



Performance management, developing a culture of measurement and continuous quality improvement in Estonian hospitals:

Recommendations on alternative entry points and ways forward

By Ann-Lise Guisset, Johan Kjaergaard, Jarno Habicht



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EXECUTIVE SUMMARY

Background and aim of the study

Estonia is currently at a crossroads in hospital performance management. In 2001, the country embarked on hospital governance reform with the introduction of new management structures (management boards and supervisory boards). Other initiatives and reforms have been implemented over the last years to hold hospitals accountable for measurable results and to foster a culture of continuous quality. Estonia joined the performance assessment tool for quality improvement in hospitals (PATH) network for its second wave of data collection and analysis in 2007 (PATH-II). The PATH coordination is assured by the Estonian Health Insurance Fund (EHIF). Its involvement in PATH is motivated by its objective to support and promote comprehensive development of health care in Estonia, in addition to its core financing of health services. The EHIF aims to “purchase not only quantity of services but also quality of services” by means of e.g. fine-tuning contracts with a quality clause, supporting the development and implementation of clinical guidelines, performing clinical audits, and developing pay-for-performance incentives. This report aims to first to review whether or to what extent these changes have improved performance management practices.

Also, there is currently growing interest in the development of an indicator system in Estonia – building on PATH experience – but questions have been raised about potential use and abuse of such tools and how to position them. The objectives and roles of the different stakeholders have not been clarified. At this point, the report aims to foster debate incorporating perspectives of the different stakeholders on the issue of the National Indicator System (or similar approaches), in the wider context of governance and performance assessment practices in hospitals.

Hence, the study aims to analyze the governance and management practices in hospitals, the current use of performance¹ indicators in hospital and the national stakeholders’ views of them, to assess national stakeholders’ local technical capacities for coordination, data analysis, and evidence-based, strategic decision-making, and to highlight strengths and weaknesses of indicator systems in supporting hospital performance management.

Main findings

The strategic focus is marked by the recent hospital reforms and aligned on the Hospital Network Development Plan (Government of Estonia, 2003) which states that the three objectives for the hospital network are (1) to ensure access to high quality care, (2) to optimize the cost for establishing and operating the hospital network and (3) to ensure the sustainability of the hospital network. Measurable targets were set to assess the achievement of those objectives in terms of (a) reducing the average length of stay in acute care (b) reducing acute care beds and (c) increasing the bed occupancy rate in acute care. We observed that hospital strategic priorities are aligned

1 “Performance management” is defined in a comprehensive perspective that includes all management of all dimensions of performance (patient-centeredness, safety, clinical effectiveness, staff orientation, responsive governance, efficiency) and refers to both the clinical and managerial spheres.

to the measurable targets (a to c) rather than to the stated objectives (1 to 3). Access, and quality of care (objective 1) as well as optimization of the network (objective 2) (through for instance sharing facilities or specializing for increased volume) are largely under-represented. In the context of hospital reforms and relative uncertainty regarding survival, what matters, and hence what is measured and looked at with scrutiny by the supervisory board and the management board, are volume and prices (content of the contracts with EHIF) and patient satisfaction (patient complaints essentially). Hence, we generally observe significant discrepancies between strategic statements, performance measurement and internal accountability structures. The discrepancies between stated priorities and performance measures were explained by a lack of data (though a lot of data are being collected, see below), a lack of knowledge of the tools (indicators, reports) and a lack of leadership or interest in investing in an integrated performance management system. There is a culture of measurement at the top management and strategic board levels but the scope is generally extremely limited (volume, price, market share, occupancy rate, financial indicators). Some figures are regularly looked at but they do not cover the whole spectrum of hospital performance.

While there has been a clear convergence in the strategic orientation of hospitals – spurred by great pressure brought about by recent hospital closures and mergers – there is extremely wide diversity in how quality is managed at the hospital level, due to weak external pressures, leaving individual initiatives and personal leadership as main drivers. Though quality is usually formally included in the mission statement or the hospital strategy, there is generally no action plan for quality, or there are very limited figures to assess it. Hospital quality is seldom described in annual reports, and it is little discussed in governing bodies. The quality improvement activities most often in evidence are monitoring patient satisfaction and handling complaints, infection control activities, monitoring of complications or adverse events, internal audits and external quality assurance audits.

Information systems are well-developed in the health sector, including numerous databases linked to all providers, various forms of regular medical statistics systems and recent e-health developments. Furthermore, there has been some progress in consolidating or integrating the various databases. The quantity of data is not at issue, but its quality and access to the “text format” fields are. Expectations regarding electronic patient records are very high. This could be seen as a good reason to wait before developing further clinical effectiveness indicators. Hospitals receive little feedback on the voluminous data sent to central authorities, and it tends to be received too late for action other than statistical compilation. The EHIF has started to provide feedback to individual providers but regular short-term feedback loops for health statistics are still at the discussion stage.

