

# FROM EVALUATION TO POPULATION HEALTH INTERVENTION RESEARCH : A NOVEL APPROACH TO PRODUCING EVIDENCE IN HEALTH PROMOTION



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# OBJECTIVES



- Propose population health intervention research as a fundamental scientific perspective in health promotion and for the study of actions on health inequalities
- Explore the interface between population health intervention research and public health and health promotion delivery systems

# PLAN



1. A niche population health intervention research and how distinct is it from evaluation?
2. Developing a science of population health intervention
3. Matching research and intervention systems for PHIR

# PART I



**A QUESTION OF SCOPE: WHAT IS  
THE DISTINGUISHING NICHE FOR  
HEALTH PROMOTION RESEARCH?**

# OTTAWA CHARTER : AN ACTION-ORIENTED DOCUMENT



- Strong ideological foundations for health promotion: it provides a normative framework for public health\*
- Orientation for action
  - Defines targets for change: the social determinants of health
  - Proposes strategies of action: advocate, enable mediate
  - Suggests values and principles for change processes: participation, empowerment, equity, intersectoral action, holism, sustainability, multiple strategies, contextualism
- No mention on the nature of the proper knowledge base for action

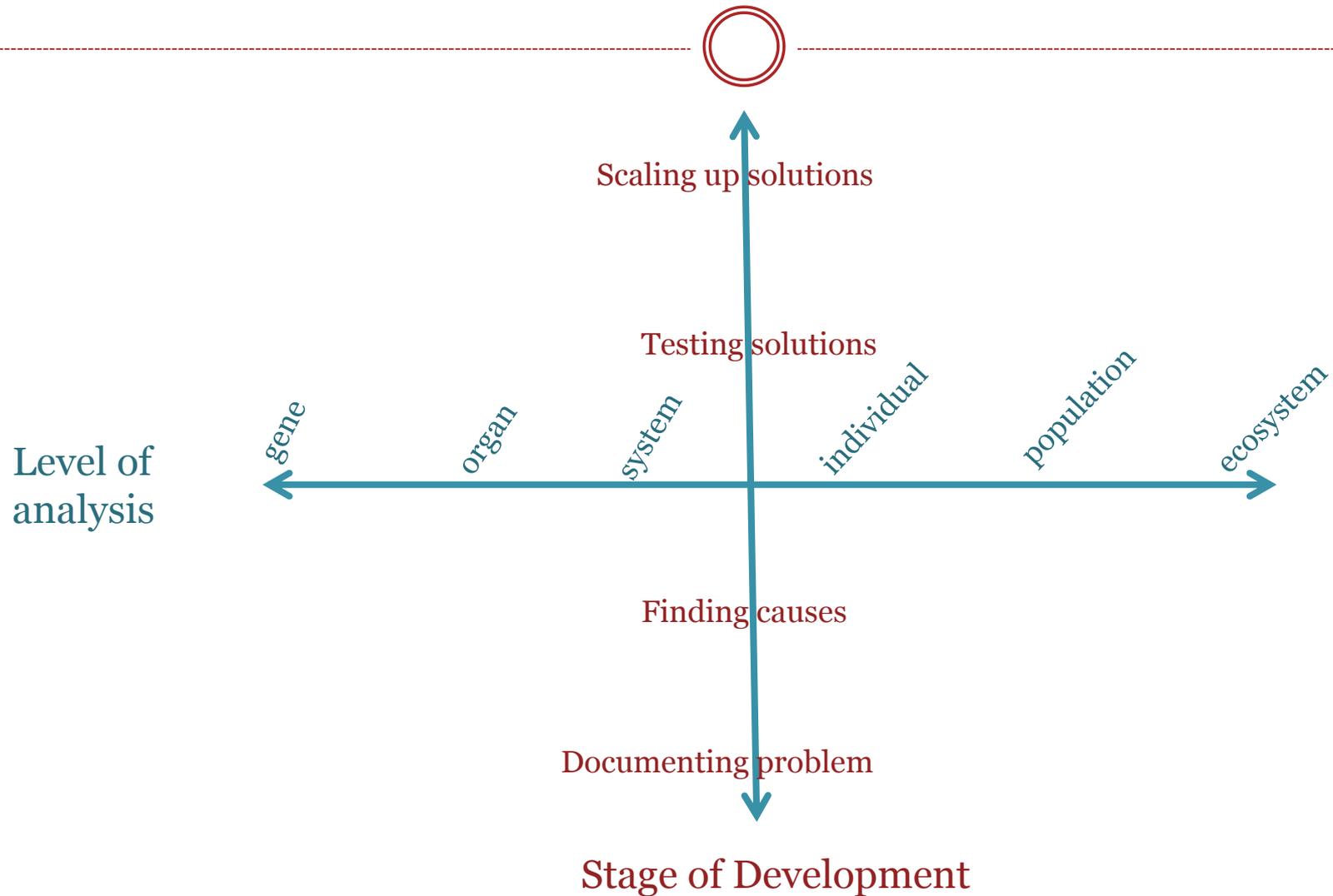
Potvin, L., & Jones, C. M. (2011). Twenty-five years after the Ottawa Charter: The critical role of health promotion for public health. *CJPH*, 102, 244-248.

