

Strategies for Quality Improvement and Increased Efficiency in Health Care Systems

Mattias Elg, mattias.elg@liu.se
Division of Quality Management and Technology/HELIX research centre
Linköping Institute of Technology, Sweden

Jesper Olsson
Ministry of Health and Social Affairs, Stockholm, Sweden
Affiliated with Medical Management Centre, Karolinska Insitutet, Sweden

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Abstract

Purpose

The purpose of the present study is to develop practical knowledge about the management of strategic improvement and increased effectiveness in health care systems

Design/methodology/approach

In the study, we use an interactive research design. This means that researchers and practitioners collaborate on the various issues of the research project (problem analysis, discussions of empirical material, analysis and writing). Four main sub-projects concentrating on studying management and improvement of health care systems has been used in order to compile the findings.

Findings

In the study, we develop nine questions that are essential. These questions embrace important aspects that organizations should work with in order to succeed with improvement initiatives: These are: 1. How do we create awareness of the need for change? 2. What results do we expect from the improvement work? 3. What resources do we need in order to succeed in the improvement work? 4. How and where do we start the improvement work? 5. How do we work with the logistics of health care from a patient perspective? 6. How can we increase our organizational learning? 7. How do we create long-term thinking and commitment? 8. How do we design IT systems which support new and better work procedures? 9. What do we need to cease doing in our work?

Introduction

In Sweden, health and medical care is facing great challenges (Cederqvist et al 2005; Sachs, 2004). During the next decade, a change of generations in the labour market will be seen when the generation born in the 40s begin to go into retirement (see Olsson et al 2003). The increased amount of elderly people will probably result in a sharply increased need of health and medical care. At the same time, financial resources are not expected to appreciably increase. Other important challenges are developments in the medical technical field and citizens' expectations. The medical-technical field's development has a tremendous impact on the health and medical care profession and its development is truly difficult to predict. Of central concern is the response to these challenges. How health care *systems* deal and cope with such changes? There are numerous of examples where organizations have found successful ways to deal with their challenges creating a performance and efficiency outperforming other organizations (see e.g. OECD, 2004; Sorian, 2006; Collins et al, 2001; Greenhalgh et al 2004). What can be learnt from healthcare organizations that work methodical and intentional to link the islands of success to become a whole system of success – a transformation. From these organisations we have searched for patterns that could explain clues helping other trying to shape and transform their organization into a sustainable system for the future; that is, to create strategies for quality improvement and increased efficiency.

Method

The present study can be seen as an interactive research project. In such models, the researcher takes active part in the object of her study (see Nielsen and Svensson, 2006; Fishman, 1999). Interaction research aims to contribute both to practical issues, e.g. how to handle practical problems in relation to the management of change, and to the creation of scientifically acceptable knowledge. It has its roots in action research which in turn is based in social science (Collier, 1945). The psychologist Kurt Lewin, considered by many to be the father of action research, argued for a discipline whose main purpose was “to help the practitioner” (Lewin, 1946). Action research, as practiced in Scandinavian countries, is defined by Nielsen and Svensson (2006) “as a scientific method for making research. It underlines the connection between understanding and change, between theory and practice, and an active co-operation between researchers and the participants in the production of new knowledge” (www.aktionsforskning.net, cited in Svensson and Nielsen, 2006, p. 14).

The starting point for this project has been: 1) a literature study; 2) an empirical study of internationally well known health care systems (hereafter called the successful organizations); 3) a survey which explores improvement initiatives in Swedish health care and 4) a study which illuminates the health care leader's views on structural change as a strategy for efficiency and effectiveness and also illuminates the leader's logics of management for change. The work in the present article is based on the report *Strategier för effektivisering* (2007). Practitioners and co-authors from that report were, besides the authors of the present article, Michael Bergström, Lena Eckerström and Roger Molin. All from SALAR (Sveriges Kommuner och Landsting).