At the present stage, among the various institutional stakeholders, the EHIF has taken a de facto lead in quality improvement. Hospital positions on this role are ambiguous. Hospitals generally do not perceive the EHIF as a neutral, independent body, as they fear economic consequences in case of unsatisfactory quality.

There seems to be discrepancy between the initial judgement of PATH’s success and subsequent reports of its actual positive impact in Estonia. Even if PATH has

not met Estonian participants' initial expectations, it has had a very positive impact in terms of capacity building, hospital networking and developing trust in the EHIF, and it generated concrete action for improvements in specific fields (e.g. operating theatres). The PATH system has been part of a major cultural change to get quality on the agenda on all management levels (boards, clinics, departments).

Conclusion and recommendations

Based on the above findings, we suggest combining two approaches. On the one side, there are opportunities to create additional external pressures to bring all stakeholders more closely together and to create strong incentives for comprehensive performance management. On the other side, there is potential to build on the numerous initiatives already being implemented and to “let the flower blossom”. A balance of top-down and bottom-up is crucial. The large variations in hospital practices indicate that managers find ways forward and provide opportunities for cross-learning, but they also reflect a lack of central vision and guidance of the hospital network. More specifically, the key recommendations are the following:

- (1) Align the different developments in the sphere of performance management and incentives and engage all stakeholders in a common supportive vision, using the tools at their disposal (data, legislation, advocacy, academic relevance, etc.).
- (2) Define incentives to motivate supervisory and management boards to develop informed dialogues on performance data, including not only volume and financial indicators but also quality and access indicators. Also target the supervisory board through programmes to raise awareness and training for strategic performance management. The objective is to align the vision statement, strategic priorities, performance measurement and performance management systems. This alignment has proven to be a critical success factor in highly performing organizations.
- (3) Have concerted action among hospitals, the EHIF, the National Institute for Health Development (NIHD), the Ministry of Social Affairs (MSA) and professional associations for the successful implementation of comprehensive performance measurement system
- (4) Build on the present experience and ideology of PATH, meaning to use the existing culture and infrastructure and to expand step-by-step: involve more stakeholders, add more hospitals, further develop some dimensions, add more PATH-set indicators, add non-PATH relevant indicators to the report (e.g. finance, volume, occupancy, market share).
- (5) Build on PATH emphasis on a comprehensive definition of performance and link performance measurement to strategic performance management.
- (6) Reuse administrative data to measure the quality of care for specific diseases and procedures in a standardized manner to get more information out of the existing national hospital patient register hosted by the EHIF. To initiate the

process and get timely results, prefer internationally developed and widely accepted indicators (e.g. AHRQ, OECD, NHS) and provide the feedback using channels similar to that of the EHIF clinical audit.

If public disclosure of performance data for informed choice of hospitals should come onto the political agenda, then the possibility of having national, validated and reliable indicator data covering all hospitals will be greater thanks to PATH and other tested indicators. Such initiatives could be understood as enabling hospitals to argue about the limits and evidence value of published information. The measurement culture in such systems is no-fault, placing responsibility on clinical and organizational pathways, learned in a protected environment through training.

1. INTRODUCTION: AN INTERNATIONAL CALL FOR PERFORMANCE ASSESSMENT AND STRATEGIC PERFORMANCE MANAGEMENT

1.1. Highly performing hospitals contributing to highly performing health systems

Equity, solidarity and participation are core values of the WHO Member States as stated in the Tallinn Charter on Health Systems, Health and Wealth, and accountability and transparency are essential to achieving them.² Health systems in the European Region are under growing pressure to optimize their performance in order to meet the health needs of populations. The Tallinn Ministerial Charter, adopted by the Region's 53 Member States, states that health systems need to demonstrate good performance. The Member States committed to "promote transparency and be accountable for health system performance to achieve measurable results".

Functions carried out by hospitals contribute to the performance of health systems. Hospitals – as key actors in the health system – need to demonstrate good performance and achieve measurable results. They are currently facing many challenges. Pressures for cost containment are increasing and sound resource allocation is necessary to continue accomplishing the hospital mission. By signing the Tallinn Charter, Member States explicitly recognized that "patients want access to quality care and to be assured that providers are relying on the best available evidence that medical science can offer and using the most appropriate technology to ensure improved effectiveness and patient safety".³ To respond to these pressures, hospitals need to clearly define their vision and strategic goals and to have a good understanding of the threats and opportunities in their environment and their own strengths and weaknesses. The Tallinn Charter served as a foundation for the Vienna Statement on Hospital Performance Assessment (annex 1).

