



## VISION AND STRATEGY FOR HEALTHCARE: COMPETENCE IS A NECESSITY

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**Well-designed, evidence-based vision and strategy are fundamental requirements for successful healthcare. This paper reviews previous comprehensive healthcare strategies (Institute of Medicine statement, Value-based healthcare, and Triple aim strategy; all from the United States) published in peer-reviewed scientific journals, and presents an alternative proposal for healthcare vision and strategy. The proposed strategy includes, as prerequisites, competence of staff, healthcare leaders and leaders of health policy, and a well-functioning healthcare system. It is necessary to optimize the financing, reimbursement and incentives, organization, and regulation of the healthcare system. Strategic means to successful healthcare are to improve staff competence, implement current scientific evidence, document clinical and system-related issues, improve quality, and carry out benchmarking with peers. The vision for healthcare is to provide continuous improvement in services, in terms of accessibility, quality, fairness, effectiveness, safety and efficiency, to the patients and to the population. The new proposal shares many issues with strategies published previously. This paper sets out the prerequisites for the proposed strategy. A common vision, high levels of integrity, and a commitment to provide the best for patients and the population are of fundamental importance. Competence at all levels of healthcare is a necessity.**

*Key words:* healthcare; public health; vision; strategy; accessibility; quality; equity; effectiveness; safety; efficiency; competence; evidence-based medicine; benchmarking, value based healthcare, Triple Aim, IOM statement.

Accepted Apr 16, 2020; Epub ahead of print Apr 29, 2020

J Rehabil Med 2020; 52: jrm00061

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Plenty of literature has been published on healthcare strategy (1). Comprehensive strategies published in peer-reviewed scientific journals allow a forum for scientific debate about the preconditions, means and aims of the strategy proposals. Considering the importance of a strategy for healthcare, there is a need for a generic framework for the most appropriate healthcare strategy, in order to inspire and encourage discussion of the pros and cons of each proposition in the scientific forum.

Definitions have been provided for means and goals in healthcare strategies. The Institute of Medicine (IOM) strategy proposes 6 main outcomes of healthcare, and

### LAY ABSTRACT

Three influential frameworks for healthcare strategy have been presented in peer-reviewed medical journals: the Institute of Medicine statement, the Value-based healthcare, and the Triple aim strategy; all from the United States. The present paper sets out the prerequisites, vision and means for achieving successful healthcare. Prerequisites comprise competence of staff at all levels of healthcare and a well-functioning healthcare system. The vision is to continuously improve impacts in 6 categories: accessibility, quality (medical, patient centeredness, processes), equity, effectiveness, safety, and efficiency (cost-effectiveness). The means for pursuing the vision include improving competence, implementing current scientific evidence (e.g. evidence-based medicine), documenting and improving quality of services, and benchmarking with peers. The present strategy adds to previous ones the competence of staff, and competence of leaders at all organizational and health policy levels as a necessity for a successful healthcare strategy.

10 general principles for how to achieve these outcomes (2). In the Value for healthcare strategy from the United States the focus is on assessing and promoting the value (benefits in relation to costs) created by healthcare for each major medical condition (3). The Triple Aim strategy from the United States aims to improve the experience of care and health of populations, and reduce per capita costs. The means include enrollment of an identified population, a commitment to universality for its members, and the existence of an organization (an “integrator”) that accepts responsibility for that population (4).

The primary aim of this paper was to set out a proposal for a healthcare strategy and vision, based on previous studies on how to assess clinical and system-level impacts of healthcare. The secondary aim was to review the scientific literature for peer-reviewed papers presenting a comprehensive healthcare strategy, and to compare these strategies with the proposal presented in this paper.

### METHODS

The strategy for healthcare proposed here is based on the author’s previous work on means to improve the performance of healthcare through the concept of real-effectiveness medicine (5), and on the ways to assess impacts of healthcare through randomized controlled trials (RCTs) or observational benchmarking controlled trials (6, 7). In addition, papers on how to assess the impact of system-related interventions (system impact research) and the impact of clinical interventions (clinical impact

research) were considered. In these papers 6 impact categories were identified: accessibility, quality (of processes), equity, effectiveness, safety and efficiency (cost-effectiveness). These 6 impacts create the vision for healthcare presented in this paper (8, 9). The concept of real-effectiveness medicine provides the strategic means for pursuing this vision. The prerequisites for successful healthcare are elaborated, based on the papers cited above on how to promote best impact in ordinary care and how to assess the impacts achieved.

