A BLUEPRINT FOR COMMUNITY-BASED SUSTAINABLE HEALTHCARE
Transforming healthcare in communities, working from the bottom up
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alliance for natural health
INTERNATIONAL

WHO ARE WE?

THE ANH COLLECTIVE

Parent: Non-profit / CARE approach

anh CONSULTANCY

B2B support

ANH International

Co-creating health by
working with nature, not against it
- Campaigns
- Activism
- Research
- Education

ANH Consultancy

Supporting sustainability
in business

Business sustainability

Individual & community sustainability

Health creation

Implementing health creation
through communities
in the real world

Charitable Change Programmes

A COLLABORATION FOR SYSTEMIC HEALTHCARE CHANGE

WHAT ARE THE LEVERS FOR CHANGE?

FROM	TO
Focus on diseases	Creating positive wellbeing
Doctors owning your health	You owning your health
Hospitals and clinics as the main setting	Your community as the main setting
Drug based interventions	Diet and lifestyle interventions
Symptom-based treatments	Natural balance across all body systems
Patients as passive recipients	Empowered, self-caring citizens

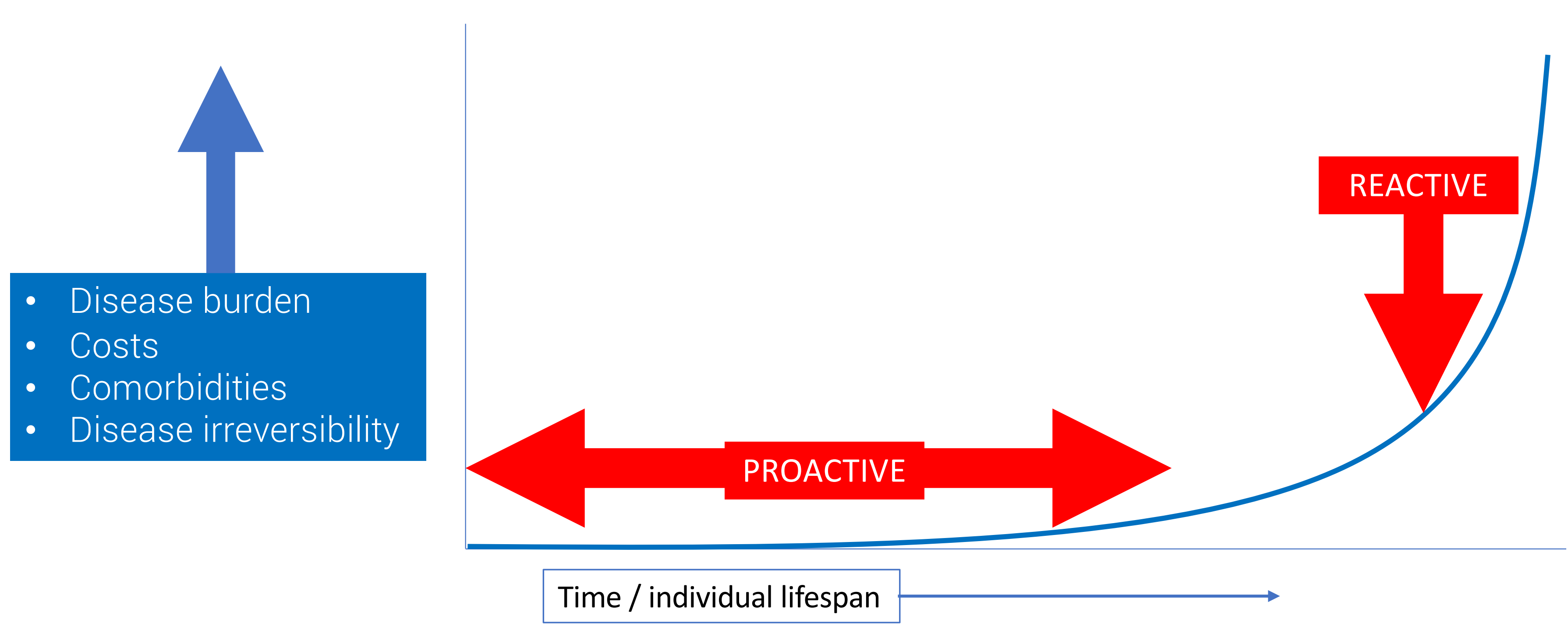
social
environmental
economic
THE THREE PILLARS
OF SUSTAINABILITY

UN AGENDA 2030:

RIGHT PROBLEM IDENTIFICATION – WRONG SOLUTIONS

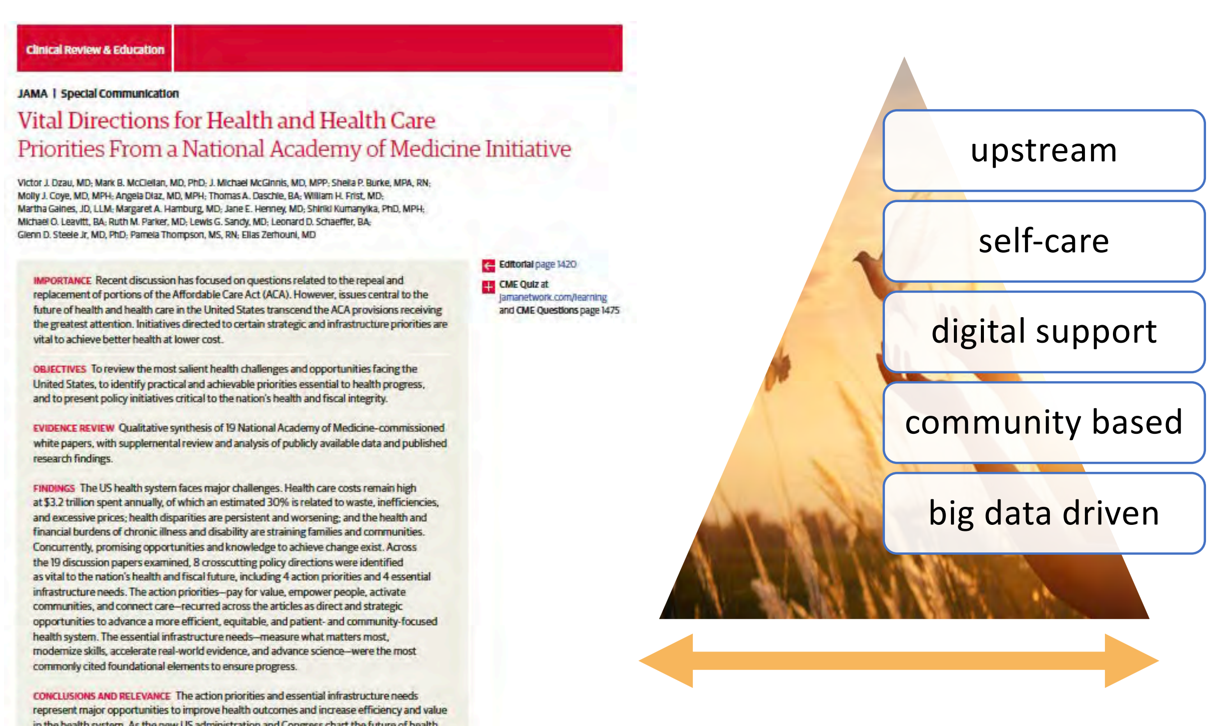
Diet + lifestyle = Key modifiable determinants of good health and well-being

THE URGENT NEED TO TRANSITION FROM REACTIVE TO PROACTIVE HEALTH AND CARE



"TIME FOR A REVOLUTION"

- Lancet Global Health Commission (2018)



Clinical Review & Education

JAMA | Special Communication

Vital Directions for Health and Health Care
Priorities From a National Academy of Medicine Initiative

Victor J. Dzau, MD; Mark B. McClellan, MD, PhD; J. Michael McGinnis, MD, MPP; Sheila P. Burke, MPA, RN; Molly J. Coye, MD, MPH; Angela Diaz, MD, MPH; Thomas A. Daschle, BA; William H. Frist, MD; Martha Gaines, JD, LLM; Margaret A. Hamburg, MD; Jane E. Henney, MD; Shiriki Kumanyika, PhD, MPH; Michael O. Leavitt, BA; Ruth M. Parker, MD; Lewis G. Sandy, MD; Leonard D. Schaeffer, BA; Glenn D. Steele Jr, MD, PhD; Pamela Thompson, MS, RN; Elias Zerhouni, MD

IMPORTANCE Recent discussion has focused on questions related to the repeal and replacement of portions of the Affordable Care Act (ACA). However, issues central to the future of health and health care in the United States transcend the ACA provisions receiving the greatest attention. Initiatives directed to certain strategic and infrastructure priorities are vital to achieve better health at lower cost.

OBJECTIVES To review the most salient health challenges and opportunities facing the United States, to identify practical and achievable priorities essential to health progress, and to present policy initiatives critical to the nation's health and fiscal integrity.

EVIDENCE REVIEW Qualitative synthesis of 19 National Academy of Medicine–commissioned white papers, with supplemental review and analysis of publicly available data and published research findings.

FINDINGS The US health system faces major challenges. Health care costs remain high at $3.2 trillion spent annually, of which an estimated 30% is related to waste, inefficiencies, and excessive prices; health disparities are persistent and worsening; and the health and financial burdens of chronic illness and disability are straining families and communities. Concurrently, promising opportunities and knowledge to achieve change exist. Across the 19 discussion papers examined, 8 crosscutting policy directions were identified as vital to the nation's health and fiscal future, including 4 action priorities and 4 essential infrastructure needs. The action priorities—pay for value, empower people, activate communities, and connect care—recurred across the articles as direct and strategic opportunities to advance a more efficient, equitable, and patient- and community-focused health system. The essential infrastructure needs—measure what matters most, modernize skills, accelerate real-world evidence, and advance science—were the most commonly cited foundational elements to ensure progress.