1.2. International trends in hospital performance assessment and strategic management

There is a wide consensus about the complexity of the hospital performance concept definition, performance measures, metrologic properties of indicators and incentives and their alignment with strategic priorities. There is a growing trend towards harmonization of systems at the local, national and international levels. This will limit the burden of data collection and reporting while helping to build synergies. A consensus is building about a limited number of evidence-based indicators, as extensively described in the

² For further information see <http://www.euro.who.int/healthsystems/Conference/>.

³ WHO Regional Office for Europe (2008). *The Tallinn Charter: Health Systems for Health and Wealth*. Copenhagen.

literature and used in recent international systems, for example, the OECD quality indicators and the European adaptation of AHRQ patient safety indicators.

Even if there is an agreement on some tools, hospital performance assessment systems in Europe remain extremely diverse (for example, the United Kingdom's National Health Service star ratings, Denmark's National Indicator Project, Germany's BQS quality measures, the Netherlands' Inspectorate KIP). They vary widely to accommodate diverse degrees of information system maturity, accountability structures and external pressures for increased accountability. They are also geared to different objectives, promoters, incentives, publics and political or strategic priorities. In some countries, a culture of measurement and transparency is extremely well-developed, while it is merely emerging in others. Performance assessment might be part of the daily routine or it might be considered "revolutionary" and lead to defensive behaviours.

The clinical effectiveness, patient safety and patient centeredness dimensions of performance are sometimes isolated under the "quality" concept.⁴ After many years exploring how quality could be measured, literature has shifted to exploring how quality can be improved (Vallejo and Sunol, 2009). Quality improvement activities are described in box 2. A recent international analysis on the effectiveness of quality improvement strategies (Marquis study: Vallejo and Sunol, 2009; Groen et al., 2009), found a multitude of overlapping and sometimes redundant quality improvement initiatives, which often focused on different aspects of quality and safety, and were probably most effective when used in combination. The authors also suggest that efforts to provide a strong statutory framework for quality improvement should aim at embedding it in existing health system funding and provision systems.

Thus, implementation of national or local hospital performance assessment systems and quality improvement activities is more about developing a culture of measurement, transparency and continuous quality improvement – aligning performance assessment to strategic management and adapting the tools to the context – than about adopting a "one size fits all" model.

Classification of general quality improvement activities

- quality improvement teams or circles
- internal audits
- adverse events reporting and analysis
- risk management and patient safety
- patient surveys
- analysis of patient complaints
- monitoring the views of referring professionals
- regular staff performance reviews

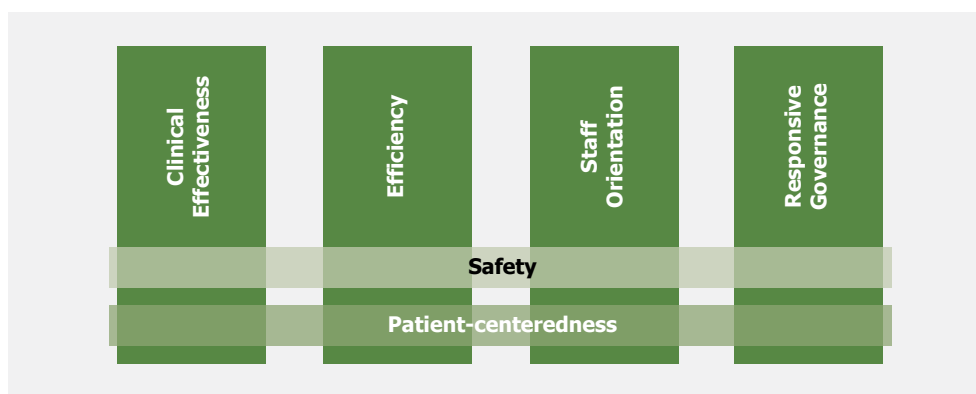
Source: (Lombarts et al., 2009)

⁴ There are various (sometimes contradictory) definitions of quality and performance. Quality is sometimes defined as a high level of "performance" (Kazadjian and Lied, 1999), which itself sometimes refers to clinical aspects and sometimes to financial aspects. This report will consider quality to be a dimension of performance, encompassing clinical effectiveness, patient safety and patient centredness. This use of the term seems to correspond best to the understanding of Estonian hospitals and stakeholders.