A literature search of PubMed and Web of Science databases for eligible articles was undertaken using the key words healthcare, public health, vision, and strategy.

## RESULTS

Fig. 1 outlines the proposed strategy for successful healthcare: the prerequisites, the means and the vision.

### Prerequisites

The prerequisites for successful health (and integrated social) care include competence of frontline staff and competence of persons leading the healthcare organizations and the health policy, as well as a well-functioning healthcare system (Fig. 1). Fig. 2 illustrates the prerequisites at the frontline staff level, at the organizational level, and at the national level.

The role of staff is crucial for any impact of healthcare, because all impacts are created at frontline in the interaction between healthcare personnel and patients.

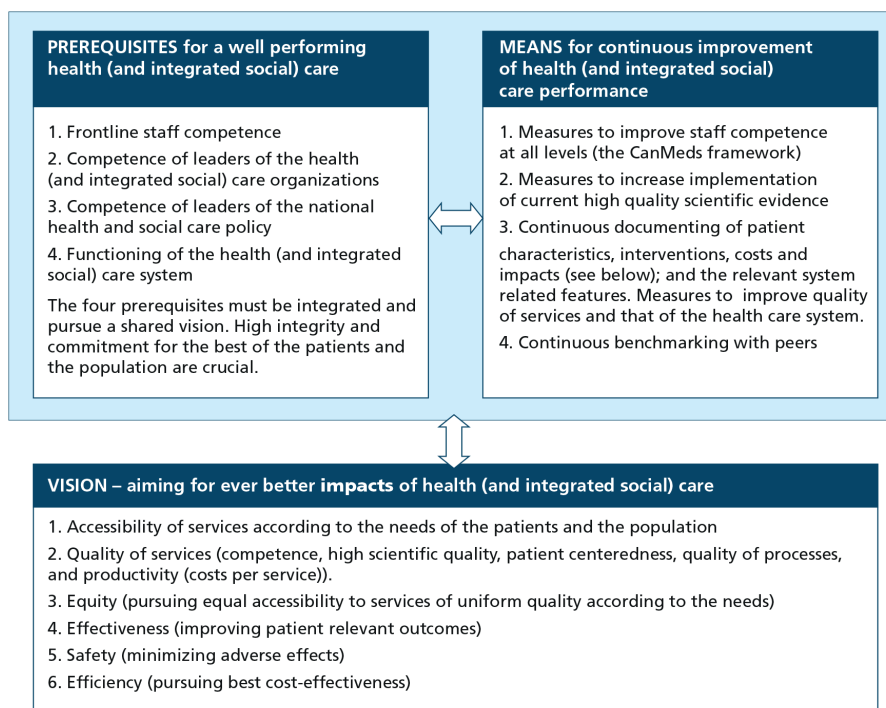
This interaction includes patients as active subjects with their values and preferences. At the frontline staff level, the prerequisites are:

- Ability of staff to assess the individual patient’s need for examinations (causal factors, prevention, diagnosis, disabilities, participation), and need for medical interventions and rehabilitation (degree of urgency, need for resources and staff competence) throughout the clinical pathway. The need is dependent on the healthcare system’s ability to help the patient, i.e. the ability of the healthcare system to help is a necessary constituent of the need in the context of healthcare.
- Ability of staff to provide high-quality services according to the patient’s recognized need: prevention, diagnostics, medical interventions, and rehabilitation throughout the clinical pathway.

At the level of leaders of the healthcare organizations and leaders of the health policy, the prerequisites are:

- Competence in leadership, which includes the ability to optimize the healthcare systems and the public health systems, ability to communicate the grounds and justification for the decisions, and ability to motivate the staff to implement the strategy.

