

White Paper



IMPROVING HEALTH CARE PROCESSES
AND MANAGEMENT TRANSPARENCY

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Introduction

Health care is a one of a kind industry. It's more complicated and demanding than any other, mainly because of its complicated structure and human-centric nature.

Hospitals and medical centers are going through interesting times. They are not only experiencing the typical challenges of reimbursement, patient safety, and inconsistent quality, but additional challenges are arising.

Times change and so does the whole health care environment:

- New treatment needs: The rapid development of healthcare technology is generating new expectations and needs. New technology treatments are usually more expensive than the old ones so their usage should be well justified and consistent.
- An aging population in the Western countries. On average, people over the age of 65 use healthcare service four times as much as those under the age of 65, and their treatment processes tend to last longer. In order to treat these patients cost efficiently all the activities must be aligned and consistent.
- Promises of health information technology (HIT): electronic medical records, e-prescribing, and clinical data exchange seem both financially and medically attractive technologies, but predicting their actual impact is almost impossible. Lack of standards makes investments risky.
- Globalization doesn't only mean fiercer competition over jobs but also over top expertise. Lack of skilled staff and increasing employee turnover cause extra costs in the form of training and reduced quality of care.
- Growing or shrinking population: Some areas are growing rapidly following the building of new residential areas, as others become less popular. This requires hospitals to be able to modify priorities and to adjust to changing patient profiles quickly.

Management Challenges

The complicated nature of health care and changes in the external environment lead to management challenges, some of which can be overcome with the help of the right tools and methodologies:

- Increased volume of aging, long-term patients that can only be treated cost-efficiently if the treatment process is consistent
- Pressures for cost-awareness and cost-effectiveness to ensure both funding and coverage
- Improving cross-organizational cooperation in health care processes and reducing overlapping activities
- Organizational changes due to outsourcing
- Fulfilling agreed service levels in health care services
- Requirements of transparency and compliancy in a highly regulated environment

Performance and process management can help in overcoming these tough challenges. These management methods can be easily adapted to both public and private health care organizations to provide the following benefits:

- Treatment processes that are agreed upon, mapped, and regularly measured produce the best results in terms of high quality and efficiency of care
- Mapping and measuring treatment processes helps to evaluate and improve return on investment for HIT investments
- Improved productivity and effectiveness as a result of clearly defined roles and responsibilities and removal of overlapping activities
- Improved resource usage through strategy alignment
- With clearly defined metrics and action, transparency and accountability become part of everyday work
- Empowering health care employees with improved knowledge and capabilities to perform better in the complicated operating environment

QPR Health Care Solution Phases

The QPR healthcare solution based on Performance and Process Management consists of four components that can be used together or individually depending on an organization's situation and current needs.

These phases are:

1. Understanding the big picture:
Who are our clients and stakeholders and what are their processes, expectations, and needs?
2. Creating the Strategy Map
What are the critical drivers for success?
3. Defining the metrics
How do we know if we are doing a good job?
4. Improving individual processes
Are individual activities aligned with objectives?

Results

Typical results of implementing a QPR solution are:

- A visual presentation of the complicated network of constituents where the organization operates and measures to evaluate performance in different parts of the network
- A deep understanding of the needs and expectations of the constituents
- Improved efficiency through focusing on the right issues and aligning all resources towards common goals
- Increased accountability through transparency and clearly defined responsibilities
- Continuous improvement and learning through collaboration
- Improved reimbursement rate and patient safety thanks to consistent processes

Phase 1: Mapping Core Processes

Most health care organizations operate in a highly complicated environment and often it is very useful to start by identifying a network of stakeholders and their expectations and needs. The most efficient way to do this is to map their processes and define their interfaces to the organization's own processes.

This consists of four steps:

- 1) Identifying the main stakeholders: patients, insurance companies, public interest groups, researchers, universities etc.
- 2) Identify stakeholders' processes that interact with our organization
- 3) What are stakeholders' needs and expectations?
- 4) Do we have a process in place to fill the needs? Do we have processes that don't respond to any needs?

The big picture helps us understand which activities actually add value to stakeholders. This is crucial when defining strategic objectives and their indicators.

The benefits of this step are:

- 1) A mutual understanding of key stakeholders and their needs and expectations
- 2) A visual description of the organization's process architecture
- 3) A clear distinction between value-adding and non-value adding processes
- 4) The ability to forecast and be proactive in a changing environment

Phase 2: The Strategy Map

A strategy map describes the cause and effect relationships between an organization's strategic objectives. For example Lower Employee Turnover > leads to > Higher Quality > leads to > Higher Patient Loyalty > leads to > Higher Revenue.

The Strategy map is the first test of our strategy. Is it logical? Are all the objectives connected to the path towards success? Usually the main

benefit of strategy mapping is identifying the one or two key objectives that drive success and that we need to focus on.

The strategy map is a great tool for visualizing and communicating the objectives. Healthcare is a very detail-oriented and polarized sector where managing human-centric patient experience is as important as being reimbursed for per-patient cost. Strategy map helps to balance the efforts from both perspectives.

