Leadership processes for re-engineering changes to the health care industry

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Keywords Leadership, Business process re-engineering, Health and medicine

Abstract As health care organizations seek innovative ways to change financing and delivery mechanisms due to escalated health care costs and increased competition, drastic changes are being sought in the form of re-engineering. This study discusses the leader's role of re-engineering in health care. It specifically addresses the reasons for failures in re-engineering and argues that success depends on senior level leaders playing a critical role. Existing studies lack comprehensiveness in establishing models of re-engineering and management guidelines. This research focuses on integrating re-engineering and leadership processes in health care by creating a step-by-step model. Particularly, it illustrates the four Es: Examination, Establishment, Execution and Evaluation, as a comprehensive re-engineering process that combines managerial roles and activities to result in successfully changed and reengineered health care organizations.

Introduction
The US health care system is undergoing turbulent changes in its financing and delivery mechanisms as it seeks to improve quality, increase access and contain cost. The evolving system utilizes managed care to drive down costs and the formation of alliances to lessen competition (Sultz and Young, 1999). However, complexities in the system cannot be easily resolved by incremental efforts made to alter delivery through changing reimbursement, physician practice and risk patterns. In fact, such minimal changes have led to the demise of hospitals and other health care facilities. To improve their market shares, organizations have engaged in integration and consolidation aimed at achieving economics of scale. Even these strategies have not placed them in better positions. Instead, more dramatic changes are needed for organizational success. The solution lies in the use of the re-engineering concept coupled with a greater emphasis on the critical players of the organization to lead the transformational process. The most essential organizational component for effecting change is leadership. Health care leaders are responsible for making crucial decisions under intense pressure to cut costs and maintain quality. They must know what to do, when and how to make changes. To bring about successful changes within the organization, leaders must drive the change process.

Research on re-engineering emphasize that leaders are an important component to the change process (Boland, 1996; Lillrank and Holopainen, 1998; Reeves, 1996). Lillrank and Holopainen (1998) describe three case studies of re-engineering in Finnish organizations and suggest that while re-engineering is more subdued than in the USA, the impact has been dramatic to achieve change in performance.
Furthermore, studies have shown the impact of the re-engineering movement for a variety of industries, including telecommunications, commercial and government organizations. These articles discuss positive and negative experiences of business process re-engineering to increase performance (Chang and Powell, 1998; Lillrank and Holopainen, 1998; Pruijt, 1998; Stebbins et al., 1998; Vakola and Rezgui, 2000). However, there are only a very few articles on re-engineering in health care organizations and even fewer that focus on leadership in those organizations. Thus, the purpose of this paper is to make that linkage by:

1. outlining the role of re-engineering in the health care industry and discussing its successes and failures;
2. emphasizing the impact of leaders in the re-engineering process through a discussion of the literature on re-engineering for a variety of industries; and
3. creating a step-by-step model of re-engineering based on leadership processes for effecting change in health care organizations.

Re-engineering and health care

Reengineering began in the business industry and was defined by Michael Hammer and James Champy as “the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed”. Hammer and Champy (1993) further suggest that re-engineering is not just about downsizing or total quality management. It is a new beginning based on four key words: fundamental, radical, dramatic and processes.

Hammer and Champy only proposed the business process of re-engineering using examples of businesses that succeeded through re-engineering. For instance, models of business process re-engineering in small- and medium-sized enterprises have been identified (Chang and Powell, 1998; Lillrank and Holopainen, 1998; Vakola and Rezgui, 2000). The benefits of re-engineering include customer perceived value, cost savings and business option value (Lillrank and Holopainen, 1998).