# WHO'S PROPOSITIONS OF THEMES FOR HEALTH RESEARCH



- Measuring the magnitude and distribution of health problems
- Understanding the diverse causes or the determinants of the problem, whether they are due to biological, behavioural, social or environmental factors
- Developing solutions or interventions that will help to prevent or mitigate the problem
- Implementing or delivering solutions through policies and programmes
- Evaluating the impact of these solutions on the level and distribution of the problem.

# MAPPING THE DOMAIN OF HEALTH RESEARCH



# MAPPING THE DOMAIN OF HEALTH RESEARCH



Scaling up solutions

**SCIENCES OF SOLUTIONS**

Testing solutions

*gene*

*organ*

*system*

*individual*

*population*

*ecosystem*

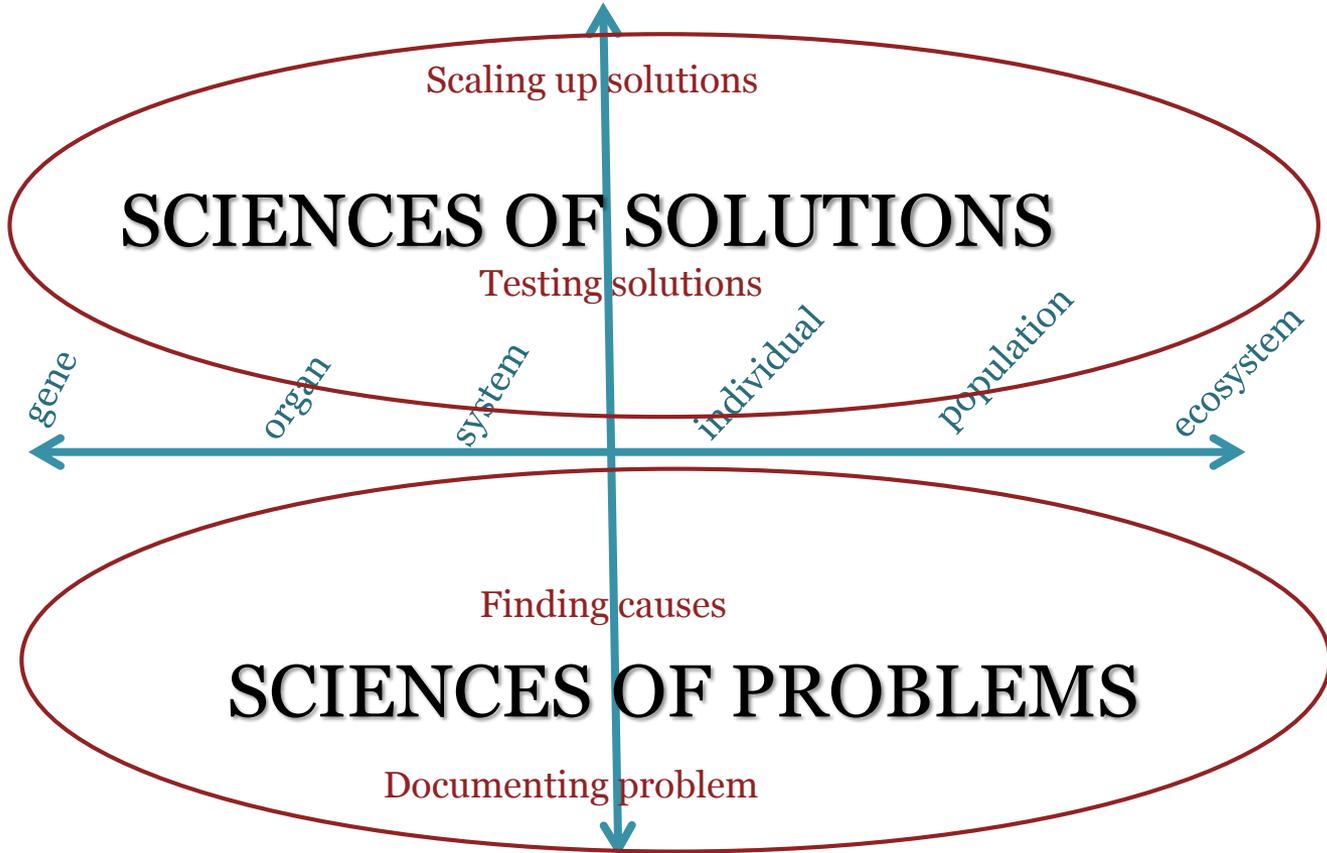
Level of analysis

Finding causes

**SCIENCES OF PROBLEMS**

Documenting problem

Stage of Development



# ESSENTIAL TENSION IN HEALTH PROMOTION



## **NORMATIVE BASE**

Ideological myths  
of health  
promotion

## **KNOWLEDGE BASE**

Scientific myths of  
biomedicine

# IDEOLOGICAL MYTHS IN HEALTH PROMOTION



- Local problems require local solutions for which science (generalisable and cumulative knowledge) and is of little help
- Process is the only think that counts in health promotion interventions: empowerment and participation
- Health promotion interventions are too complex and not amenable to scientific enquiry
- If we have good intentions and listen to people we cannot do wrong

# SCIENTIFIC MYTHS OF BIOMEDICINE



- Knowing the causes of a problem is sufficient to inform remedial action
- There exist a hierarchy of research designs at the top of which is the randomised controlled trial and its variations
