# ACHIEVING A SUSTAINABLE HEALTH SYSTEM - A CONCEPTUAL FRAMEWORK FOR HOLISTIC DECISION MAKING

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**Abstract**:

Sustainability has since the late 1990s dominated the debate on health system. The current economic and financial crisis is currently adding to the already existing concerns of accelerating costs and increasing doubts regarding the system capacity and resources in meeting the health services needs of aging population. In this debate health system and health care system are often used interchangeably. The health system has therefore been approached from the traditional view, which equates the level of health with the quality of medicine. In the traditional view, the improvements in health status are achieved through the public health care and individual care provided by public health professionals, medical practitioners, nurses and hospitals (acute treatment).
This paper challenges the traditional view of health system and explores its components. It differentiates between health system and health care system.

A definition of a sustainable health system is proposed based on the interconnectedness of the components of a health system. A conceptual framework is then proposed for holistic decision making towards achieving a sustainable health system.

**Keywords:** Sustainable Health System, health system, health care system, traditional view of health system (traditional health system).

## Introduction

The accelerating increase in health care spending has triggered debate in many countries around the world. This debate has happened from many perspectives, including political ideologies (e.g. right versus left), universal health care versus private or combination of public funded and private. This paper argues that although the health care spending is a good indicator that provides evidence about something going wrong with the health care system, it shouldn't be at the center of all debates on the future of health systems and health care systems, including health system/health care systems sustainability.
First of all it is already misleading to use health system and health care system interchangeably. The health system defined as "all activities whose primary purpose is to promote, restore or health" (World Health Report 2000) is much broader than health care system.

Lalonde (1974) differentiated between health care system (comprised of the system by which personal health is provided) and health system or "health field", the system comprised of all matters affecting health.
The health system is therefore an articulation of all the organizations, institutions, and resources that are devotes to the production of health interventions with formal and informal care as well as related practices outside of the traditional health area (Ngana 2008).
Adding to the misleading boundary of the health system, the debate on the sustainability of the health system has often focused on the financial aspect, ignoring the multidimensional aspect of the sustainability concept. Another misunderstanding in this debate has been around considering sustainability either as a "journey" or a "destination".

The absence of common understanding and definition of key concepts (e.g. health care system, health system, sustainability…) and the induced traditional form of analysis taken (separating health care system from health system; financial aspect from other aspects…) did not meet expectations.

Systems thinking principle will be used to propose a definition of a sustainable health system. A sustainable health system will be defined here, as a "destination". The fundamental difference of System thinking from traditional forms of analysis or traditional view about health system will support the process for required paradigm shift towards a sustainable health system. Instead of focusing on the traditional health care system, using traditional forms of analysis i.e. breaking it into constituent parts, a focus will be on the interaction of the traditional health care system with the other constituents of the health system (i.e. the health field). This interaction along with the other interactions among the constituent parts of the health system will constitute the base of the proposed conceptual framework that will support articulated dynamic decision-making process (meta, macro, meso and micro decision levels) toward attaining the destination of sustainable health system.

In developing the proposed conceptual framework for holistic decision making, this paper introduces both conceptual and operational health system. The conceptual health system is associated with intrinsic goals while operational health system that could also be related to the concept of "health action" is associated with instrumental goals.

## Methodology

The methodology used here the Theory of Enformed Systems (TES) is rooted in Systemics, which is the branch of science dealing with holistic systems (Watson, Schwartz and Russek: 1998). The health system (or health field) and the system of decisions will be considered as holistic systems. Systemics will help in providing a broader perspective on the study of these systems. The TES plays a critical role in forcing disorganized components of a system towards a better articulation and in becoming better organized. It is therefore expected that applying the TES on the health system and its

system of decisions would have similar outcome i.e. guiding towards having their components better articulated.

The four basic characteristics of Systemics are as follows:

- Transdisciplinary scope: the whole-making, the holistic tendency, or Holism is always omnipresent (Smuts 1926).
- The organization of wholes is hierarchies of 'holons' ('holarchies'): organizations or systems are multi-levelled hierarchies of semi-autonomous sub-systems (or sub-wholes) of a different level of arrangement. Holon refers to intermediary parts that relative to their sub-ordinates in the hierarchy function as self-contained systems; relative to their super-ordinates as dependent components (Koestler 1967).
- The study of systems is conceptualized as fundamental to all scientific disciplines. The general theory of systems is based on the idea that "wholes are more than sum of parts": "General systems theory's subject matter is formulation of principles that are valid for systems in general, whatever the nature of their component elements and the relations or 'forces' between them" (Bertalanffy 1968).
- The development of Systemics is anticipated in the concept of "wholeness science", which includes the prevailing "separateness science" as a "limited domain". "As evidence for the need for the Wholeness science, the following areas are not covered by the prevailing paradigm, but would be by a science of wholes: the ultimate nature of things; the self-organizing behavior of organisms; consciousness and free will; the concept of self; nonlocal causality; and altered states of consciousness. (Harman 1994)

The principles of the TES are:

1. *"A holistic system is the sum of its parts plus one essential component: a map in spacetime of the relationships among these parts.*

2. *This map is an "organizing field" through which enformy organizes physical entities to correlate with the spatio-temporal nonrandomness inherent in this field.*

3. *The organizing field itself possesses certain fundamental properties that establish and maintain the system's integrity.*

4. *These properties, in turn, account for the fundamental aspects of all coherent systems.*

5. *The properties of the organizing fields also allow them to cohere in spacetime, creating nonlocal, atemporal interactions among collective systems"* (Watson 1998).

## Health System (Health Field) - From "disorganized to organized components: Applying the TES methodology.

The definition and the boundaries of the health system constitute the first challenge in all attempts of its analysis. This paper will introduce two perspectives in the definition of health system, including conceptual health system and operational health system. These two perspectives are respectively associated with intrinsic and instrumental goals of the health system.

### Definitions and Conceptual process

**Intrinsic goals**: is defined based on the following criteria:

- Possibility of raising the level of achievement of the goal, while holding the level of all other intrinsic goals unchanged. This intrinsic goal should be at least partially independent of all others.
- Raising the level of achievement of an intrinsic goal is desirable. If this isn't, it is probably an instrumental goal.

**Instrumental goals**: is defined as goals whose achievement is really a means to another end.
There is a chance that a goal that does not meet the intrinsic goal criteria is an instrumental goal.

**Health:** "a state of complete physical, mental, and social wellbeing, and not merely the absence of disease or injury." (WHO 1948)

**Intrinsic goals of health system:** the main goal that defines the health system is to improve the health of the population. Improving the health of the population is the intrinsic goal of the health system. The health status is impacted by the social and economic environment (50%); health care system (25%); physical environment (10%) and Biology/Genetic endowment (15%) (Canadian Institute for Advanced Research 1997; cited by The Conference Board of Canada).

**Conceptual health system**: associated with the above intrinsic goal of the health system, is the interconnectedness of the components that impact the health status, including physical, social and economical environment; health care system; and biology/genetic endowment.

**Instrumental goals of health system:** In order to achieve intrinsic goals there is a need to identify instrumental goals for example: access to care, community involvement, innovation, sustainability…

**Operational health system**: associated with the above instrumental goals of health system, is the articulation of the instrumental goals as well as their achievement towards achievement the intrinsic goals of the health system.

**Sustainability**:
*A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong if it tends otherwise. Aldo Leopold, (Sand County Almanach, 1949)*

**Sustainable health system**: proposed definition
A health system will achieve sustainability or become sustainable when it aims at preserving the integrity of the conceptual health system through the achievement of health system intrinsic goals.

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