Borrowing from this business strategy, health care is likewise endeavoring to reengineer using the same definition. Many researchers followed the re-engineering directions of Hammer and Champy, used them for health care and compared them to other processes such as total quality management or automation (Bergman, 1994; Perry, 1994; Flarey and Blanchett, 1995). However, research on re-engineering as an instrument for redesigning health care processes is very limited. In an interview with Hammer (Grayson, 1997), he noted that while health care holds commonalities with other industries, there are special twists. Health care is very hierarchical and involves many players, such as providers, payers and suppliers. Nevertheless, re-engineering can work in health care, if it focuses on the methodologies about work, organizational purpose and performance (Boland, 1996). In fact, re-engineering cannot exist in a vacuum. Strategies must understand the evolution of the industry and the effects of managed care. Furthermore, re-engineering cannot be viewed as a solution, or even an answer for all the problems in the system. Reengineering represents the recognition of problems and outlines methodologies for resolving them.
Boland offers four phases in the health care re-engineering process:

1. Analyze the business and redesign work roles;
2. Restructure management, redesign clinical services and align provider financial incentives;
3. Develop a member focus and integrate information components; and

Additionally, he suggests that key ingredients include simplifying and redesigning how people work, improving their job skills, motivating them to perform better and providing the necessary equipment, technology and facility support. Tremendous changes, including market forces, organizational culture, customer focus, system-wide re-engineering, are taking place in the industry. These changes must be fully taken into consideration and account for the shifts in the future directions of health care delivery.

Furthermore, Moravec describes that re-engineering efforts in health care organizations occur in four basic steps.

1. Position for change. Decide why the organization must change and envision what it should become.
2. Diagnose the way customers and patients are treated now... View the total process as a customer would.
3. Redesign the organization and performance of work. Solicit input from stakeholders.
4. Make the transition. Develop a transition strategy and identify phases, teams, responsibilities and priorities (Moravec, 1996).

Why re-engineering has often failed

There are several reasons that re-engineering has failed to work for health care organizations. Hammer and Champy (1993) assert that failure occurs because of a lack of "knowledge and ability". For instance, as much as 70 percent of re-engineering projects have failed (Sia and Neo, 1998). The primary cause is lack of leadership in dealing with work processes, performance measurement and skills requirements. In other words, without fully understanding what the re-engineering process really entails, demise is the ultimate result. Second, re-engineering efforts have failed to improve performance because organizations were not really focused on re-engineering. That is they erroneously and haphazardly attached that terminology to cost cutting or quality improvement programs. Since Hammer and Champy popularized the re-engineering catchword, others have been eager to test its use. Thus, around the mid- to late 1990s, re-engineering initiatives were widespread. Unfortunately, many were not successful (Walston et al., 2000). The most commonly made mistakes were lacking in comprehensiveness of re-engineering efforts. Typically, health care organizations emphasized first and second wave change initiatives that only focused on functional improvements. These changes led to even greater fragmentation, specialization and compartmentalization (Miller, 1996). For instance, re-engineering programs produced negative effects on organizational processes and even overall program failure. Rather than integrating all aspects of the system, management only...
called for re-engineering of key processes. Thus, the lack of attention to integration led to negative results (Stebbins et al., 1998).

Moravec (1996) further points out that few leaders are actually clear on the differences between re-engineering, restructuring and downsizing. While the other two terms are similar, referring to correcting mistakes or catching up, re-engineering has an entirely different focus, which is intended to move forward and answers the question “how do we want our healthcare to look five years from now, and beyond?” (Moravec, 1996).

A third reason for the failure of re-engineering is overlooking the most crucial element in the re-engineering process: the impact of leadership on this revolutionary process. Indeed, leaders play a critical role in the organization’s goals and determine its ultimate success or failure. In an interview with Hammer, he stated that the “single most important characteristic is passionate executive leadership. Without it, nothing will happen” (Grayson, 1997). In fact, the focus of re-engineering is on the senior leader’s role as a driver or enabler of change (Stebbins et al., 1998).

Studies of acute care hospitals found that without integrative and coordinative efforts in the re-engineering process only worsens the hospital’s cost position. The use of teams and executive management will improve the organization’s competitive position (Mellon and Nelson, 1998; Walston et al., 2000). Thus, for re-engineering to work in health care, a process needs to be created with leaders in the forefront accurately and continuously conducting a series of activities to effect change.