CONCLUSIONS AND RELEVANCE The action priorities and essential infrastructure needs represent major opportunities to improve health outcomes and increase efficiency and value in the health system. As the new US administration and Congress chart the future of health and health care for the United States, and as health leaders across the country contemplate future directions for their programs and initiatives, their leadership and strategic investment in these priorities will be essential for achieving significant progress.

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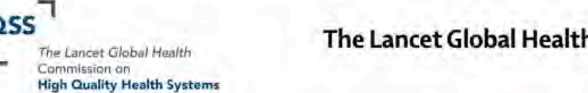
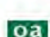
CME Quiz at jamanetwork.com/learning and CME Questions page 1475

Dzau et al. *JAMA*. 2017; 317(14): 1461-1470.



The Lancet Global Health Commission

High-quality health systems in the Sustainable Development Goals era: time for a revolution



Margaret E Kruk, Anna D Gage, Catherine Arsenault, Keely Jordan, Hannah H Leslie, Sanam Roder-DeWan, Olusoji Adeyi, Pierre Barker, Bernadette Daelmans, Svetlana V Doubova, Mike English, Ezequiel García Elorrio, Frederico Guanais, Oye Gureje, Lisa R Hirschhorn, Lixin Jiang, Edward Kelley, Ephrem Tekle Lemango, Jerker Liljestrand, Address Malata, Tanya Marchant, Malebona Precious Matsoso, John G Meara, Manoj Mohanan, Youssoupha Ndiaye, Ole F Norheim, K Srinath Reddy, Alexander K Rowe, Joshua A Salomon, Gagan Thapa, Nana A Y Twum-Danso, Muhammad Pate

Executive summary

Although health outcomes have improved in low-income and middle-income countries (LMICs) in the past several decades, a new reality is at hand. Changing health needs, growing public expectations, and ambitious new health goals are raising the bar for health systems to produce better health outcomes and greater social value. But staying on current trajectory will not suffice to meet these demands. What is needed are high-quality health systems that optimise health care in each given context by consistently delivering care that improves or maintains health, by being valued and trusted by all people, and by responding to changing population needs. Quality should not be the purview of the elite or an aspiration for some distant future; it should be the DNA of all health systems. Furthermore, the human right to health is meaningless without good quality care because health systems cannot improve health without it.

mothers and children receive less than half of recommended clinical actions in a typical preventive or curative visit, less than half of suspected cases of tuberculosis are correctly managed, and fewer than one in ten people diagnosed with major depressive disorder receive minimally adequate treatment. Diagnoses are frequently incorrect for serious conditions, such as pneumonia, myocardial infarction, and newborn asphyxia. Care can be too slow for conditions that require timely action, reducing chances of survival. At the system level, we found major gaps in safety, prevention, integration, and continuity, reflected by poor patient retention and insufficient coordination across platforms of care. One in three people across LMICs cited negative experiences with their health system in the areas of attention, respect, communication, and length of visit (visits of 5 min are common); on the extreme end of these experiences were

Lancet Glob Health 2018; 6: e1196–252

Published Online September 5, 2018 http://dx.doi.org/10.1016/S2214-109X(18)30386-3

This online publication has been corrected. The corrected version first appeared at thelancet.com/lancetgh on Sept 18, 2018 and further corrections were made on Oct 12, 2018

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Kruk ME, et al. *Lancet Glob Health*. 2018; 6(11): e1196-e1252.

A WORLD FIRST...
health
intersection
sustainability

THE BLUEPRINT PROGRAMME: Proving the concept that has the power to make health care work for people and planet

- In Dec 2018, ANH-I published a report describing a **vision and blueprint** for health creation in response to the rising burden of global disease and its crippling impact on existing health systems around the world. Rob Verkerk published the first peer-reviewed journal article on the application of sustainability principles to health care in 2009
- The blueprint provides a **framework** and a **universal language** that enables all health professionals, and their communities, regardless of health status, **inclusive** of complementary and natural solutions, to engage in **creating health solutions** for themselves and for others while monitoring their effects
- The blueprint provides a model for health and care that is **sustainable**. It is based on key principles and learning that have previously been applied to other sectors, such as energy and agriculture
- The model has an '**upstream**' focus which views an individual's '**health system**' within an ecological context. At its core is the adoption of **sustainability principles** by healthcare providers, **self-care** that works with, rather than against, nature, and **community-based health hubs** that use the model
- The 'readiness' phase of implementation has begun with the intent of building a **cross-sector collaboration** underpinned with a **united movement**: partnerships, advisors, influencers and stakeholders. We need to jointly recognise the burning platform; align on the vision and mission; and, mobilise commitment for some meaningful action
- **Consensus** on how we design and test the model in the real world, enabled by a technology platform for scalability, will remain central to the implementation to uphold the integrity of the model with science and credible evidence of outcomes.
- **The end game** is wide scale adoption of the approach across all modalities and 'natural section' of health ecosystems (including foods, lifestyles and interventions) that are found to deliver the best outcomes for most people.

A BLUEPRINT FOR
HEALTH SYSTEM
SUSTAINABILITY
... the aim [of the 'blueprint'] is to propose the basis for a universal approach ('language') applicable to an upstream model that includes the evaluation of whole body, multi-system health and resilience through an ecological lens.