At the level of the healthcare (and integrated social care) system, competent and fair actions to optimize the system towards the vision are needed in: (i) financing, (ii) reimbursement and incentives, (iii) organizational



**Fig. 1.** Proposed vision and strategy for healthcare. The prerequisites for a good performance are related to competence of staff at all healthcare levels and to a well-functioning healthcare system. The vision is to pursue ever better impacts, which include 6 mutually associated categories. The means are: increasing staff competence, implementing best current evidence (e.g. by utilizing evidence-based medicine), improving quality and benchmarking with peers.

<b>I Requirements for performance at frontline staff level (non-leading positions level; all personnel of any health care provider)</b>
<ol style="list-style-type: none"> <li>1. Ability of the staff to assess the individual patient's need for examinations (causal factors, prevention, diagnosis, disabilities), medical interventions and rehabilitation (degree of urgency, need for resources and competence) throughout the clinical pathway. High integrity and devotion.</li> <li>2. Ability of the staff to provide high quality services: prevention, diagnostics, medical interventions and rehabilitation throughout the clinical pathway. High integrity and devotion</li> </ol>
<b>II Requirements for performance in leading of the health and social care (subnational level; districts, hospitals, health care centers, units)</b>
<ol style="list-style-type: none"> <li>1. High competence in leadership. High integrity and devotion. Ability to communicate the grounds and justification of the decisions and to motivate the people to accomplish the strategy.</li> <li>2. Wise and fair (maximizing the prerequisites and impacts of health care) actions: a) regulatory decisions; b) decisions on allocation of resources.</li> <li>3. Ability to generate a well-functioning local health care system and public health system.</li> </ol>
<b>III Requirements for performance in leading of the health and social care policy (nationwide level; politicians, ministries)</b>
<ol style="list-style-type: none"> <li>1. High competence in leadership. High integrity and devotion. Ability to communicate the grounds and justification of the decisions and to motivate the people to accomplish the strategy.</li> <li>2. Wise and fair (maximizing the prerequisites and impacts of health care) actions: a) legislative and regulatory decisions; b) decisions on allocation of resources between the regions; c) decisions ensuring sufficient resources to the health and social care in general.</li> <li>3. Ability to generate a well-functioning national health care system and public health system.</li> </ol>

**Fig. 2.** Prerequisites at frontline staff level, organizational level and national level.

issues, (iv) legislation, regulations and accreditation, (v) allocation of resources within and between disciplines and regions, (vi) education and research, (vii) other measures, including cooperation with organizations and associations pursuing health of patients and the population (9).

The healthcare system and health policy must also pursue continuous improvements in public health. The public health pyramid framework, proposed by Thomas Frieden, includes 5 levels of public health actions (10, 11). Actions targeting the system level, such as changing the context (i.e. smoke-free restaurants, or healthy drinking water in low-income countries), and those national efforts that reduce socioeconomic differences, are considered to have the greatest impact on population level (10, 11).

High integrity and commitment to providing the best for the patients and the population at all levels of the healthcare system, and among the payer organizations, are necessary for a successful performance (5).

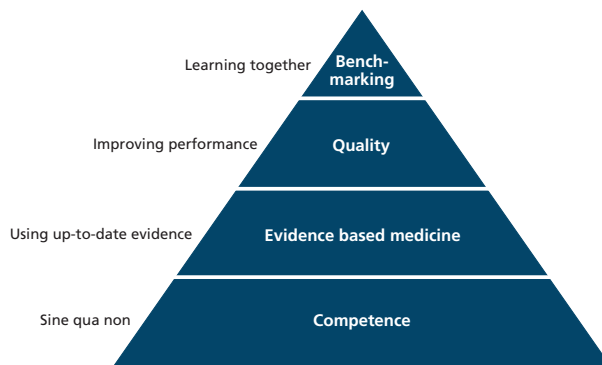
*Means*

The means for how to improve performance is based on a previous paper on real-effectiveness medicine and is positioned on 4 levels (Fig. 3) (5). These 4 levels share a common denominator, the PICO (Patient, Intervention,

Control intervention, Outcome) concept. This concept should be used in clinical practice, in assessing and implementing evidence, in documenting clinical practice and in benchmarking. Thus, all improvement activities should be based on a well-defined patient group.

The first level includes continuous improvement in competence of healthcare staff at all levels, utilizing the CanMEDs framework (12).