Impact of leadership on re-engineering

The involvement of leaders in every step of the re-engineering process is crucial to its success. Reengineering fundamentally changes an organization and addresses basic questions about values, missions and work in relation to the needs of the customer. Since re-engineering entails fundamental changes, key organizational leaders must be ultimately responsible for determining the type and extent of changes undertaken (Boland, 1996). They not only call for changes but must also lead changes, and this requires participation of all levels of leaders and other staff. Thus, both leadership and employee skills on re-engineering are required for success (Stebbins et al., 1998). Essentially, leaders must answer two questions in the change process: in what direction should my organization change be positioned for success? and how do I get there? (Reeves, 1996). To answer these questions, Reeves’ recommendations of leadership principles include:

1. confronting reality by understanding harsh environment conditions;
2. knowing your stakeholders by prioritizing their needs and motives;
3. communicating continuously to keep stakeholders informed;
4. building skills by investing in human resources; and
5. planning processes, systems, organizational culture and structure (Reeves, 1996).

Although Reeves (1996) points to several important guidelines for changes, he fails to provide a detailed description of the steps needed to drive changes. He suggests that there is “no explicit calculus, no prescriptive outline” and “not one answer”.

Gelinas and James (1996) indicate that organizational leaders are the linchpins of change. They must invest substantial time and resources (20-50 percent of their time)
in the transformation process if it is to be successful. They introduced three phases of change:

1. set the stage for change by making a case for change. Leaders are responsible for creating vision and making the connection to their actions;

2. design change in which leaders must communicate with stakeholders and identify changes; and

3. create change by planning and implementing the changes identified in phase 2.

Their recommendations, similar to Moravec's (1996) provide some direction for the leaders. Yet, both research studies only portray a portion of the change process, since they fail to consider and offer solutions beyond the implementation stage and after mistakes are made.

Existing research does not deny the importance of leadership in re-engineering. In fact, studies argue for involvement of leaders to make changes to the organization. Understanding human resources is at the heart of change (Sia and Neo, 1998). However, Sia and Neo (1998) suggest that changes were fragmented and haphazard. Often it was a “hit-or-miss” approach. Thus, precise leadership skills, activities and directions were not found.

An integrated step-by-step leadership process of re-engineering

The literature on re-engineering shows that there is a lack of comprehensiveness in models on re-engineering. Stebbins et al. (1998) suggest that re-engineering theory lacks coherent methodology to conceptualize and reinvent the organization. They also point out that guiding models on the redesign process with redesign principles have yet to be developed. Thus, based on lacking evidence in the literature, this study has created a model of leadership processes in the re-engineering initiatives for the health care industry. In particular, this research is unique since it integrates and expands on existing knowledge on leadership and re-engineering, specifically for health care through the creation of a step-by-step model. This model illustrates the responsibilities of leaders in using the concept of re-engineering as a method for changing and revitalizing the organization. Reengineering occurs in a series of four steps, which can feedback into the first step, if necessary, with leaders conducting activities to aid that effort on a daily basis. Most importantly, leaders must initiate the re-engineering process and monitor its progress throughout. They must dedicate their energy, time, thinking, patience, hard work and commitment (Jordan, 1996) to achieve the desired results.

Leaders must motivate, inspire and provide authority for the organization in its redesigning efforts. Once the desired effort has been agreed upon, it is filtered down to every level of the organization. At the top of the organization, senior-level leaders are responsible for informing, clarifying and monitoring the redesign process. They are devoted to analyzing the present situation, developing, implementing a strategic plan and evaluating its progress. Specifically, the leader's roles consist of the four Es: Examination, Establishment, Execution and Evaluation. At the center of the model is leaders who are capable of choosing the appropriate timing and decisions for re-engineering. If the organization cannot financially reengineer completely, then re-engineering can be divided into several stages, taking several months up to several years before the entire re-engineering process is completed (Kubica, 1996).
In other words, while re-engineering has been described as a drastic and dramatic process, it also involves smaller, incremental improvement steps in its actual implementation process (Lillrank and Holopainen, 1998; Stebbins et al., 1998). Consequently, the model of re-engineering is a revolving series of processes in which having completed one cycle of the process, another cycle begins. The combination of the leader's roles and activities and the four Es will result in successful organizational re-engineering (Figure 1).

