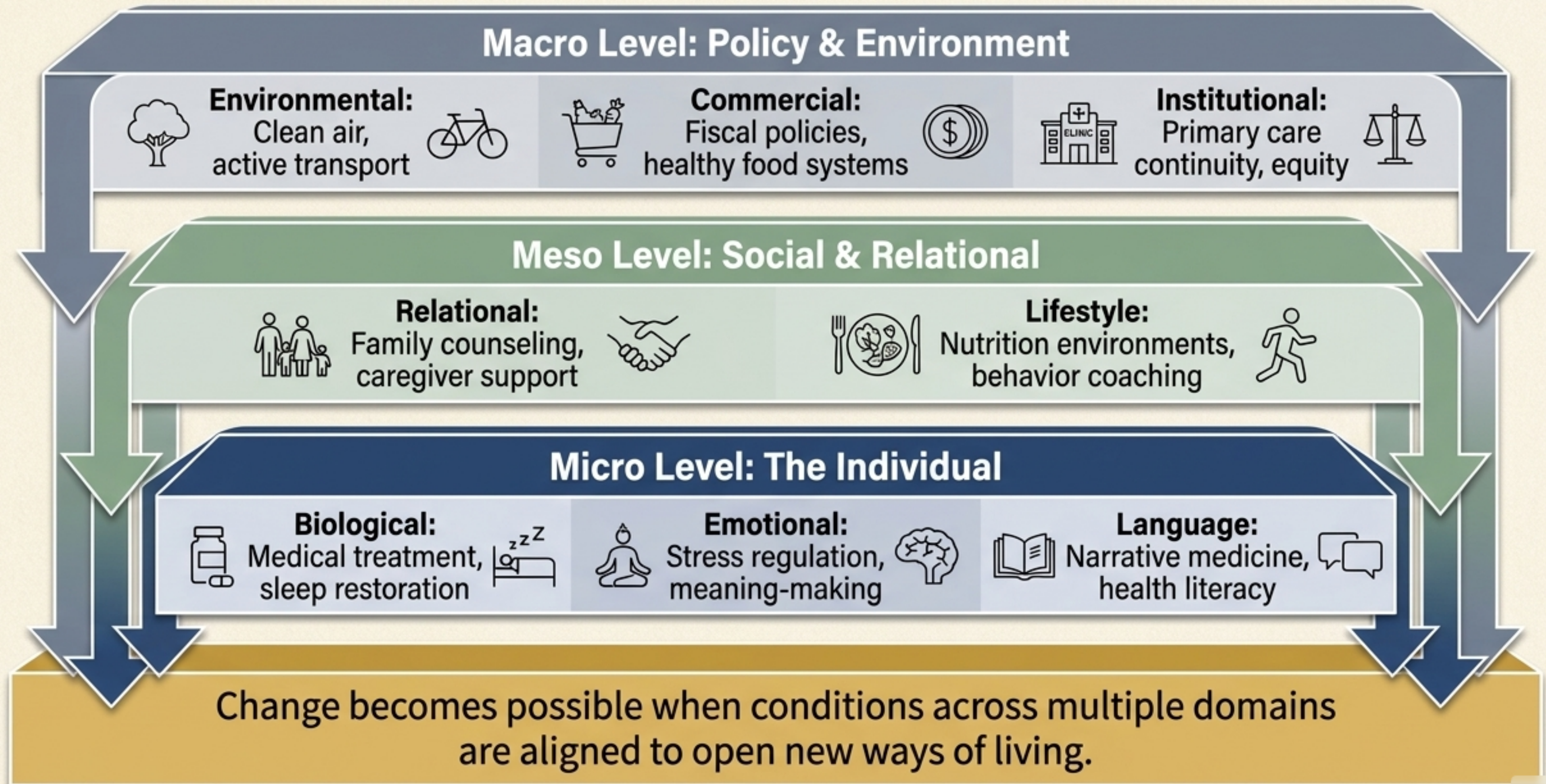
## **A** Assess conserved patterns

- What pattern keeps repeating? (Identify the recurrent loop that conserves disease, without blame).

## **R** Re-open a feasible domain

- What small non-forcing change can become livable? (Co-design one action that alters the organism-niche coupling).

# 8 Leverage Points to Re-Open Domains of Action



# Scaling Up: The Public Health Shift

## Pathogenic Dynamics (What Keeps NCDs Going)

-  - Food deserts
-  - Globalized unhealthy commodity systems
-  - Aggressive marketing
-  - Fragmented care
-  - Extreme climate vulnerability

## Life-Coherent Alternatives (What We Must Cultivate)

-  - Sustainable food systems
-  - Equitably regulated markets
-  - Healthy walkable communities
-  - Supportive caregiving environments
-  - Universal primary care

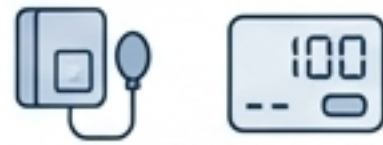
**The System Principle:** NCDs at a population level are signals of pathogenic niches. We must rebuild public goods as life-supporting commons.