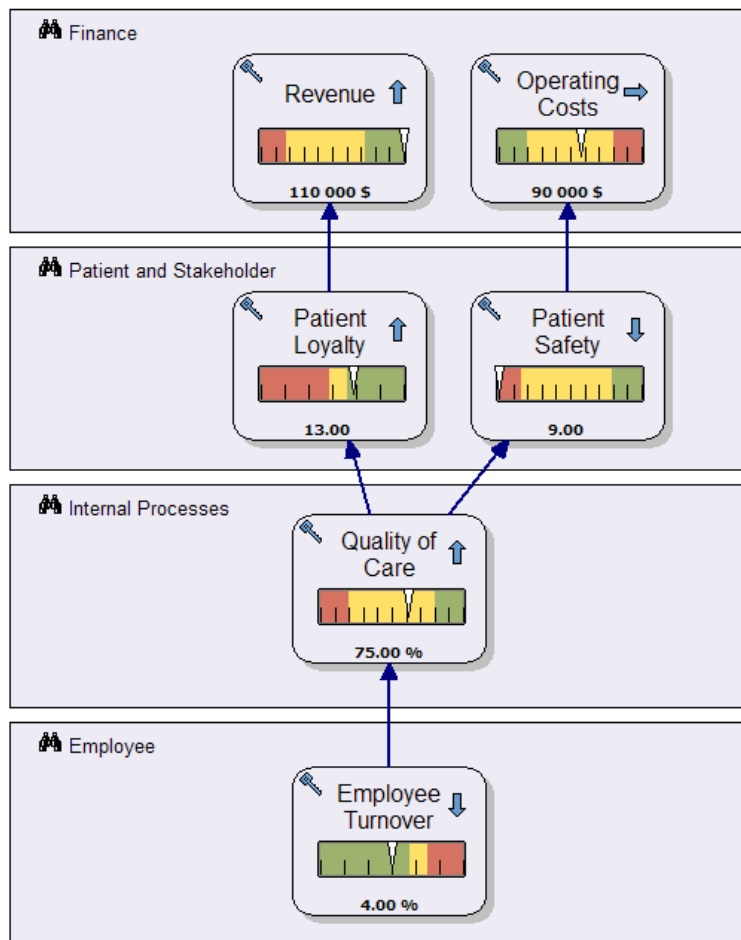


Figure A: A visual representation of the strategy map is an important communication tool, as it helps to justify investments in certain areas and emphasize the importance of selected objectives. This strategy map shows how critical employee turnover is to both patient loyalty and safety.

Phase 3: The Balanced Scorecard or Measurement Framework

When the strategic objectives are agreed on, they still need to be cascaded down to every level of the organization. Implementing a balanced scorecard or a performance management framework provides a methodology to start with. It also ensures that the balance of measures is considered when identifying strategic measures.

Every clinic having the same objectives doesn't only align priorities but it also adds a great deal of consistency in reporting. Often clinics even have their own rules on calculating and reporting certain types of infections or setting up action plans. As long as that's the case, best practices cannot be identified and implemented.

Need for change in priorities is a visual in strategy map, but it's truly communicated through cascaded measures at each individual. In addition to communication, setting targets is an essential part of successful performance management. Targets drive change in employees' behavior, and help identify and prioritize improvement needs.

With an integrated measurement system managers don't spend their time hunting down the numbers but actually manage both lagging and leading indicators.

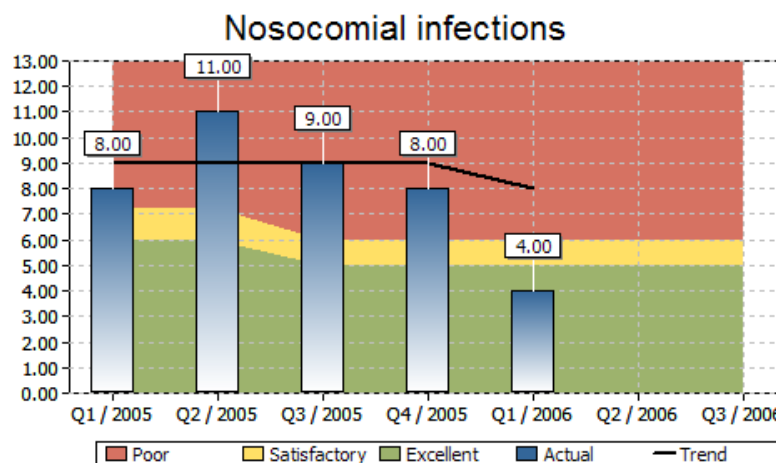


Figure B: This chart presents three things at once: Monthly number of nosocomial infections, trend of infections, and target and alarm limits. Change in targets drives change in organization's performance, so it needs to be communicated effectively.

Lagging indicators are your rearview mirror, they tell about past performance. Leading indicators predict the future, like increasing nurse turnover will probably lead to quality deficits. The balance between leading and lagging indicators ensures you know how you did and helps you act proactively. Additionally, the balance between financial and non-financial indicators ensures comprehensive management of actions.

For example staffing level is a leading indicator and something that needs to be stabilized. High staffing levels compared to capacity usage lead to excess costs. Then again low staffing levels disable full capacity usage and weaken patient safety which leads to poor financial performance. In this case the financial figures are the lagging indicators that need to be in balance with staffing levels and other leading indicators.