**Examination**

Step one of the re-engineering process begins with a careful examination of the health care organization and its environment. The thorough examination process begins from the inside out, but could be outside in (Morell, 1996). The process of internal and external examination is conducted by leaders who are responsible for determining the most appropriate time to reengineer and ultimately making that decision. The CEO and other senior executives are closely involved in this initial assessment and design stage (Stebbins et al., 1998). First, they realize that minor adjustments are inadequate to ensure success or survival of the organization as competitors grasp more of its market and revenue. Next, leaders must become motivators to prepare the organization for redesign by making “the case for change” (Gelinas and James, 1996). They give approval for examining the external environment and the position of its organization within it. They must understand current and future market challenges and opportunities, the purpose of the organization, future direction and outcomes created by the change process. In addition, their organizational strengths and weaknesses are analyzed and compared to their competitors. They must be able to answer questions such as what are the changes? Why must changes be made? Who is to make them? How are changes to be made? When should the changes take place? Categorically listing these questions and finding answers is part of the examination process:

- timing for the re-engineering process;
- market challenges and opportunities;
- organizational strengths and weaknesses;
- purpose of the organization;
- future direction of the organization; and
- outcomes of the organization.

At the same time, examination is built upon group effort, not likely to be accomplished haphazardly (Sia and Neo, 1998). Although senior level leaders first make the decision
for re-engineering, then the message is communicated across the organization. Senior-level leaders must constantly stay in touch with all members of the organization and examine their reactions. By monitoring the environment and scrutinizing trends and opportunities, leaders prepare the organization for change and keep participants informed of the redesign movement. Without cooperation and the buy-in from every member of the organization, re-engineering will not succeed. Once the choice has been made and agreed upon, the examination step is complete.

**Establishment**

The second step of re-engineering is establishment. A long-term plan is established to determine the direction of the organization as it deals with the complexities in the environment. This strategic plan is especially crucial to health care organizations (Abendshien, 1994; Kubica, 1996) and should illustrate precise instructions of all necessary activities. Some of the probing questions involve identification and analyses of the changes to be made. Whether to target all current processes or select only a few processes at a time, the decision is made based on the answers found in the examination step.

The establishment step combines the creation of the re-engineering model with the persons responsible for that effort. Senior-level leaders serve as visionaries and persuade the organization to move toward a shared goal. For instance, senior-level leaders must “identify and achieve the organization’s goals” (Morell, 1995), by establishing the organization’s uniqueness in order to find a niche. At the same time, leaders are consciously aware of the long-term benefits of their initiatives and concentrate on moving their organization forward (Moravec, 1996). Establishing a strategic plan not only means reconfiguring existing processes, emphasizing the competitive edge, developing new partnerships, cultivating knowledge and integrating systems to achieve better outcomes, but must also focus on future directions. Senior-level leaders become involved in the development of realistic goals, objectives, a timetable and budget for accomplishing such activities.

Establishing a plan should emphasize quality, customer satisfaction, cost effectiveness and improved work environment for employees (Flarey and Blanchett, 1995). In addition to incorporating these aspects, establishing organizational value is also important to the process (Gilmartin, 1996), so that every activity that does not add value to the organization is deleted and thus reengineered:

- realistic goals, timeline and budget;
- focus on quality, cost effectiveness and customer satisfaction; and
- organizational culture and values.