# Measuring Coherence: The NCD Dashboard

## Biomedical Indicators

(Necessary but not sufficient)

✓ Blood pressure



✓ HbA1c



✓ Lipids



✓ BMI



✓ eGFR

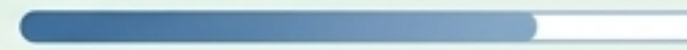


## Lived Coherence Indicators

(How the person lives)



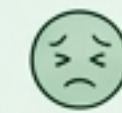
Sleep quality



Food access



Movement safety



Stress load



Time/work pressure



Trust in care



## System & Niche Indicators

(What society makes easier)



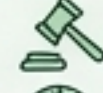
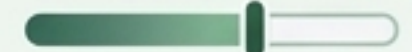
Primary care continuity



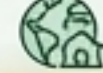
Walkability



Clean air



Commercial regulation (ultra-processed foods)



Climate resilience



**Expand measurement from disease metrics alone to the conditions that conserve health.**

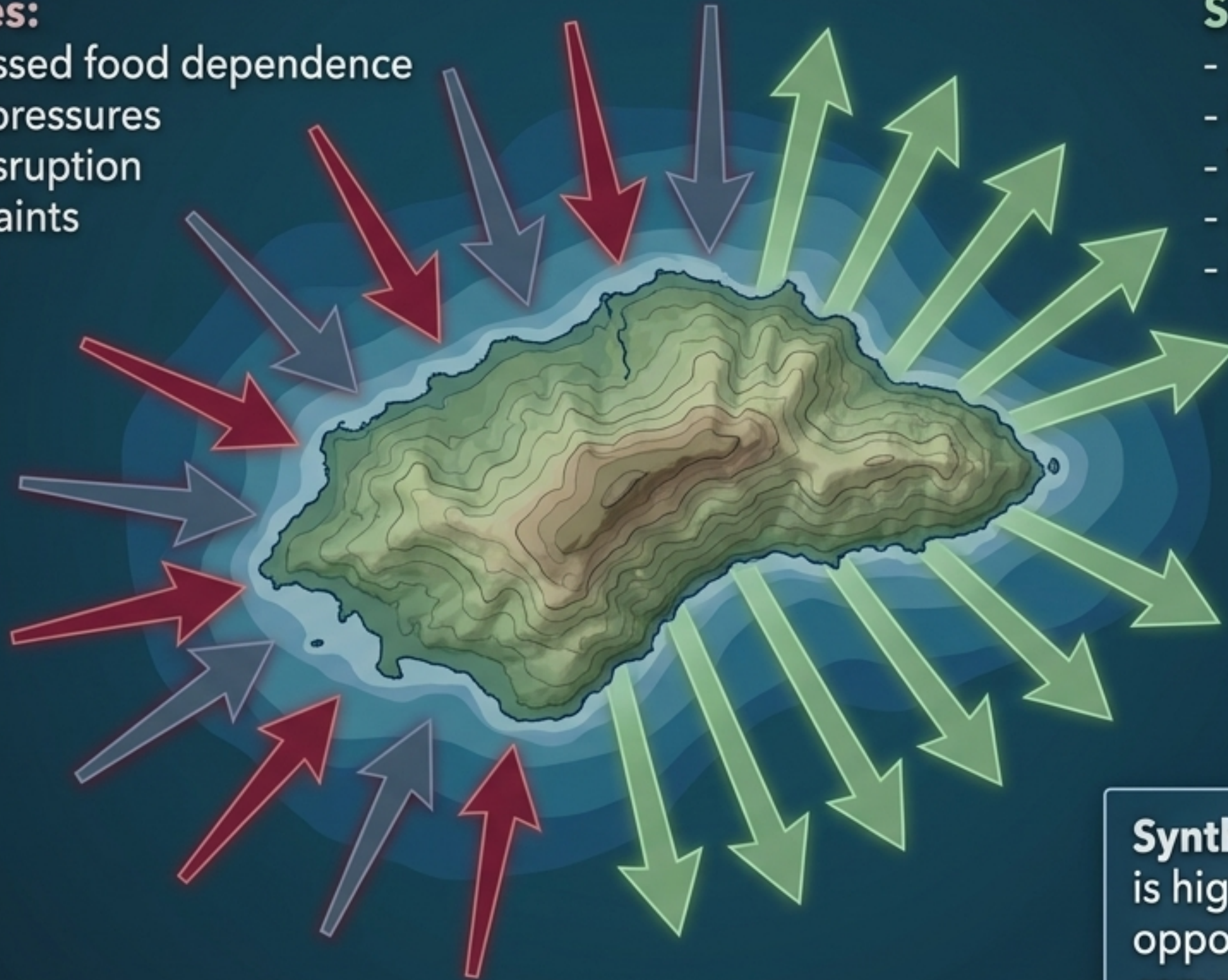
# Application: Organism-Niche Coupling in the Caribbean (SIDS)

## Pathogenic Pressures:

- Imported ultra-processed food dependence
- Tourism commercial pressures
- Hurricane/disaster disruption
- Health-system constraints
- Extreme heat