Based on the previously mentioned studies we developed an interactive research model in which practitioners from the health care system collaborated with the researcher. From this standpoint four idea seminars were conducted. At these

seminars people from different hierarchical positions as well as different organizational and geographical locations were invited to participate. Based on the objectives of understanding the premises of transformational actions among managers, *meetings were designed to tease out all important aspects in order to leverages the Swedish healthcare system*. More on the method is written in (Olsson, Övretveit et al. 2003). From these workshops four pictures were created. Among these pictures we searched for commonalities and constructed a picture of the shared pattern between the different workshops.

Finally we consolidated the emerging picture to a number of questions framing the guiding concepts used by managers creating a whole systems approach to transformation. This has been done over a one year period processing outcomes both within the research group as well as testing our assumptions on different professional groups within the Swedish healthcare system. Thus, the results we are presenting may be seen as temporarily and speculative. We have used the previous studies freely in order to create an understanding what it takes to manage initiatives for improvement and increased efficiency in large scaled health care systems. Of course, we acknowledge the difficulties in undertaking this journey but still we believe that it is both important and possible to find better alternatives than today's strategies.

Results

A general assumption made in the present work is that health care organizations exist and operate under various conditions. This requires that strategies must flexible and their applications adapted to the individual organization's own history and conditions. Outgoing from this assumption, we have compiled a series of questions which leaders have found useful for their initiatives in quality improvement and increased efficiency. We emphasise, the importance to see these questions as a whole; together, we believe these questions make it possible to increase learning and create systems which can function in a knowledge-guided manner.

1. How do we create awareness of the need for change?
2. What results do we expect from the improvement work?
3. What resources do we need in order to succeed in the improvement work?
4. How and where do we start the improvement work?
5. How do we work with the logistics of health care from a patient perspective?
6. How can we increase our organizational learning?
7. How do we create long-term thinking and commitment?
8. How do we design IT systems which support new and better work procedures?
9. What do we need to cease doing in our work?

1. How do we create awareness of the need for change?

What are the driving forces behind improvements? Research on the management of innovations and change points out the importance that there is awareness among those working within the organization of the problems and challenges it is facing (Beer et al, 2000; Van de Ven et al 2000; Olsson, 2002). From this perspective, leadership has an important role when it comes to driving the process of change (Berwick, 1996). Leadership should be able to motivate those involved and respond to the question: Why should we change? If they are able to do that, it is easier to succeed. Who wants to work to improve something which is not perceived as an important problem that needs to be solved? Consequently, professional practitioners need to gain insight into

the problems confronting health care. This concerns shedding light on several dimensions of information/data simultaneously: medical results, patient experiences, finances, etc (Kazandijan et al, 1999). The creation of organizational transparency is one of the few, general tools which make it possible for leaders to pay attention to what is happening in the daily work of health and patient care .

A recurring aspect in creating tensions for change, found in the studied organizations, is the story, or narrative. When the results and the desired direction of development are told in terms of an actual case, in a story or in a relevant description, this captures the interest of those who work within these professions. The story is a way of clearly making a connection to the everyday reality where the results of health care are created.

2. What results do we expect from the improvement work?

Leadership has an important role to play when it comes to creating strategic expectations. Expectations do not emerge automatically. Research shows a clear pattern: Leadership has more impact if it has a clear understanding of what results can be expected, both long-term and short-term. The successful ones are signified for having a clear focus on improvement of the organization's combined performance. They want to simultaneously improve clinical and financial results, patient experiences, and personnel satisfaction within prioritized areas. Visions are important (Collins et al 2001). Since health and patient care organizations often are large and complex, there is a need to combine an often fragmented organization around a single vision. At the same time, it is desirable to avoid controlling every individual unit in the organization. Then the vision can function as a unifying bond and as an important communication tool which signals the organization's values and provides direction. We stress that the content of the vision is the final product of an interpersonal process; thus it is crucial that many people be involved when the vision is formulated. It is this process which creates a feeling of ownership and of wanting to live the vision, not relating to the paper on which it is written.