Once organizational leaders have established a strategic plan that emphasizes niche and value, the next step is to promote an organizational culture that generates collaborative efforts (Gelinas and James, 1996). For instance, the leaders must convince those directly below them of the need to change. While they are responsible for leading change by providing resources and establishing plans, but most critically, they must build understanding and support at all levels of the organization so that collaborative and coordinated changes can be made. They serve as catalysts to communicate the plan to the rest of the organization. They invite participation from employees in discussions to seek agreement (Smeltzer et al., 1995). That means everyone in the
organization (i.e. the employees and front line managers) must also believe in and accept the plan (Perry, 1994; Morell, 1995; Trofino, 1995). For example, meetings should be held for the purposes of team building and reaching consensus. Without consensus, the plan would not succeed. If dissatisfaction emerges, then more discussion is held, with organizational leaders demonstrating commitment to the development and growth of both employees and organization. When the leaders have firmly established a value added, strategic plan with the input and consensus from the entire organization, the re-engineering process can then continue.

**Execution**

After establishing a vision and a workable plan that contributes value to the organization, leaders must execute the plan. Direct action of the plan includes many different activities, such as allocating financial resources, selecting appropriate human resources, delegating tasks, reorganizing roles and responsibilities, analyzing problems, resolving conflicts, seeking alternatives and finding solutions. For example, identifying appropriate players for the execution phase is not easy. Sometimes, existing personnel may be unsuitable, thus, hiring, placement, training and other human resources matters must be addressed (Stebbins et al., 1998). Especially since health care is very specialized and becoming even more so, utilizing generic and broad skills may not lead to the desired results. Consequently, more specialized skills are necessary. To acquire these skills, training sessions to help build skills make employees more adaptable to changes. Skills building to broaden expertise in areas such as technical, problem-solving, decision-making and leadership are necessary for all personnel in the organization. Organizational leaders must continue to strengthen their own communication, listening, delegation and diversity skills (Reeves, 1996). In addition, cross training employees reduces the need to hire new staff and alleviates fears of unemployment (Bergman, 1994). Since re-engineering is a new concept in the health care field, education is an integral part of the execution phase.

The execution step has been called one of the most difficult steps in re-engineering. Some organizations “never figure out how to implement their plans” (Lumsdon, 1995). Execution is hard work and requires the evolution of organizational culture and tested leadership capability. Here, teams are important and have significant responsibilities in communicating the process and coordinating all work effort. Furthermore, essential to maintaining harmonious and productive teams is the ability of organizational leaders to utilize their interpersonal skills to energize all employees within the organization. Ummel et al. (1995) assert that “leadership and care must be exercised at this stage to ensure a smooth hand-off, so that the process moves forward”. Consequently, leadership strengths combined with stable staff will result in progress (Smeltzer et al., 1995). Execution of the plan to reengineer the health care organization encompasses leadership functions to educate, train, and motivate staff to bring the plan to fruition:

- allocate resources (financial, human, capital);
- redefine roles and responsibilities;
- manage conflict;
- educate, train managers and staff; and
- communicate and coordinate work efforts.
Evaluation

Having executed the plan of action, the last step is to evaluate the progress. Existing research suggests that re-engineering occurs in three stages and end with the execution phase (Gelinas and James, 1996; Moravec, 1996). They argue that evaluation is an unnecessary step and wastes resources. This inaccurate view has led to the demise of re-engineering efforts. Evaluation is vital to the re-engineering process (Vakola and Rezgui, 2000). In fact, when attempting to reengineer, resources should be set-aside for all four phases, including evaluation. The evaluation phase is important in two ways. First, it allows the organization to determine whether it has achieved its outcomes. When the original plan of action was established, it also pinpointed the desired results. These results should have been achieved. Furthermore, some unintended outcomes may also have been produced. For example, the process was only intended to result in patient satisfaction; however, at the same time, the redesigning process emphasized training sessions which also improved employee satisfaction. It is not altogether uncommon to achieve multiple outcomes.