- The only effects that count are those that can be related to individual health

# POPULATION HEALTH INTERVENTION RESEARCH



*“Population health intervention research involves the use of scientific methods to produce knowledge about policy and program interventions that operate within or outside of the health sector and have the potential to impact health at the population level.”*

(PHIRIC, cited by Hawe & Potvin, 2009)

# PART II



## **POPULATION HEALTH INTERVENTION RESEARCH**

# POPULATION HEALTH INTERVENTIONS



- Population health is mainly produced by conditions that result from decisions and actions taken by social actors (organisations, institutions), most of whom are situated outside of the health sector
- Population health interventions are coordinated actions to change the conditions that shape population health:
  - Policies : attempts to modify the norms and rules that govern the distribution of resources (power, money and other) at various levels (nation, region, local)
  - Programs: activities and services directed at specific groups to modify the quantity and quality of resources for health
- Health promotion is a form of population health interventions
- Population health intervention is not an individual-level intervention that reaches many people; it intends to shift population distribution of risks ou determinants of health

# WHY PHIR INSTEAD OF EVALUATION



- PHIR CONTRIBUTES TO:
- Construct population health intervention as an OBJECT of scientific enquiry
- Contribute to a science of population health interventions through the development of cumulative and transferable knowledge
- Shift the focus away from the project management function of evaluation