It is clear from research that leadership groups in successful organizations have developed their own core ideas which guide daily action and strategic decisions. The following guiding concepts repeatedly emerge as especially important (Transformera system; see also NATIONAL STRATEGI for kvalitetsudvikling i sundhedsvæsenet; ...og bedre skal det bli! Norska strategin for kvalitetsforbedring i sosial – og helsetjenesten)

- Patients are health care's most important customers, and goal-setting for our organization is to create value for and with them, as well as to strive for good health on equal terms in the general public.
- Health care is a knowledge-based service operation and its results are created in cooperation with the patient. Consequently it is an important, basic principle concerning increased effectiveness, to develop health care in close collaboration with the patients and attempt to understand their requirements, needs and thoughts.
- All of our results and the value of our organization are created in the daily operation where patients, professionals and support systems meet.
- Focus is on using feedback systems and performance measurements that are plausible for the professionals as well as helpful for the leadership, when

discussing and understanding to which extent the organization is creating better value. The leadership needs to create arenas for this discussion.

The challenge lies in going from words to action, which is an important difference between leadership groups which pursue action-oriented transformation processes and those which devote themselves to comfortable, narcissistic operational development.

3. What resources do we need in order to succeed in the improvement work?

The work of increasing effectiveness itself demands resources. The leadership has an important role in producing the resources required in order to pursue a long-term development process (Van de Ven et al 2000). Studies of successful organizations show that their leadership makes necessary resources available (op.cit, 2000). The process of change requires the allocation of time, money and support for competence development. The successful organizations point out that both current and future colleagues need to have competence in improvement knowledge (Batalden et al 2007). One consequence is, for example, that development of education in improvement knowledge at all levels and for all professions need to be strengthened (Universitetssamverkan för förbättringskunskap). In addition to this support, successful organizations have also invested in an infrastructure which increases the likelihood of attaining long-term, sustainable results. Besides training opportunities in quality improvement at basic and specialized levels, an environment for the leaders' continual learning, including support for the leadership group's learning, should be part of the infrastructure. Successful organizations also cooperate in research projects. They connect research resources in various knowledge centers, to the strategic transformation process. In this context, this concerns research which focuses on quality development, leadership/management, etc. This is done in order to create a foundation for knowledge-based leadership of the organization in the same way that diagnostics, treatment and nursing care should be knowledge-based.

4. How and where do we start the improvement work?

It is important that the leadership have a defined strategic intent about where the focus of the transformation process should be (Ovretveit, 2006). This is a conclusion that may be drawn from findings of local transformation processes. One way to choose strategic areas is to proceed from where the greatest value for the customers can be attained in relation to the organization's mission and goals. On a local level it is customary that a small number of individuals initiate a process of increasing effectiveness, since they themselves are interested in solving a specific problem. The problem with that type of minor improvement initiative on a local level is that it lacks strategic intent. The risk is that it is difficult to see the effects of these projects on the system level. In the long term, this may create problems for leaders higher up in the organization and can thereby threaten the long-term process. When strategic areas are prioritized, it is *necessary to balance between ideas which are based on professional motivating forces and the strategic needs of the organization.*

In order to handle this balancing, successful organizations have seen the usefulness of making organizational priorities. A strategy which helps to decide where to start is the Pareto principle: 80/20. It is crucial to identify the major patient flows, the major costs and/or costs for lack of quality, and make an evaluation of where the majority of the improvement potential is. Through discussions based on data, the leadership group

can decide where it is suitable to begin the process of change. When the prioritization is made, the leadership group has solid ground on which to stand.