1.3. The performance assessment tool for quality improvement in Europe (PATH)

PATH was developed by the World Health Organization Regional Office for Europe in 2003 and revised in 2009 (www.pathqualityproject.eu). Estonia was interested in the performance assessment tool at an early stage to have baseline for hospital sector performance and started to participate in the network (Groen & Habicht, 2005). The PATH system is a comprehensive tool for hospitals to assess their performance, question their own results and translate them into quality improvement activities by using practices from other hospitals. By participating in PATH, hospitals join a network sharing a number of core values and commitments such as transparency, openness, collaboration and continuous improvement. Participating hospitals recognize that performance management is complex and needs to be addressed by their strategic decision-makers as well as by all hospital staff. The PATH system goes beyond the traditional professional divisions such as financial performance vs. clinical effectiveness; it is based on a comprehensive view embracing clinical effectiveness, efficiency, staff orientation, responsive governance, safety and patient centeredness (figure 1).

Figure 1. The PATH system conceptual model

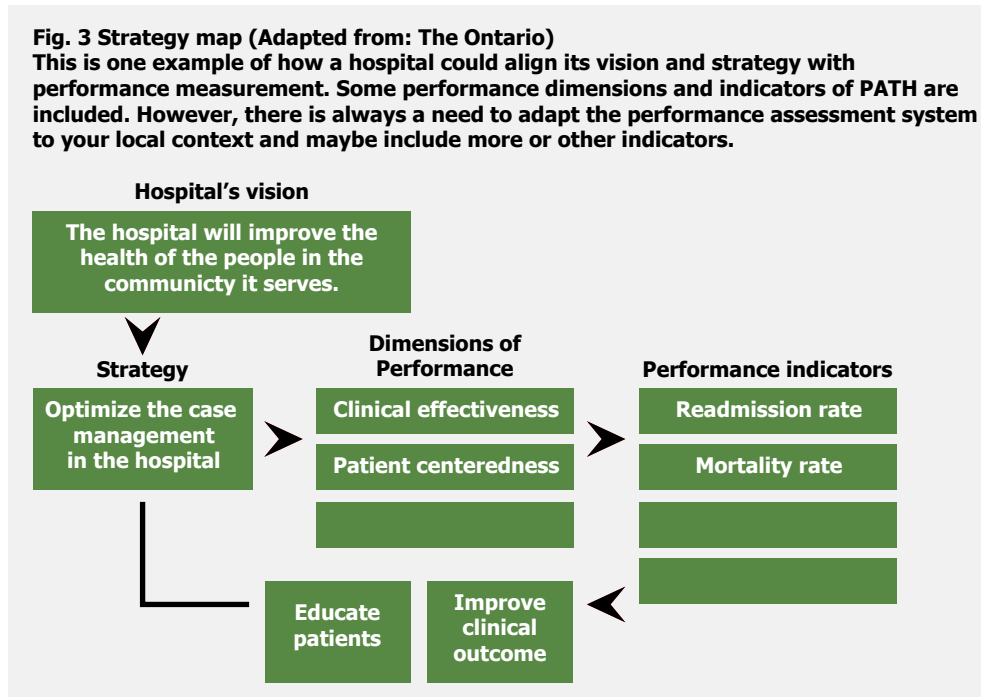
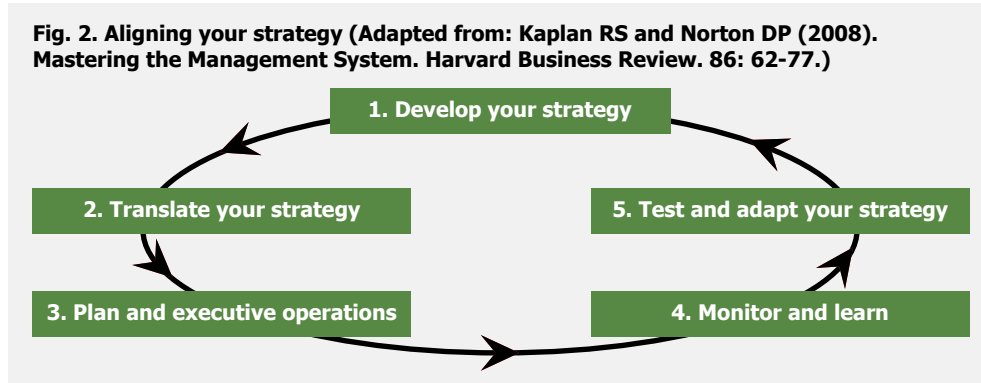


The PATH system is also meant to support strategic hospital management. It builds on Norton and Kaplan's theory (2008) linking performance measurement and management by aligning vision, strategy, goals and performance initiatives (see figures 2 and 3).