Secondly, the result of multiple outcomes may be negative in nature. For instance, only concentrating on reducing cost may compromise employees’ satisfaction. To ensure that only desired outcomes are produced, the key lies appropriate leadership skills to effect change. Organizational leaders must monitor the effectiveness of the newly re-engineering organization, whether additional adjustments are necessary in various processes or the entire system. Then, evaluation is conducted to seek out and eliminate dysfunctional processes in daily activities. Leading the evaluation phase should be those who are capable of providing purpose, and direction and targeting for results (Ummel et al., 1995). At the same time, feedback is essential to the generation of a successful end product:

• reach desired outcomes;
• effective changes for the organization;
• continuous feedback to make adjustments;
• periodic review for more responsive organization; and
• cooperative, integrated and empowered organization.

Evaluation may also take place periodically to review if the new reengineered process is still effective and whether additional changes are needed. Some changes may be rewriting job descriptions, reassessing organizational tasks and developing new methods and procedures (Bergman, 1994). These minor adjustments require proactive leaders who recognize the need for such changes. Evaluating processes once in a while allow for creative changes to make the organization more streamlined and responsive to rapid changes in the environment. This takes enormous skill on the part of organizational leaders, who must be ready to face substantive changes. Leaders also serve as coaches and mentors to prepare all employees for changes. Many times, leaders must decide upon appropriate timing to pursue new ideas, challenges and ventures into the unknown (Blanchett and Flarey, 1995). In order for these activities to be successful, leaders must be skilled in creating and maintaining a cooperative, integrated, collaborative and empowered organization. If along the way, when an evaluation comes across internal strife, the solution will rely on the leader’s experience and skills, such as the ability to communicate, coordinate, prioritize,
monitor progress, resolve conflict and address human relations problems (Blanchett and Flarey, 1995).

The evaluation step finalizes the first phase of the re-engineering process. However, re-engineering is not an end. Evaluation must continuously take place to encourage feedback of all adjustments made to the organization. In this way, if evaluation determines changes need to be made, then the four Es process start all over again, with organizational leaders initiating a new cycle, beginning with a reexamination of the organization and environment.

**Discussion**
In order for re-engineering to be successful to effect meaningful changes in the organization, organizational leaders are a crucial component for they are responsible in bringing innovation and change to enhance their organizations. The four Es process is an integrated model describing leadership functions in each step of the changes made through the utilization of the re-engineering method. Leaders must utilize their skills and perform activities directed by the four Es process to result in performance improvements and productivity. Inadequate, ineffective, unskilled and incompetent leaders will result in the demise of re-engineering. Likewise, without the specific steps illustrated by the four Es, the re-engineering process will inevitably fail. The key to success lies in leaders who immerse themselves in the re-engineering effort and communicate that energy throughout the organization. In addition, leaders must possess attributes such as respect, integrity, perseverance, self-control and indomitable spirit (Strasen, 1995). Furthermore, they must also be self-confident, tolerant of high stress, energetic and emotionally mature (Yukl, 1998).

**Conclusions**
The US health care industry is going through its toughest challenges in a competitive, resource scarce, managed care environment. Not only must organizations struggle to maintain their institutional priorities of higher efficiency, better performance and lower costs, but they must also attempt to satisfy their patients' needs for better quality and improved health status. In order to meet the demands of the environment, stakeholders and internal organization, health care organizations are embracing re-engineering strategies to maximize their growth and potential.

Unfortunately, health care organizations have always been behind other industries in terms of innovations. This does not mean that health care has not attempted to invent new ways to reduce cost and generate more revenue. However, endeavors were usually random and reforms were only gradual steps of progression. It has only now been realized that the problems of health care are too great to be altered by incremental reform (Boland, 1996). Drastic action in the form of re-engineering has been introduced to the health care industry. Reengineering will not succeed without the endorsement and full participation of organizational leaders who must play proactive roles to make precise decisions in the change process. Although a few cases of re-engineering efforts were made in the health care industry, some have not been successful. The most common errors were lack of knowledge and coordinated effort. Thus, this research offers an integrated approach by combining re-engineering initiatives in the health care industry to the roles and activities of organizational leaders who are responsible for effecting change. Specifically, the four Es model is a series of precise steps that leaders
should follow when attempting to reengineer their health care organizations. By utilizing these processes, effective and successful changes will occur.

References