5. How do we work with the logistics of health care from a patient perspective?

Every operation functions through processes which create value for the patients, relatives and loved ones. In many cases these processes cross organizational boundaries. When the process of change is pursued with a focus on the logistics of patient care it may focus on actions such as:

- reducing delays and waiting times
- removing waste of resources from processes
- having a better flow • looking for bottlenecks
- standardizing where possible
- finding forms which shift resource allocation, tasks and responsibility from the line toward the patient's process through patient care

The activities which are carried out by the colleagues with support of their leadership need to be coordinated and, as needed, rearranged and transformed. The basis for which processes should be in focus is found through the Pareto Principle (80/20) (Deming, 1986). Performance measurements and patient information about medical decisions, activities and results are therefore fundamental information in this work. One type of distinction is between volume and complexity which requires totally different organizations. (see e.g. a discussion on complexity by Bar-Yam, 1996 and Bar-Yam 2006)

We know from experience that there is a variety of ways in which health care is carried out. It can be a matter of various degrees of standardization, depending on the extent of guidelines for diagnostic and therapeutic procedures, unexpected problems with patients or problems caused by factors which are related to the organization and the available personnel resources (Nolan et al 1996; Horbrook et al 1985; Lindmark et al 2005). There are many ways in which to carry out health care. An identification of recurring patterns which represent the patient's path through nursing care will nonetheless provide a good ground on which to stand when working in a patient-oriented and task-directed manner. Working in a task-directed way entails placing the operation and its activities in the foreground. By making changes in everyday routines, changes in values and outlook are achieved. Research on successful organizations indicates that task-oriented approaches are the most effective, both as far as achieving actual results is concerned and in actively moving into a new way of thinking.

6. How can we increase our organizational learning?

Sixty to eighty percent of traditional improvement efforts whose aim is to transform the front-line work fail. This says something about how strong the forces are to preserve something in the status quo. This also says something about the need for special competence in order to carry out transformation. Unsuccessful improvement processes produce at least two negative consequences: one is a waste of economic investments, and the other being that the colleagues' trust in the process of change and in the leadership's new strategy is reduced. The latter being the most serious one, especially over the long term. This in its turn reduces people's willingness to become involved in future improvement efforts.

Successful organizations have found strategies which minimize the effects of mistakes and make it easier to succeed. They start by testing, to a limited extent, how ideas can be adapted to a local context. This way of testing and adapting their ideas to local situations provides an opportunity to discover and learn how health care systems respond to change. This strategy also gives leaders the opportunity to slightly modify leadership control, since the risk involved is minimal. This method of working empowers the personnel and stimulates them to understand, and be happy about improving their own situation. While testing is taking place in local contexts, access is gained to improved results and new knowledge. At some point in the process the leadership must increase the extent of change in order to improve performance on the system level. When this point is reached, it is vital that the changes have been directed at the organization's strategic processes, for example that the choice of improvement areas in the organizations is based on strategic thinking about where the potential exists.

7. How do we create long-term thinking and commitment?

Entering into a strategic transformation process is a long-term undertaking. Upper management ought to ask itself how a sense of purpose can be maintained. Thorough changes often take many years to implement. Turnover of members and changed strategic directives create problems for the leader who wants to have a long-term involvement in this work. Leaders who have succeeded in attaining this sense of purpose work actively vis-à-vis the political leadership in order to align previously defined goals and aims with new ones. The professions are very important when changes in activities which contribute to results for patients are to be achieved. Then the starting point is the microsystem, which consists of the group which works nearest the patient together with the patient her-/himself, the technology being used (IT for example), along with the goals which have been set for patient care. The leaders' decisions and the strategic orientation which is implemented must be anchored in the microsystems, because it is there that patient care is actually formed. Leadership needs to find ways to support the microsystems in their development process. This is a matter of:

- setting up arenas where an understanding of what is important to implement can be created
- understanding the microsystems need for new support structures
- supporting a development-oriented process

Analysis and dialogue are important management tools. These are based on data which describe the results and the contents of the microsystem's everyday work. Involving both the microsystems and other surrounding systems is of vital importance when preparing and analyzing. This entails setting up arenas for comprehensive organization-wide strategic dialogues, as well as creating agreements among professions. For the inter-professional participation to take place, real support is needed. It is the task of leadership to create these arenas and provide frameworks and direction for them.