WHO, as promoter of PATH, emphasizes local empowerment. The PATH system was revised with this perspective in 2009. It is to be used as a tool to integrate national initiatives and make them sustainable. For instance, in Belgium, the PATH project was used as a stepping stone to a national hospital performance report organized by the Ministry of Health, adopting PATH's philosophy of anonymous comparisons for self-evaluation, a multidimensional view of performance and some indicator definitions. Other countries might use PATH indicators for their own systems. It is crucial that PATH build on local performance measurement and improvement mechanisms, that its contribution to a national long-term strategy for accountability and quality improvement be made explicit and that the roles (or lack of involvement) of all national stakeholders be clarified. This is of utmost importance because,

contrary to previous periods with PATH-pilot and PATH-II, PATH'09 presupposes that data analysis takes place on the national level. This requires substantial financial investments and technical capacity development, and might raise concern about data propriety (who can use the data for what purpose).

Figures 2 and 3. Performance measurement and strategic management⁵



⁵ See also: Zelman WN, Pink GH, Matthias CB. Use of the balanced scorecard in health care. *Journal of Health Care Finance*, 2003, 29(4):1-16.
 Yee-Ching LC. How strategy maps works for Ontario's Health System. *International Journal of Public Sector Management*, 2009, 22(4):349-363.
 Veillard J et al. (2009). Making health system performance measurement useful to policy-makers: aligning strategies, measurement and local health system accountability in Ontario. *Health Care Policy*, February 2010.

1.4. The Estonian context and motivations for this study

Hospitals reforms in Estonia since 2000

In this section, we present two reforms that will have a major impact on hospital governance and incentives for performance management. This introduction builds on the detailed presentation of the reforms in *Estonia Health System Review* (Koppel et al., 2008).

In 2000, the Hospital Master Plan 2015, commissioned by the Ministry of Social Affairs, recommended that the number of acute facilities be decreased to 13 hospitals⁶ and 2 acute beds per 1000 population. These recommendations were implemented gradually and in 2003 the plan was reassessed and the Hospital Network Development Plan (HNDP) was approved. This plan foresees 19 active treatment hospitals (12 general and local, 4 central and 3 regional). PATH participating hospitals comprise all central and regional hospitals, which are in the HNDP. In the period from 1999 to 2001, 41 hospitals and outpatient clinics in urban areas were merged into six networks, mainly in the big cities. Four of the networks were able to restructure their services and close seven facilities. As the networks were established, the management and supervisory boards were created and given the responsibility of running the merged hospitals as single legal entities. Earlier in 2005, the hospital sector reforms were assessed and it was noted that the pace and accomplishments of the reforms had been substantial and supported further implementation of the Hospital Master Plan (Veillard et al, 2005).

In 2001, ownership, legal status and governance of hospitals were clearly defined. All hospitals operate by law as joint stock companies or foundations. Most hospitals are owned by the state, local governments or public entities and in many instances hospitals have multiple owners (such as a number of municipalities). This multiple ownership might weaken the owner's motivation to assume the responsibility for hospital performance (Koppel et al., 2008), and it might weaken the ability to hold owners directly accountable for hospital performance (Habicht, Aaviksoo, Koppel, 2006). The importance of streamlining the accountability lines and improving governance practices has been emphasized (Veillard et al, 2005; Jesse 2008). Hospital owners nominate the supervisory board members, mainly based on position (members of city or municipality council) rather than on competence. As a result, a politicizing of the supervisory boards has been observed over the last years. The management board is accountable to the supervisory board, in a two-tier management structure.

The relationship between the EHIF and hospitals is based on contracts, not on direct ownership. At the beginning of each year, the EHIF negotiates capped cost and volume contracts with hospitals. Though selective contracting was established in 2003, the EHIF is required to contract with all hospitals in the Master Plan 2015. More recently, those contracts include details on access and service quality in addition to volume and per-case costs.

6 There were 83 hospitals in 1995 and 67 in 2001.

The 2002 New Health Services Organization Act formalizes the requirement for quality assurance for health services providers: all providers are obliged to have a Quality Handbook, which is the basis for their internal quality assurance system (Koppel et al 2008). Quality in health care has gained increasing attention and there is a wide range of stakeholders involved (Pölluste et al., 2005). In addition, a number of quality projects have been carried out. For instance, in 2003 the EHIF established the Clinical Guidelines Advisory Board. In addition, the EHIF is organizing clinical audits to determine whether the provision of services is justified and to check the quality of case records. Feedback is sent to the providers to motivate them to provide improved services on the basis of the evidence. Clinical audits are carried out by professionals renowned for their experience in the field and draw on current laws, clinical guidelines, codes of conduct and good practice (EHIF, 2008). Also, the EHIF has facilitated discussions on pay-for-performance (P4P) initiatives using experience from other countries (Maynard, 2008) and started pilot PROM programmes in hospitals in 2009. Since 2003, the EHIF has supported the participation of six hospitals in PATH (see below). In addition, quality and performance indicators have been applied to family medicine with increased involvement of doctors over the years.