The second level consists of implementing the up-to-date scientific evidence, particularly from RCTs, systematic reviews, health technology assessment (HTA) reports, clinical guidelines, and from the observational



**Fig. 3.** The 4 levels of the real-effectiveness medicine framework to optimize the value of healthcare.

effectiveness studies: the benchmarking controlled trials (BCTs) (7). Avoiding waste is a responsibility of all, and the burden to prove effectiveness lies on those who provide the health services and on organizations that pay for them.

The third level includes standardized documentation of healthcare performance at various levels, and continuous quality improvement and evidence implementation measures based on performance data (5). Optimally, the performance of the whole clinical pathway from primary to secondary or tertiary care should be assessed, as well as the relevant system-related features.

The fourth level includes benchmarking (learning from the best practices of peers) between treatment providers (5). Co-operation with associations and organizations striving to improve the health and welfare of the patients and the population are also needed.

### *Vision*

The vision of healthcare is to continuously improve impacts for the patients and the population (Fig. 1). The term “impact” refers to all the effects caused by the interventions, and includes 6 categories: accessibility, quality (medical and patient perceived, processes), equality (of obtaining services of uniform quality), effectiveness, safety (occurrence of adverse effects) and efficiency (cost-effectiveness). Each impact category includes generic and specific outcomes.

### *Healthcare strategies published in peer-reviewed scientific journals*

A literature search of peer-reviewed journals found 3 healthcare strategies that were already recognized by the author when starting the study: the IOM statement (2), the Triple Aim strategy (3), and the Value strategy (4).

The IOM statement, published in 2001 considered it mandatory that all healthcare constituencies should share a common vision of the 6 aims for improvement: safe, effective, patient-centred, timely, efficient, and equitable healthcare (2). Ten general principles were proposed to inform efforts to redesign the health system. These included continuously healing relationships, customization according to patient needs and values, self-control by the patient, shared decision-making and evidence-based decisions, safety, transparency, anticipation of needs, decreasing waste and active collaboration between institutions. For changing the healthcare system structures and processes, changes were suggested in 4 broad areas: applying evidence to healthcare delivery, using information technology, aligning payment policies with quality improvement, and preparing the workforce for the transition to a new system. In the value strategy proposed by Porter, value is produced by providing the best outcomes

at the lowest overtime costs (13). Measurement of health outcomes over full cycle of care for a medical condition should become mandatory for every provider and for every medical condition (4). The emphasis is on health outcomes rather than on process measures. The means for increasing value include reorganizing healthcare services and reimbursement systems, having healthcare providers compete for patients based on value, using electronic medical records to support integrated care, and increasing patient engagement. Integrated practice units are needed, which encompass all the skills and services required over the full cycle of care for each medical condition. The alignment of everyone in the system around a common goal for doing what is right for the patients is a necessity (14).

The Triple Aim strategy is based on improving the experience of care, improving the health of populations, and reducing the per capita cost of healthcare (3). The preconditions are specifying a population of concern, a commitment to universal coverage, and an integrator organization which takes responsibility for the 3 aims. The integrator’s role includes partnership with individuals and families, redesign of primary care, population health management, financial management, and macrosystem integration.

## DISCUSSION

The aim of this paper was to generate a proposal that includes the prerequisites for a well-performing healthcare system, which provides the means by which to continuously improve performance, and which includes a vision, i.e. the impacts which the healthcare system should pursue. The barriers for implementing the strategy are not considered, because they are context dependent (3).

### *Prerequisites*

Frontline staff creates the value together with the patients. There are 3 questions facing the professionals at the frontline. The questions when encountering a patient are: (i) What is the probable illness?, (ii) How does it interfere with the patient’s life?, and (iii) In what ways healthcare (and integrated social care) can help the patient and how urgently should one act. To answer the latter question, one requires knowledge of the benefits and harms of the treatment options. Patient’s views of the treatments and its consequences are crucial, and assessment of need necessitates a good interaction between the healthcare professionals and the patient. For example, mastectomy due to breast cancer may be life-saving, but will not suffice; one must also consider the psychological and sociological

issues facing a patient who has had a mastectomy, and help her to cope. The International Classification of Functioning, Disability and Health (ICF) framework is suggested for operationalizing the needs related to patients' disabilities and inabilities to participate in society (15). Ability to make these inferences is a prerequisite for all healthcare systems, and success is dependent on the competence of the frontline healthcare personnel to meet these requirements (Fig. 1). Ability of the staff to provide high-quality services in an integrated fashion throughout the clinical pathway is obviously as important as the comprehensive assessment of patients' needs.