8. How do we design IT systems which support new and better work procedures?

The potential of information technology is put in its proper context when the starting point is that the value of the organization is created in the Microsystems (for a discussion on Microsystems see question seven). In the best cases, IT can be an integrated support for the work of the professions with the patients. From this

perspective the development of systems is an operational issue rather than an IT issue. Developing IT systems which are not connected to the learning of the colleagues leads rather often both to new problems and to additional work. Successful organizations design their IT systems for capturing data, analysis, feedback of data and adequate support for decision-making. IT systems should support the patient processes. Therefore the systems should be able to communicate with each other. At the same time there should be online tools both for the daily and the strategic management of, and learning from, patient care. Systems which are an integrated aspect of patient care are now more frequently found in patients' homes.

9. What do we need to cease doing in our work?

A final question concerns activities which no longer create value and which the organization ought to stop doing. Often we continue to do things in the same old way, even though we have found a new way which is more effective. Then in practice the planned increase in effectiveness does not occur. When improvements in patient care do occur, it depends to a large extent on doing things in a new way. If it is made more difficult to fall back on old routines, it becomes easier to continue with the new efficient action. New structures can be linked to new behaviors in order to sustain what is new, which in turn is supportive for those involved. It is also important to discard equipment, methods, arenas, policies, directions, trainings, incentives and other structures which support undesirable behavior. Another aspect of this is of an internal resource nature. This is a matter of utilizing, from an improvement perspective, the defined strategic intents from the leadership regarding where focus should be. This makes it possible to communicate which other processes must be set aside, temporarily or for a longer period.

Summary and discussion

Results from successful organizations point unambiguously to a series of questions on which to focus and where solutions develop, which are adapted to the relevant context. The core is that all work to increase effectiveness must start from the perspective of the patient. The goal is to improve the clinical results at the same time as patients and citizens experience that patient care is improving. If this is not successful, the usefulness is dubious. From the perspective of leadership, measurements and follow-ups are therefore the basis for good results. Through measurement and support systems, the leadership creates a basis for measures, which make it possible to get the professions involved and bind together the various parts of the system. By having the colleagues trained in performing improvement work the valuecreating processes and systems are developed. The starting point in order to attain this is increased clarity about what the operational concept of patient care actually imply, i.e. answering the question of why we have a health care system. The value of patient care must be created in the everyday encounter among patients, professions and information technology. For a given health problem, the patient has contact with one or several value-creating entities which need to be coordinated in order to make an efficient whole that provides good care. Clarifying processes, resource allocation, tasks and responsibility is important. The task of leadership is to create arenas for dialogue, where knowledge based data from operations and the improvement process can be linked together with the intentions of leadership and the needs of the patients. The aim is to get the professions on board, which in itself to some extent entails a new philosophy for everyone. In order to clarify what processes are strategic to implement and within which areas, data and expertise are needed that

indicate the potential and thereby help in arguing for the strategic choices which are made. The fact that there is new expertise from research does not automatically mean that it is put into practice. For that work, improvement knowledge and skills and support from leadership in the actual transformation process is required. Well thought-through strategies make it possible to know when an established development plan should be changed or left untouched. This is the key to creating long-term commitment. Within the leadership area there are several examples, tools and ways of thinking that are important aids. This base of expertise is not clearly known, trained and exercised by leaders and practitioners at various levels in the organization, which is also shown in international studies. The base of competence for leading and implementing strategies in increased effectiveness needs to be strengthened, both through traditional education/training as well as through action-learning and in new innovative collaboration arenas among county councils and universities. Working with a unified strategy is a long-term undertaking which requires resource allocation concerning time and competence development.

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