# EVALUATION VS INTERVENTION RESEARCH



<b>Intervention research</b>	<b>Evaluation research</b>
Intervention is often initiated by the researcher, although may be designed in collaboration with practitioners	Intervention under investigation is usually designed by practitioners or agencies
Funded by a research grant	Funded by internal resources
Budgeted according to the cost of collecting information required	Funded as percentage of the cost of the program, e.g.an arbitrary 10% level
Results are destined for the public domain, eg., in peer reviewed journals	Results may be restricted to an internal report by contract agreements
Usually focussed on assessment of intervention outcomes, may also include assessment of process and mechanism of action; bigger budget	Smaller budgets frequently limit enquiry to secondary data sources in relation to outcome, or restrict the evaluation questions to matters of intervention process
Requires ethics approval	Ethics approval not routinely sought

# LATE BREAKING



## Statement on Advancing Implementation Research and Delivery Science

Final draft as of September 30, 2014.

Launched at the Third Global Health Systems Research Symposium in Cape Town.

The Statement was developed by the participants of a series of consultative meetings hosted by the Alliance for Health Policy and Systems Research within the World Health Organization, the United States Agency for International Development (USAID), and the World Bank Group, with the facilitation of the USAID|TRAction Project and Johns Hopkins University.

# THE CAPE TOWN STATEMENT ON ADVANCING IMPLEMENTATION RESEARCH AND DELIVERY SCIENCE



- IRDS is a collaborative enterprise focused on learning and action to improve health in “real world” conditions. IRDS is about using research to improve policies and program delivery, and spreading knowledge gained from implementation.
- IRDS addresses a range of implementation challenges, including complex processes, inefficient use of resources, inequitable allocation of resources, and supply and demand barriers to scaling-up and sustainability.

# CAPE TOWN STATEMENT: A CALL TO ACTION



- **Health policy makers, managers and their organisations**
  - Develop and pursue relevant IRDS agenda
  - Provide mechanisms for integration of IRDS and results in their organisation
- **Funding & development organisations**
  - Increase funding streams available for IRDS
  - Align funding with national and local health priorities
  - Make funding flexible to allow for innovations in practice and research
- **The civil society**
  - Demand increased access to data for IRDS for stakeholders in the health system
  - Engage with all actors in the use of IRDS
  - Ensure accountability of and adherence to ethical standards by IRDS researchers

# CAPE TOWN STATEMENT: A CALL TO ACTION



- **Researchers and academic organisations**
  - Train the next generation of IRDS researchers
  - Promote IRDS and raise the profile of IRDS in performance assessment and promotion criteria
  - Promote the development of theories, methods and knowledge synthesis
  - Promote opportunities for students and faculties to be involved in field work
- **Editors and publishing organisations**
  - Promote publication of IRDS papers
  - Showcase IRDS case studies, including successes, failures, and learning from implementation

# VALID QUESTIONS IN PHIR



- There exist a variety of questions (and variations) that need to be answered by PHIR (science of solutions):
  - What could work: theoretical exploration of potential solutions given actual state of knowledge
  - Could it work: trial of given interventions in controlled conditions with adequate counterfactual
  - Does it work: observation of the chain of effects (proximate, intermediary and distal) that follow an intervention implemented with contextual constraints
  - Is it the best possible intervention: Comparative analysis of the relative values of expected effects in context
  - How does it work: observation of the interactions between context and intervention that produce (or not) the intended chain of effects
  - Is it replicable: observation of an intervention's capacity to produce similar chain of effects in various contexts

# METHODOLOGIES IN PHIR



Knowledge synthesis and theory development

What could work?

Is it the best possible?

Social experimentation

Could it work?

Social observation/  
Natural experiment

Does it work?

How does it work?

Is it replicable?

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Designed for research purposes

Designed for service purposes

# METHODOLOGIES IN PHIR



Aggregate  
context

What could work?

Is it the best possible?

Control for  
context

Could it work?

Take context  
into account

Does it work?

How does it work?

Is it replicable?

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Designed for  
research purposes

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service purposes

# PHIR AND IMPLEMENTATION



RESEARCH ON IMPLEMENTATION SYSTEMS :  
EFFECTIVENESS

Social observation /  
Natural experiment

Does it work?

How does it work?

Is it replicable?