Motivation for the study

Estonia is currently at a crossroads in terms of hospital performance management. A number of initiatives and reforms have been implemented in recent years to improve hospital governance, hold hospitals accountable for performance management and foster a culture of continuous quality improvement. In this context, there is growing interest in the use of indicators and a national indicator system. Simultaneously, questions are raised about the use of such tools and how to position them. The objectives and roles of the different stakeholders are not clarified.

The process for implementing performance indicators has been led by the EHIF, through the participation of Estonian hospitals to the Performance Assessment Tool for quality improvement in Hospitals (PATH). The PATH hospital group and the EHIF continue to work with indicators, and envision a number of alternatives for implementing PATH and complementing PATH indicators with ad-hoc indicators or tools, such as a national indicator project (similar to the Danish experience) or performance indicator publication. A number of questions are pending, such as who is to participate, whether the group should be open to other hospitals or stakeholders and evolve towards a truly national indicator project, whether PATH indicators should be used for other purposes than internal quality management, whether PATH and other indicator projects can co-exist, how to coordinate accountability, payment and internal quality improvement mechanisms, etc.

The report aims to foster debate, bringing in stakeholders' perspectives on hospital governance and performance assessment practices. It highlights some potential way forward or "entry points" to developing a culture of measurement, accountability and performance management. One area of interest is quality management and improvement. The study will analyse governance and management practices in hospitals, current use of indicators in hospital performance management, the positions of stakeholders on indicator systems, assessing local technical capacities for coordination, data analysis, strategic decision-making based on evidence .

2. MATERIAL AND METHODS

2.1. Steps taken

The study was initiated during a visit of the WHO technical leader of PATH implementation, when it was agreed with EHIF that the views of all the stakeholders should be solicited. Limited information was distributed to solicit the participation to the interviews.⁷ The face-to-face interviews (varying from 45 minutes to 75 minutes) were organized within a week. This report's main findings and recommendations are based on the interviews with institutional stakeholders and hospital representatives, as well as on previous reports (Habicht, Aaviksoo, Koppel, 2006; Koppel et al., 2008; Veillard et al, 2005; Groene & Habicht, 2005; Maynard, 2008) and on the international experience with the implementation of quality improvement and performance management strategies in hospitals (Lombarts et al., 2009). The report was presented at a seminar (22 October 2009, see annex 4) to allow the interviewees and others to comment and validate the main findings. More than 30 participants represented all the stakeholders included to the study.

2.2. Interview guides

With the aim of supporting strategic hospital management, we conducted the interviews with members of the management board of the six PATH-participating hospitals on how they view their role (with a focus on performance management practices and tools, transparency and internal accountability, the use of evidence to support strategic decision-making, incentives for quality improvement and their short and long-term expectations for national indicator project) and on their experience with PATH project in Estonia in the past years. PATH hospital quality coordinators were also interviewed, to understand the national context of performance management and the role of PATH in developing a culture of measurement and continuous quality improvement. We also discussed quality management in more detail and the position of quality in the hospital structure. We reviewed bottlenecks to developing quality management and their views on future developments. The assertions made by the hospitals are not backed up by quantitative data. The analysis based on the perception of the persons interviewed rather than on objective data.

Representatives of the MSA, NIHD and EHIF with interests in hospital sector statistics and measurements were also interviewed to clarify their roles with respect to performance measurement and improvement. The generic hospital interview guide was adapted to the respective institutional interviewees.

The interviews covered the following areas: 1) strategy and accountability; 2) performance assessment and management; 3) quality management; 4) data and indicators and 5) the PATH experience. Their relative importance varied to match the background of the interviewee; not all questions were asked of all interviewees.

⁷ See also annex 2 for a list of interviewees and annex 3 for interview guidelines for hospitals members of the board and PATH coordinators.