UP-STREAMING HEALTH & VITALITY

3 Essential Components

A Universal Health Assessment System

defined by function, not disease

Technology-Enabled, 3-level Guided and Self Care

starting with self, supported by Health Guides

A Sustainability Accreditation System for Health Guides & Providers

inclusive of bio-medical and natural health approaches

Impact

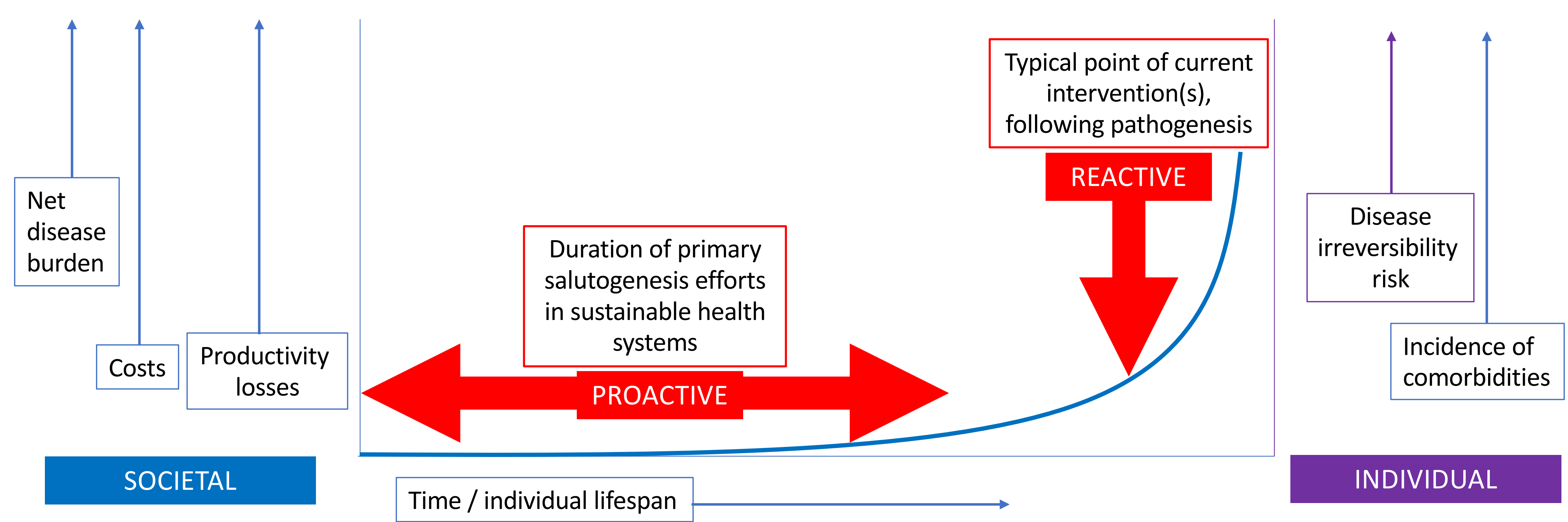
Population Health Outcomes

Chronic Disease Burden

Per Capita Health Cost

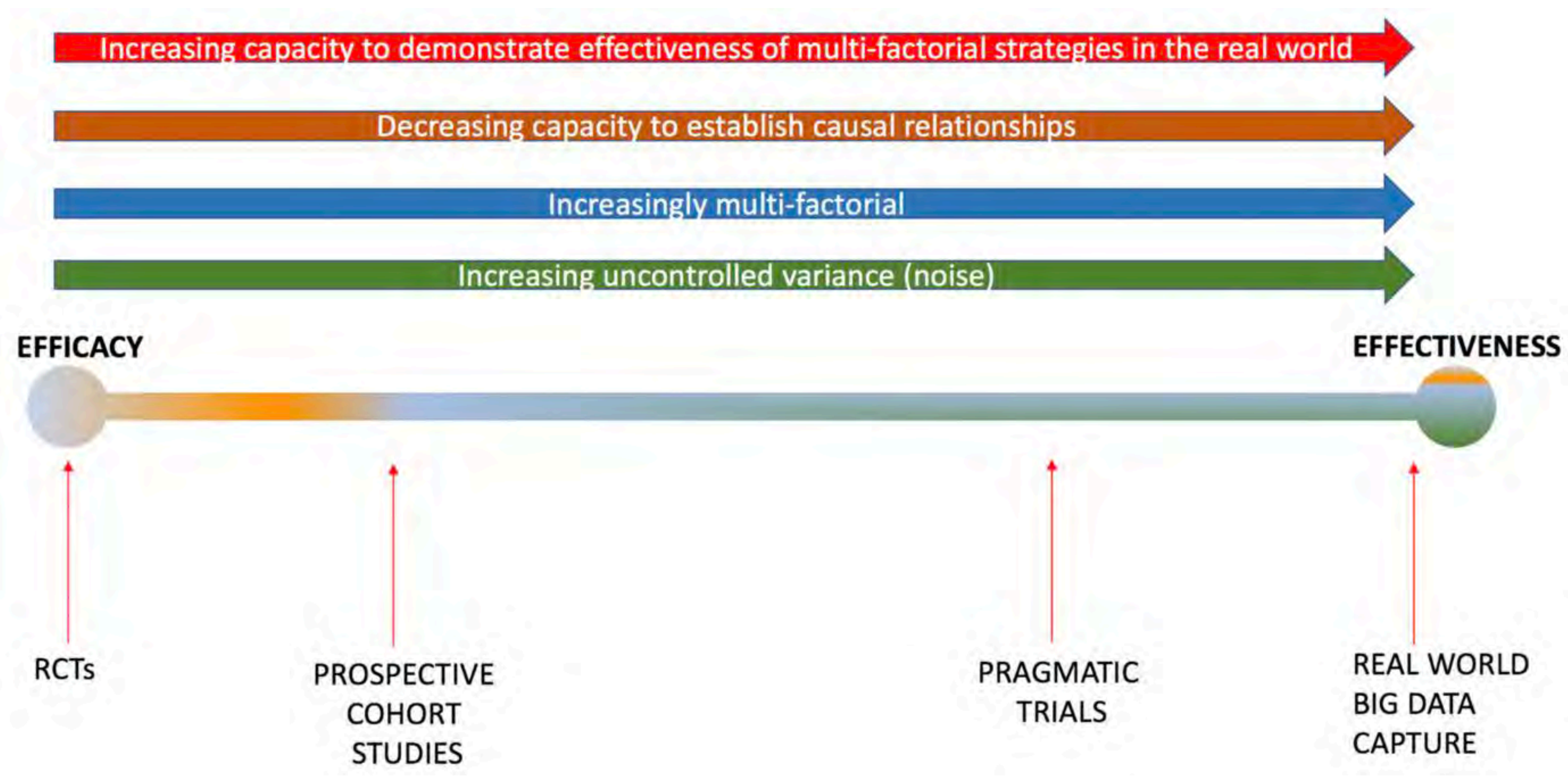
SEVEN KEY DISRUPTORS
OF THE STATUS QUO
1. Upstream
2. Effective self-care
3. Connected
4. Health-centric