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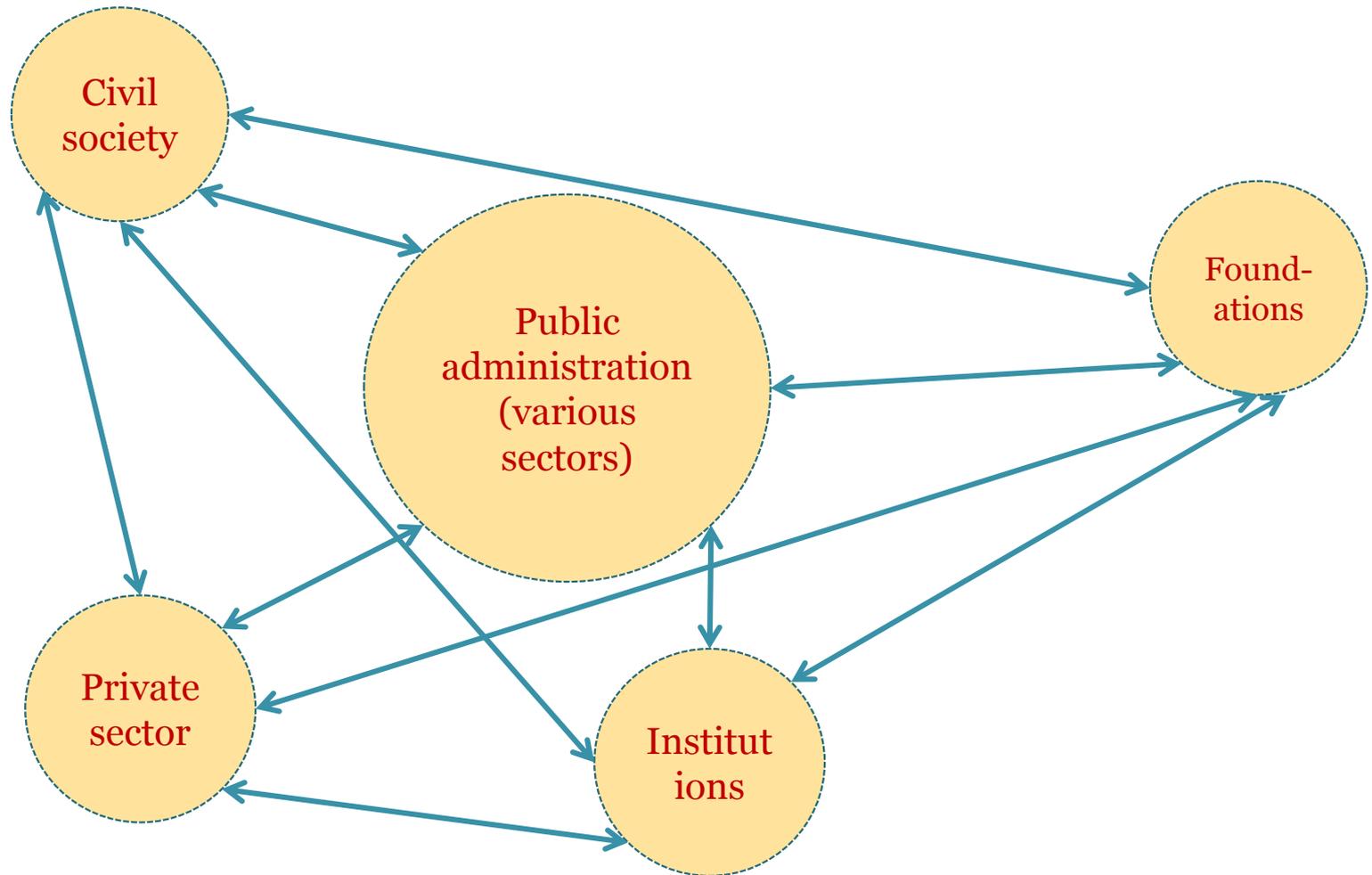
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# PART III