In addition to the abilities of the staff, appropriate facilities and a well-functioning healthcare system are a necessity for favourable impacts. Leaders of the healthcare organizations and health policies carry the main responsibility for appropriate facilities, for optimal functioning of the system, and for implementation of the strategy. At national policy level leadership is also needed in regulatory and legislative measures, and in making prudent decisions about the amount of resources that should be directed to healthcare, and how these resources should be allocated. Therefore, great leadership and commitment should be pursued for the best of the patients and the population (Fig. 1). Donald Berwick has emphasized the importance of ethics in the next "era 3" of medicine (16).

Ever better performance must occur through integrated actions between frontline staff and leaders of the healthcare organizations and healthcare policy. All should share the same vision and focus on optimizing success at the frontline of work with patients.

### Means

The fundamental determinant of the ability to help the patient is the competence of the staff. In the CanMeds competence framework, medical expertise is the core issue, but there are 6 other essential categories: ability to communicate, co-operate, manage, advocate health, understand scientific papers, and act in a professional and ethical manner (17). Partnership with patients and their families is important. Furthermore, the need for competence extends to persons without direct patient contact, particularly to the managers and leaders, from single units to the level of national health policy.

Evidence regarding the effectiveness of interventions is increasing at a speed that no individual can follow: more than 75 RCTs and 11 systematic reviews were published every day in 2010 (18). Nevertheless, treatment should be based on as up-to-date knowledge as possible. The second strategic means to advance the impacts of care is to improve quality of services and effectiveness by implementing the current evidence

(19). The evidence on efficient ways to implement the best evidence should be exploited (20–22). There is evidence that the RCTs published in the leading medical journals do not comprehensively describe patient features that are not directly related to the actual biomedical disorder (23). Furthermore, the systematic reviews seem to report poorly the essential clinical factors of the randomized controlled trials, which greatly hampers the generalizability of their findings (24). Obviously, within evidence-based medicine priority should be given to all efforts to increase the (validity and) generalizability of the evidence base.

The third strategic means is sufficient documentation and evaluation at the individual patient level. Documenting outcomes of care is important, but not sufficient, as outcomes depend on patient characteristics and interventions. Without knowing all the major causes of outcomes, it is not possible to make valid comparisons between healthcare providers (6). Patient characteristics, interventions, outcomes, and use of services and their respective costs, as well as relevant system-related factors must all be considered in the evaluation.

In real-time, the only way to assess the impacts of healthcare services is benchmarking with peers treating similar patients. Uniform outcome assessments in each patient group are necessary to make these comparisons (4). One needs to determine, patient group by patient group, the essential data on patient characteristics, diagnostic and treatment procedures, and outcomes. All documentation has to be made on an individual patient level, to allow meaningful comparison between treatment providers (6).

The healthcare system should be developed towards ever better cost-effectiveness. The stakeholder particularly interested in the efficiency is the payer organization; in many cases society. Optimizing financing, reimbursements and incentives, organizational issues, regulations and allocation of the resources are all necessary (9). Allocation of resources within and between disciplines according to cost-effectiveness is crucial for optimizing efficiency (25). Also here, healthcare leaders carry the main responsibility.

### Vision

The goal of healthcare is to pursue improved benefits for patients, population and society. The vision is to provide accessible, high-quality, fair, effective, safe and efficient healthcare services to the patients.

The ultimate aim of healthcare is to provide as much benefit and do as little harm as possible to the patients (25) (taking equity into account, see below). Since healthcare resources are always limited, cost considerations are necessary, and the resources should be allocated where the value for investing resources is

greatest. These aims constitute the effectiveness, safety and efficiency impacts of healthcare.