5. Participatory
6. Collaborative
7. Community

SOCIETAL AND INDIVIDUAL BENEFITS OF TRANSITION FROM REACTIVE TO PROACTIVE HEALTH AND CARE



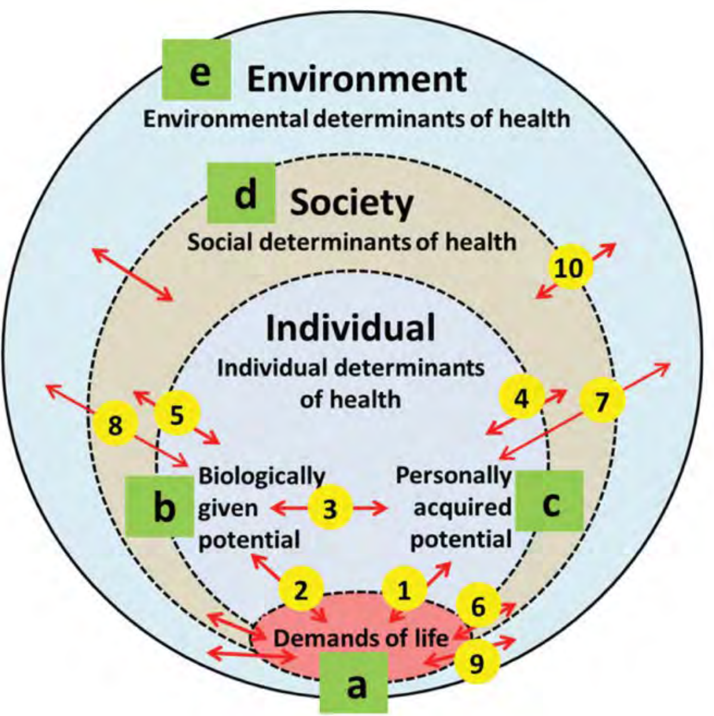
SHIFTING TO THE RIGHT SIDE OF THE EFFICACY-EFFECTIVENESS CONTINUUM

(after Witt et al, 2014)



WHOLE SYSTEM MODELS OF THE 'HEALTH SYSTEM'

The VA Whole Health model consists of 5 components (a-e) and 10 complex interactions (1-10).
Source: Atwood et al, *Fam Med.* 2016; 48(9): 711-719



The Meikirch model consists of 5 components (a-e) and 10 complex interactions (1-10).
Source: Bircher & Hahn. *J Eval Clin Pract.* 2017; 23(1): 222-224.