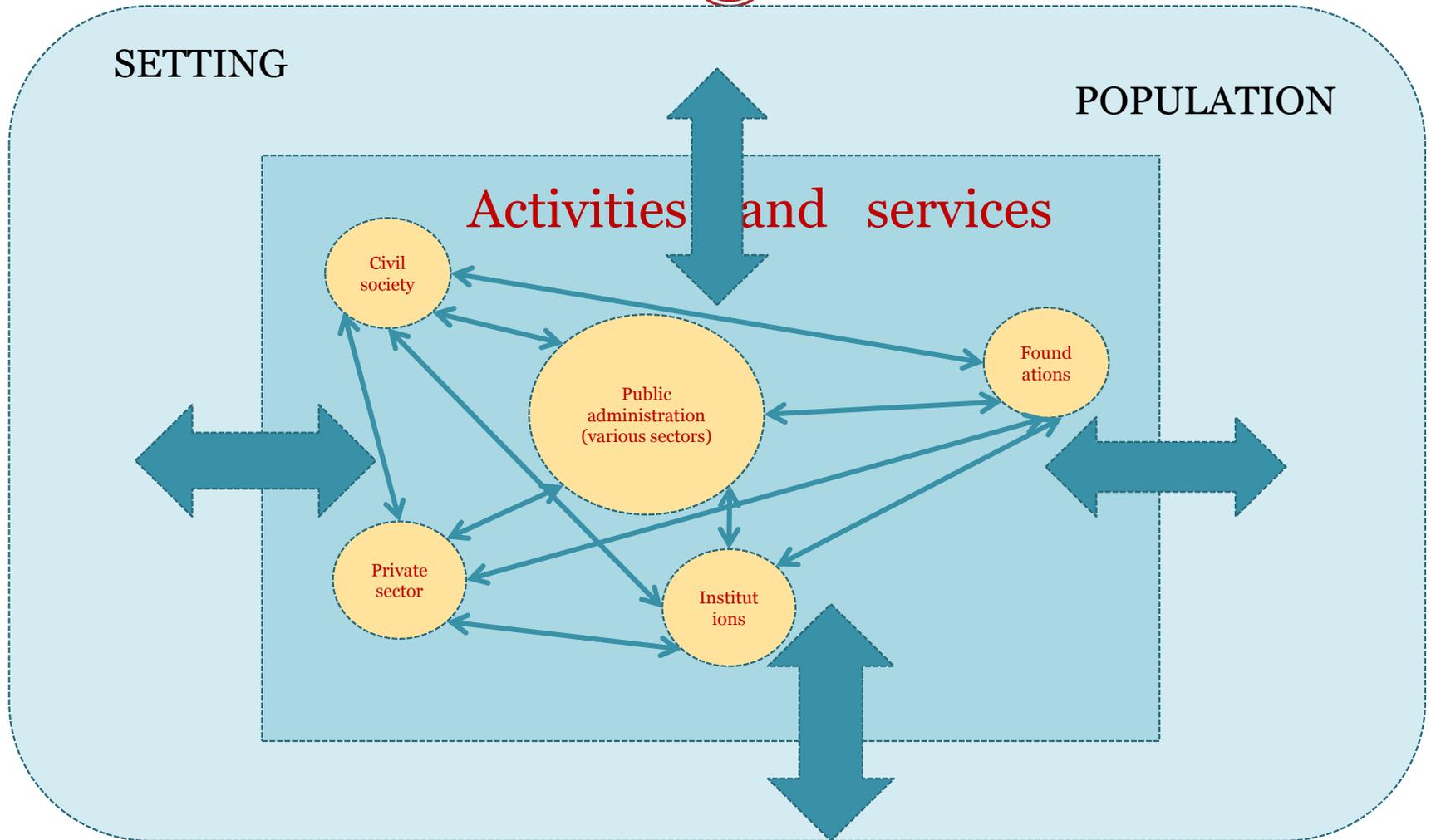


## **RESEARCH AND IMPLEMENTATION SYSTEMS FOR POPULATION HEALTH INTERVENTIONS RESEARCH**

# PHI IMPLEMENTATION SYSTEM: ACTORS



# PHI IMPLEMENTATION SYSTEMS

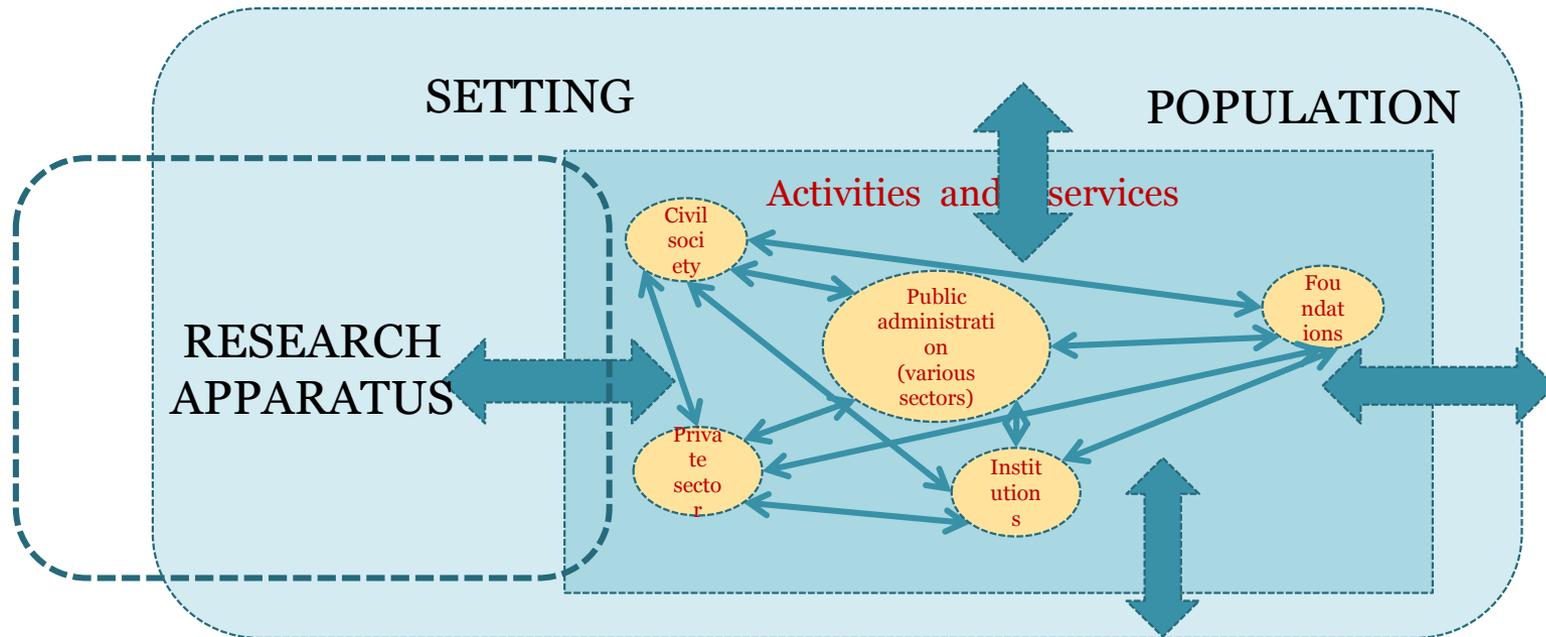


# CHARACTERISTICS OF PHI IMPLEMENTATION SYSTEMS



- Complex systems
- Arbitrary frontiers between systems and context
- Implementation systems are evolving and adaptive systems; they change with time and according to local conditions

# PHIR AND IMPLEMENTATION SYSTEMS



# CHARACTERISTICS OF PHIR ON IMPLEMENTATION SYSTEMS



- All components of the system [actors, collaborative arrangements, activities and services, impacts, effects] are of potential interest for research
- Necessary interactions between the research apparatus and the implementation system; these interactions need to be problematized in the research project: continuum of participation
- Necessary integration of a multidisciplinary perspective to capture the complexity

# CONCLUSION



1. Necessity of developing a knowledge base for population health intervention on « how to »
2. Population health interventions can be conceived as interventions to change population health and its determinants
3. A science of population health interventions requires the development of collaborative relationships between implementation systems and research