2.3. The sample

Estonian active treatment hospitals are classified as regional, central, general and local. They provide treatment for acute diseases requiring active medical intervention. Local hospitals rank lowest and regional hospitals highest, in terms of varied and specialized services. The PATH participating hospitals include two of three regional hospitals and four central hospitals. The central hospitals provide some tertiary, but mainly secondary care, for catchments of approximately 200 000 inhabitants. Local and general hospitals – not participating in PATH and not interviewed – are smaller, with generally between 50 and 200 beds, and provide care for common conditions. Thus, the sample is not representative of all 25 acute treatment facilities but only of the highest level hospitals. Our sample is purposive and no inference can be made to Estonian hospitals not participating to PATH.

3. MAIN FINDINGS

In this section, the presentation of the main findings is first described along the five areas covered by the interview guide. Then they are organized along the strengths and weaknesses of the sample hospitals and the opportunities and threats in the environment to develop a culture of performance measurement for strategic management and to foster continuous quality improvement in hospitals. This section focuses on the presentation of the results for the 6 hospitals in the sample.

3.1. Hospital reforms in Estonia and strategic orientations of the six represented hospitals

The principal focus of strategic management, as a general trend in the six general hospitals, is illustrated in figure 1, built on the four dimensions and two transversal perspectives in the PATH conceptual framework. Hospitals clearly stated that they focus on economic and financial performance rather than on quality:

- Hospital A: *“Don’t use the word performance in Estonia. This word is mostly understood by the stakeholders and politicians as financial balance and economical sustainability. What matters for them is 1) finance, 2) volume of services (and waiting list), and 3) complaints (scandals in newspapers)”*.
- Hospital B: *“The strategic priority is to survive in a difficult environment with less funding and more waiting time. Supervisory boards are essentially interested in financial and economic issues; they do not interfere in the quality issue. The only qualities discussed by the supervisory board are volume and bed use.”*
- Hospital C: *“The priority for all Estonian hospitals, including our own, is to increase volume and utilization.”*

Nationally, there has been a reduction in the number of hospitals and beds since the early 1990s, along with clarification of the hospital network. In the regions of high hospital density and overlapping clinical areas, three hospitals indicated that the strategic focus is on long-term survival in a difficult environment. Hospitals are geared to sustaining access to critical resources for specialities and sub-specialities in the long term. They compete for financial and human resources, especially physicians. The competition for patients is most acutely marked among the capital’s three hospitals, but other hospitals also indicated a priority objective of attracting patients: *“We have our main business and our patient populations clearly defined, the main objective is to keep all departments and to develop them”*. The scarcity of physicians and nurses was cited by all hospitals.: *“Big hospitals are fighting for patients, the main issue for our hospitals is to have students, resident nurses and physicians.”*; *“Physicians have great bargaining power. If they are not satisfied, they go to another hospital in Estonia or even leave for another EU country”*. The current scarcity of financial resources was also mentioned: *“The main issue is how to get the required financial resources, to be able to replace equipment when it breaks”*; *“This is the first year that we did not have a budget increase, so we need to find alternative*

funding and decided to advertise our services and allow patients to pay out of pocket to bypass waiting lists”.

In the context of hospital reforms and uncertainty of survival, volume, prices and patient satisfaction are what is measured and scrutinized by the supervisory and the management boards. From a strategic marketing perspective, a few hospitals have explicit strategies to specialize, identify a “niche”, define a unique competitive feature and clearly communicate it. For instance, one hospital indicated that oncology and cardiology was “*something to protect*” and how they differentiate themselves and that it was then crucial to maintain the highest quality in those disciplines and to communicate it to the population. Another asked “*With the competition, should we increase our volume or to do what we are supposed to do and cooperate with primary care?*” Other hospitals aim at maintaining all specialties and compete for patients and physicians on all fronts. This strategy was justified by one hospital by “*the referral role that regional hospitals are playing; as they take more complicated cases from smaller local hospitals*”. This hospital meets with other hospitals once a year and with family physicians twice a year. The two last hospitals made a “responsive governance” dimension explicit in their strategies. A hospital articulated the hospital mission for responsive governance: “*We are an institution that should guarantee social security in the region, as opposed to health care services. We have a social responsibility to Tallinn citizens, and more focus on the patient population than on high-level medical services.*” In the same hospital, there is good cooperation among family physicians, nurses and the outpatient department.

In the context of hospital reforms and relative uncertainty regarding survival, what matters, and hence what is measured and looked at with scrutiny by the supervisory board and the management board, are volume and prices (content of the contracts with EHIF) and patient satisfactions (patient complaints essentially).