Other impacts are also needed. Access to services is necessary for the patients to benefit from healthcare. Accessibility must be considered as a need for the beneficial services, which health (and integrated social) care is able to provide. A high quality of services is vital for the favourable outcomes. Competence, scientific quality, patient centeredness, and well-functioning processes, including good productivity, are all needed. Equity in access to services of uniform quality is an important ethical aspect of healthcare. Better equity may also lead to better cost-effectiveness of healthcare system, as the number of patients receiving cost-effective interventions increases (26). When making changes in the way the patients are treated, or in the healthcare system, all 6 impact categories should be evaluated, and documented, at all levels of the system. (9)

#### *Comparison with previous strategies*

The proposed impacts of the healthcare in the present paper are otherwise similar to the 6 aims proposed by IOM, but they consider (in addition to effectiveness) medical quality in diagnostics and treatment to be a fundamentally important aim for healthcare. The means to achieve the goals suggested in the present strategy also include competence of staff at all levels of healthcare, but otherwise largely concord with those of the IOM.

In the value strategy proposed by Porter, the emphasis is on cost-effectiveness, but other information are also considered important, e.g. data on disease severity in order to be able to adjust for baseline differences between healthcare providers (4). The importance of accessibility, medical quality, and equity as goals of healthcare are not made explicit. As means for achieving the goals, focus is on the assessment of real-life performance and benchmarking between peers. Competence as a prerequisite and as a means for a successful healthcare does not seem to be incorporated.

The Triple Aim strategy, pursuing better health with lower costs for all citizens, is otherwise similar in its goals to the present proposition, except that accessibility of care, medical quality and equity are not explicitly included in the major goals. Both the Triple Aim and the present strategy emphasize the importance of a well-functioning healthcare system. The importance of forming quality registers for benchmarking are not made explicit, unlike in the value-based healthcare strategy and in the strategy presented in this paper. Competence at all levels of healthcare, particularly at the staff level, does not seem to be included.

In comparison with the 3 previous strategies, the current paper emphasizes that one needs to base the

strategy on defining the prerequisites for any successful healthcare. It is proposed that all value is created by frontline staff in interaction with patients. Competence of the staff is crucial for achieving the vision. Good leadership and well-functioning systems are necessary to facilitate the benefit created at the staff–patient interaction. Furthermore it is suggested that improving competence, implementing best current scientific evidence, continuous quality assessment and improvement, and benchmarking are all needed to increase the impacts of healthcare. The present strategy proposes vertical integration, i.e. alignment in the strategy from top leaders to the frontline staff. This proposition of alignment is shared by all the previous strategies.

There are 2 major differences between the present and the 3 previous healthcare strategies. Firstly, the present strategy outlines prerequisites for reaching the goals of healthcare. Secondly, in the present strategy the competence of staff working with patients and the competence of other decision-makers in healthcare is emphasized, both as a prerequisite, and as a means for pursuing optimal outcome. The proposition is that, without staff competence, effective, safe and efficient healthcare is unimaginable, and that competence is highly correlated with the main aim of the healthcare, i.e. to produce as good value as possible with the restricted resources. There is evidence that competence is a major determinant for effectiveness and safety of medical interventions (27).

#### *Conclusion*

The proposed vision and strategy for improving healthcare is based on the aim of continuous improvement in responding to the needs of the patients and in the assessment of the need for those services that the healthcare is able to offer. Equally important is pursuing continuous improvement in competence in providing high-quality interventions according to need. Continuous improvement in leadership and well-aligned actions between all healthcare professionals are essential. Integrity and commitment to providing the best for the patients and the population are preconditions for optimal success (28).

Increasing staff competence, use of current evidence, increasing quality and benchmarking with peers are all needed. The vision of healthcare is to provide accessible, high-quality, fair, effective, safe and efficient health services to the patients and the population.

This strategy must be shared throughout the healthcare system; a *lingua franca* is needed. In comparison with the previous propositions for a healthcare strategy, the present proposition emphasizes the prerequisites for a successful healthcare: competence of the frontline

staff, and competence of leaders of the organizations and of policymakers.

### ACKNOWLEDGEMENTS

The author developed the idea for this paper and is the sole author of the manuscript. The author thanks Asko Lukinmaa and Riitta Malmivaara for helpful comments, and Seija Puro for graphical design of the figures.

*The authors have no conflicts of interest to declare.*

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