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NOT PREVENTION OR
MANAGEMENT OF DISEASE

ANH 12 DOMAIN MODEL OF THE 'ECOLOGICAL TERRAIN'

1. Genetic and epigenetic background

2. Glycaemic control and metabolic flexibility

3. Gastrointestinal system and microbiome function

4. Mitochondrial function

5. Immune system function

6. Oxidative stress status

7. Neuroendocrine system function

8. Circulatory system function

9. Toxic burden and biotransformation

10. Structural integrity status

11. Psychological and cognitive function

12. Psychosocial-emotional health status

FROM PATHOGENESIS TO SALUTOGENESIS

Some of the variables in an individual's life that cause imbalances in one or more domains of the 'Ecological Terrain':

- Diet and nutrition
- Physical activity
- Rest and relaxation
- Sleep
- Social connection
- Connection with nature
- Purpose/meaning in life
- Environmental toxins/pollutants
- Radiation sources
- Stress/stress tolerance

3 LEVELS OF ASSESSMENT ACROSS THE 12 DOMAINS

LEVEL	FEATURES	EXAMPLES
SELF-ASSESSMENT	Zero or low cost, no specialized equipment required, symptomology characteristic of dysfunction or imbalance in specific domains	• Glycaemic control: waist to height ratio, blood sugar 'crashes' • Mitochondrial dysfunction: feeling 'tired all the time' • Psychological function: degree of social connection
GUIDED ASSESSMENT	Low cost, but relevance of data benefits from interpretation and guidance from health professional	• Toxic burden: evaluation of domestic chemical and air pollution exposure • GI system and microbiome: Evaluation of food and symptom diary • Psycho-social stress: monitoring of sleep patterns and heart rate variability (HRV) via smartphone app
PRACTITIONER ASSESSMENT	Biomedical and genetic tests	• Genetic and epigenetic background: genetic screening of specific polymorphisms • Mitochondrial function: functional screening, patient history, results of functional testing (blood work, organic acids), mitochondrial function profile • Oxidative stress: Test for oxidised LDL fractions and advanced glycated end (AGE) products, DNA/RNA oxidative damage assays, assay for activity of antioxidant enzymes e.g. glutathione (GSH), superoxide dismutase (SOD), catalase

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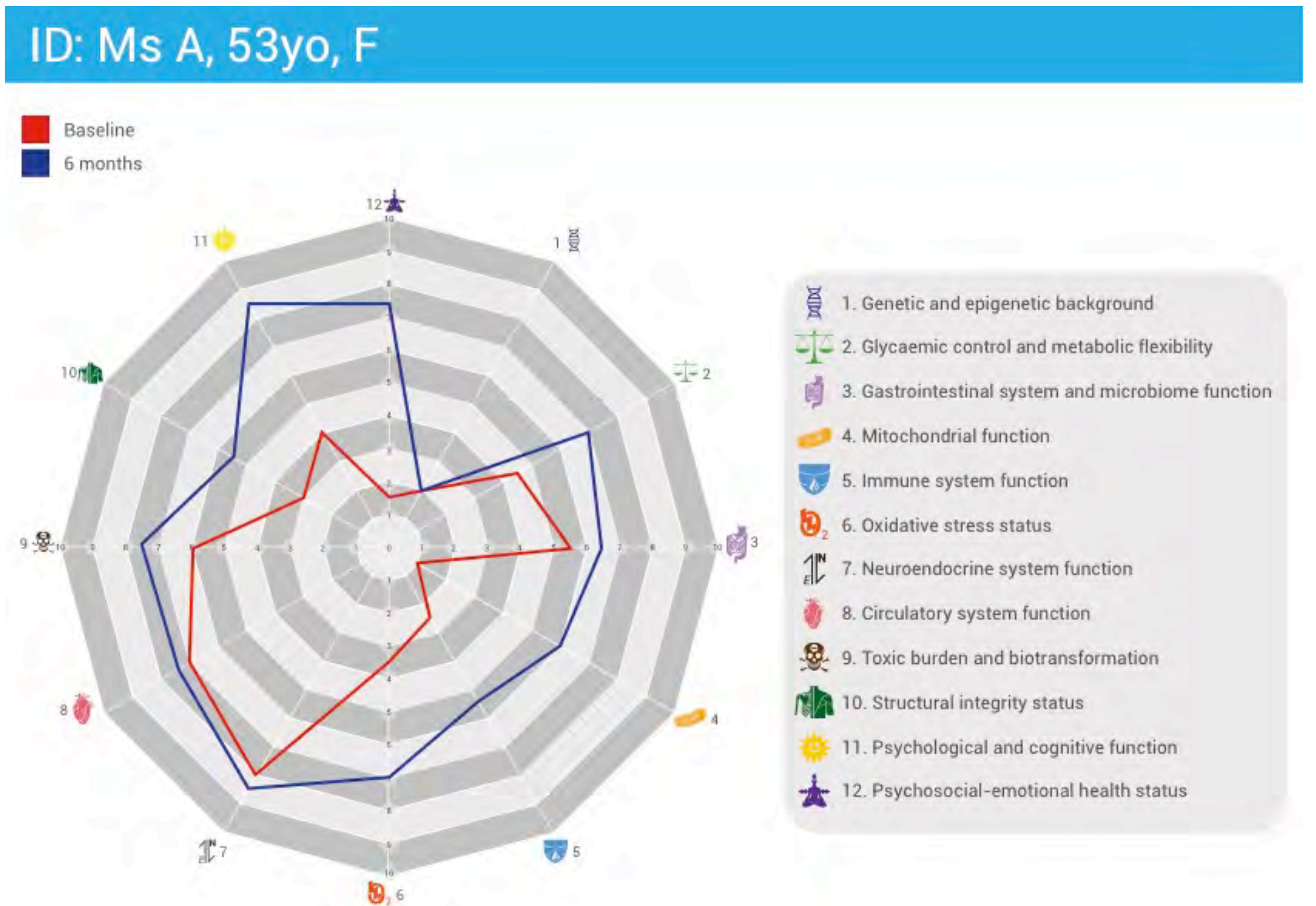
EXAMPLE: INDIVIDUAL ASSESSMENT OUTPUT