Phase 4: Process Improvement

Often, implementing a measurement system reveals “broken” processes. Typical signs for a “broken” treatment process are higher than average costs, unhappy employees, double checking and overlapping activities.

Process improvement starts by agreeing on objectives and stakeholders of the process. The next step aligns all the process steps with objectives and non-value adding activities are removed. To ensure continuous improvement, process specific measures must be deployed and tracked regularly.

Benefits of improving individual processes range from a better reimbursement rate to higher employee motivation. Reduced lead time often leads to better medical results and more satisfied patients.

Results Require Collaboration

None of the steps above can deliver the desired results without collaboration. Only through collaboration can you empower all the human assets of your organization. It is important to understand that collaboration implies much more than just communication. Collaboration means joint problem solving, knowledge sharing, and continuous learning from best practices.

The main benefit of QPR software products is the fact that besides performance and process management capabilities they also offer full support to employee collaboration. Action plans, comments, identified risks, and documented best practices are all stored in the QPR database together with performance measures and process maps.

When key performance indicators are stored in the QPR database and accessed through the QPR Portal, it's going to create a human knowledge repository around the indicators. This ensures that in case of high employee turnover, retirements or any time a new employee starts to familiarize themselves with the organization's practices, all the lessons learned and other comments are available in one source. Too often valuable human knowledge is stored in someone's head and their email inbox and nowhere else.

In a collaborative environment the employees in charge of measures have the possibility and the responsibility to add explanations to low performance, lessons learned for exceptional performance and risks they have identified. By doing that they not only contribute to better performance but become more committed at the same time.

http://127.0.0.1 - QPR Portal - Demo User (qpr) - Microsoft Internet Explorer

Create Risk

Description

Header: Capacity usage in December

Description: It seems that our staffing levels are too high for forecasted capacity usage in December.

Impact: 20000 €

Probability: 70 %

Rating:

Impact minimization: Start adjusting staffing levels in all nursing units.

Mitigation:

Notes:

Roles

Owner: matti Select

Identified by: Demo User (qpr) Select

Figure C: Explanations for possible risks and performance variances can be provided immediately for everyone's use.

Collaboration delivers expected results only if best practices are clearly defined and everybody knows their roles and responsibilities. For example lots of time can be saved if explanations for performance variances are provided before management meetings. By doing this everybody can ensure that valuable meeting time is spent on real decision making. And then again decisions made in management meetings can be stored in the QPR database, which then slowly starts building the knowledge repository.

After the meeting all attendees will have an email reminder in their inbox about what was decided, which ensures that no more action plans stay at the planning stage, but a transparent follow-up is easily available.

Get Results Fast

Implementing a solution like this doesn't need to be exhausting. First you need to set objectives and define deliverables for the implementation project. This often defines what the appropriate phase is to start with:

If you are having the challenges in finding the balance between various constituents, it's best to start by mapping organization's core processes and defining how they respond to various external needs and expectations (phase 1).

Then again, if the challenge is in strategic alignment and utilizing all resources to achieve common goals, strategy mapping (phase 2) is the phase to start with. As a deliverable of this phase you will have clearly defined strategic objectives.

When strategic objectives are in place, they will only become "live" if deployed using balanced scorecard or another measurement framework (phase 3). In this phase they will also be cascaded down to several levels of organization and completed with relevant measures or key performance indicators. Tracking measure performance soon gives an indication on which operational processes need to be developed further, which leads us to phase four, working with individual processes.

After selecting which phase to start with you need to select a pilot or test unit. Most of the time there are certain units in the organization that are more mature to test new methodologies, frameworks, and software solutions. It always makes sense to develop so called standard operating procedures (SOP) and internal best practices with such a unit. After delivering results from a single unit, it's easier to implement same concept of improvement across the organization.

Using an out of the box software solution such as the QPR helps to deliver tangible results in every phase of the implementation. It ensures that all deliverables are communicated and understood through the organization, and consistent objectives are cascaded down within the organization. It also offers the opportunity to start small, as all the features and functionality are available for later use, even if they are not needed in the beginning.

With professional services provided by QPR Software and QPR's partners you can be sure that implementation projects run smoothly and reliably. We help you select the appropriate phase to start with and ensure that targeted results are delivered on time. Soon you can expect to see the results: more satisfied patients and higher revenue figures.

Next Steps

To learn more about QPR Software's Process and Performance Management Solutions for Health Care solution please visit

<http://www.qpr.com/integrated-management-system.html>

To learn more about testimonials from other organizations in your industry about QPR please visit

<http://www.qpr.com/customers.html>

QPR Software Plc

QPR Software Plc is an international, highly regarded partner for enterprises and public sector in process development and business performance improvement. QPR's mission is to help people and organizations to take control of their business processes and achieve their goals.

QPR software has been implemented in more than 1,500 organizations across the globe and is provided in more than 20 languages. QPR was founded in 1991, has its headquarters in Helsinki, Finland and co-operates with an extensive network of talented partners in over 50 countries worldwide.

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