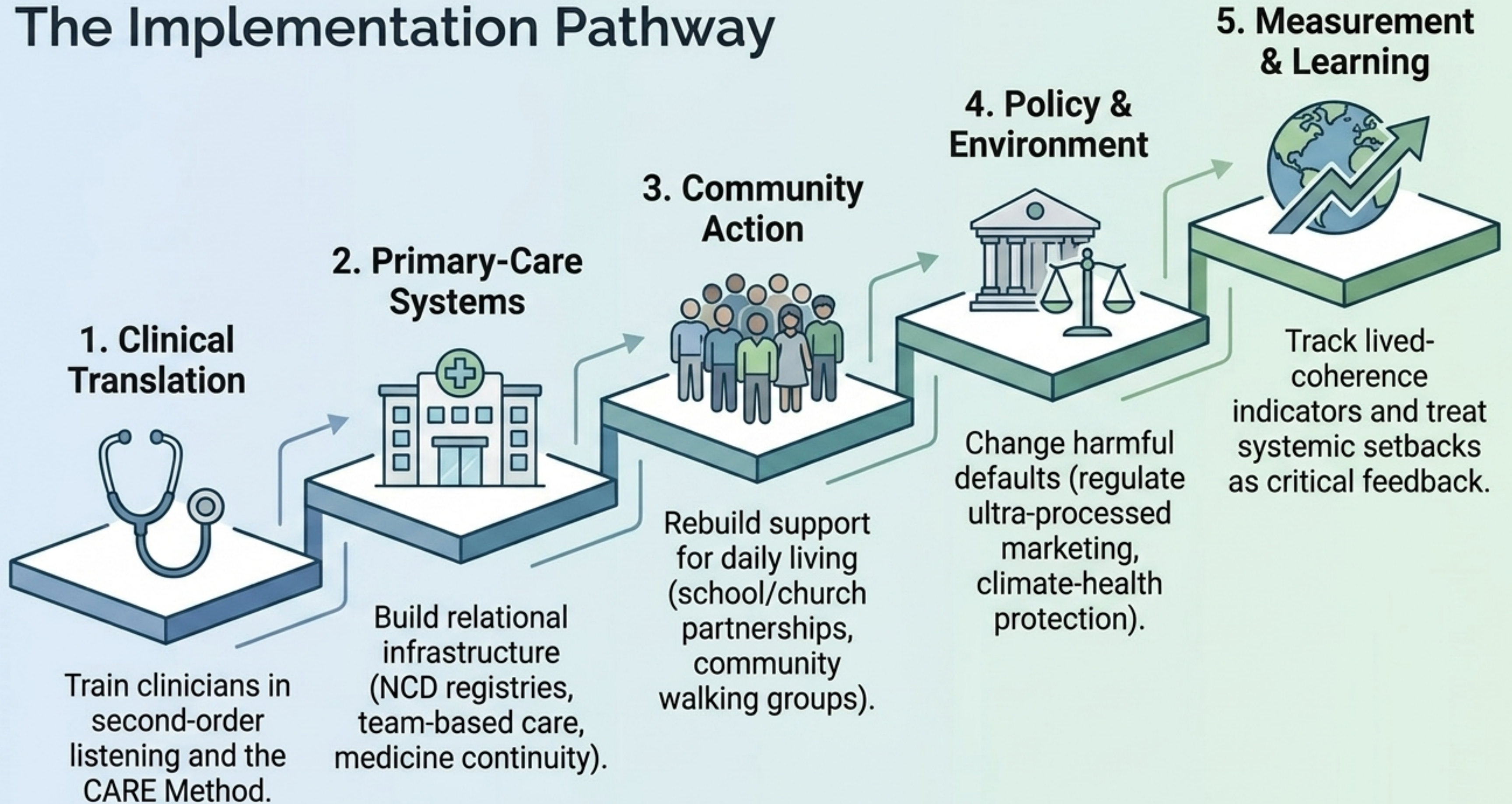
## Small-Island Assets:

- Dense social proximity
- Community trust
- Visible policy feedback loops
- Strong church/faith networks
- Community kitchens











**Synthesis:** In small societies, risk is highly structural, but so is the opportunity for rapid, coordinated community-scale transformation.

# The Implementation Pathway



# Preserving Clinical Seriousness: Nuance & Safeguards

What this is NOT	The Nuanced Reality
 Do not delay evidence-based treatment	 Acute and advanced disease still requires timely biomedical, pharmacological, and surgical care.
 Do not romanticize adaptation	 A biologically stable pattern is not always healthy; true coherence must expand a patient's life-capacity.
 Do not replace public-health "best buys"	 Fiscal and regulatory interventions (taxes, bans) remain absolutely central to niche redesign.
 Do not blame the niche to remove agency	 Acknowledging constraints is about enabling co-creation and shared responsibility, not fatalism.

# A Medicine of Relational Transformation



NCDs are not merely diseases to manage, but signals calling society to reorganize its way of living. We must preserve the precision of biomedical diagnosis while placing it within the wider biology of living.

*What kind of world must we bring forth so that healthier ways of living can be conserved?*