Purposes include:

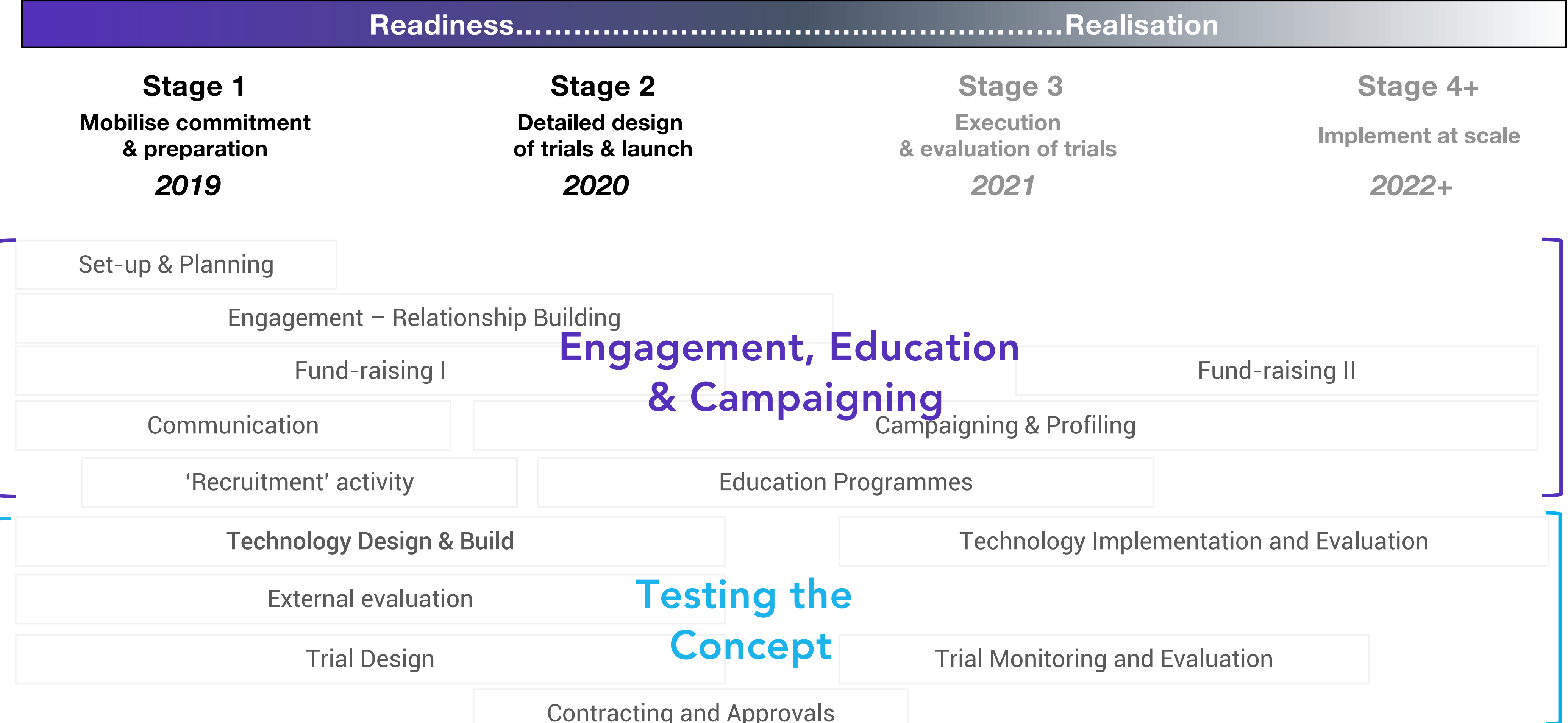
- Tracking by the individual
- Tracking by health and fitness professionals
- Motivation
- Empowerment
- Collaborative and participatory
- Participatory research

10 HALLMARKS OF HEALTH SYSTEM SUSTAINABILITY

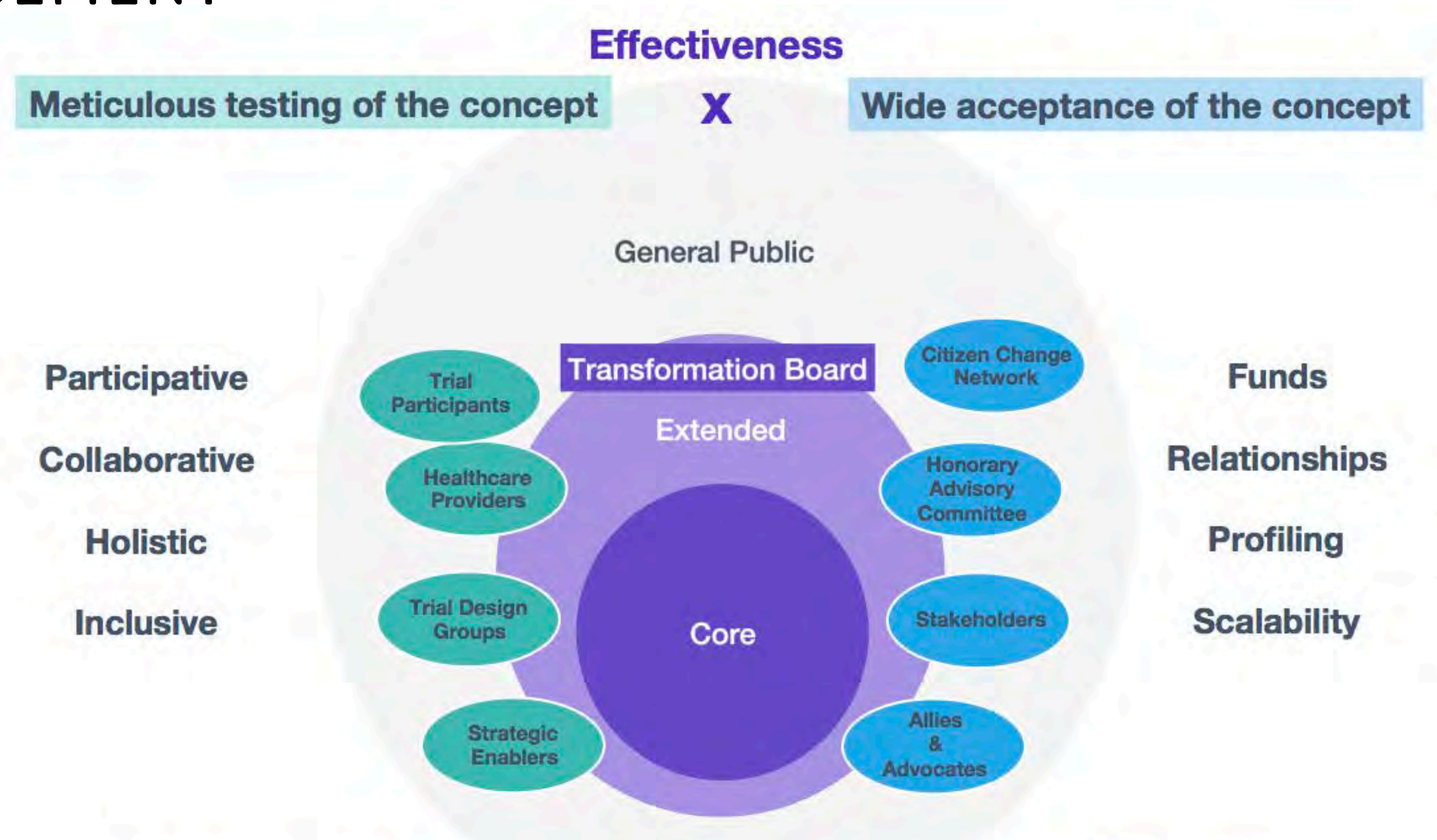
- Each individual needs to interact with wider 'health systems' that meet specific sustainability criteria
- 10 hallmarks of health system sustainability for health guides and providers

Implementation

KEY MILESTONES



CREATING PURPOSEFUL ENGAGEMENT



TRANS-DISCIPLINARY WORKING GROUPS TO DEVELOP CONSENSUS

HEALTH & RESILIENCE EVALUATION

Identify factors, quantitative and qualitative metrics and biomarkers for evaluation of health status and resilience at 3 levels (self-evaluation, guided evaluation and practitioner evaluation)

POLICY & REGULATORY EVALUATION

Identify factors and policy/regulatory measures that may help or hinder improved individual self-care and engagement, as well as improved or reduced practitioner, patient or client collaboration or participation status and resilience at 3 levels (self-evaluation, guided evaluation and practitioner evaluation)

SUSTAINABILITY EVALUATION

Identify factors and metrics that pertain to sustainability of health systems at individual local community regional scales and national scales

ECONOMIC EVALUATION

Identify approaches and methods relevant to evaluation of economic feasibility, cost/benefit assessment and options for 'incentivisation'

SOCIAL & ENVIRONMENTAL EVALUATION

Identify factors. methods and metrics that allow evaluation of net social and environmental impacts, both positive and negative, in a diverse range of settings and environments

PILOT TRIALS ACROSS CLINICAL AND COMMUNITY SETTINGS

Pilot trials in various settings are in the process of being established in the UK to evaluate the effectiveness, safety and sustainability of the collaborative and participatory health models

- Primary care
- Community pharmacy
- Integrative medicine clinics
- Traditional systems of medicine
- Community settings

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TO
HEALTH CREATION
FROM
DISEASE-FOCUSED
HEALTHCARE

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