The strategic focus is marked by the recent hospital reforms and aligned on the Hospital Network Development Plan (Government of Estonia, 2003). The 2003 Hospital Network Development Plan states the network objectives as ensuring access to high quality care, optimizing the cost of establishing and operating the network and ensuring its sustainability. Measurable targets were set to assess the achievement of those objectives: a) to reduce the average length of stay in acute care from 6.7 days in 2004 to 4.6 in 2015; b) to reduce acute care beds from 6500 in 2001 to 3200 in 2015 and c) to increase the bed occupancy rate in acute care from 67% in 2001 to 83% in 2015. Thus, hospital strategic priorities are aligned to the measurable targets rather than to the stated objectives. Access, quality of care and optimization of the network (through sharing facilities or specializing for increased volume, for example) are largely under-represented. This indicates the risk of tunnel vision induced by the use of targets: what is measured becomes the focal point, rather than what really matters.

It is noteworthy that the findings above slightly contradict a previous study on hospital governance (table 2). In that study, ensuring quality of care was cited as a top priority by both the managers and the supervisory boards, while improving market share and developing new services were lower priorities, efficiency was a middle priority and improved access to care was cited as the top priority by the supervisory

board. As noted by Jesse (2008), the approved strategies and development plans are not always followed (only 54% of the supervisory members agreed with the statement the supervisory board’s decision-making is in accord with the hospital’s mission, vision and long-term objectives (Habicht, Aaviksoo, Koppel, 2006). This raised the question of how committed the hospital governors are to the strategy and whether it is meant to guide the development of the organization or is solely done to check a box in a list of required documentation. It also raised the question of the applicability of these strategies as accountability instruments (Jesse, 2008). The discrepancy between the stated strategic priorities and the actual decision-making process might partially explain the discrepancy between the results of the interviews (what is actually looked at) and the results of the previous study (what is formally stated). The interviewees in our study rapidly shifted from a discussion of the strategy to a list of the main issues. If quality is at the top of the strategy, the main issues are conditioned by the short-term preoccupation with access to resources. Thus, the discrepancy might also be explained by a bias introduced with the format of the interview.

Table 1. Hospital objectives ranked by importance by hospital managers and supervisory board members

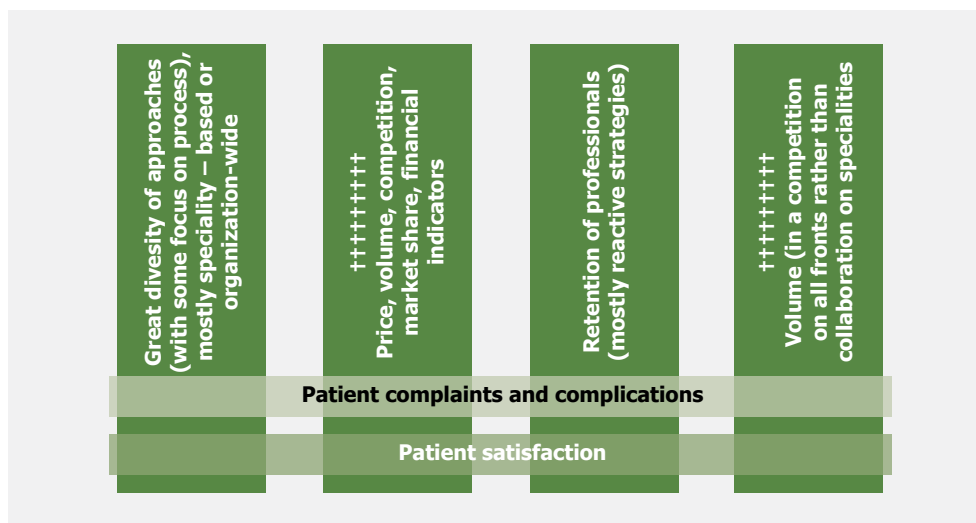
Objectives	Managers	Supervisory board
Ensuring quality of care	1	2
Improving client services	2	3
Increasing efficiency	3	4
Developing new services	4	6
Improving access to care	5	1
Increasing market share	6	5

Source: Habicht et al., 2006

3.2 Performance assessment and management, culture of measurement and internal accountability

There is a culture of measurement at the top management and strategic board levels, but the scope is generally extremely narrow (volume, price, market share, occupancy rate, financial indicators). As mentioned above, some figures are regularly looked at but they do not cover the whole spectrum of hospital performance (figure 4). When we asked hospital managers and quality coordinators to make a judgement of their own performance, they referred hardly at all to figures to support their judgements, even when prompted to do so. This observation is even more critical when assessing clinical effectiveness. Reputation seem to be the key to forming a judgement of quality: *“Patients come here because they know that they get good care – they request for some specific doctors and prefer to wait [for them]”*; *“The assessment of how good we are on this is mainly built on the reputation.”*; *“Reputation drives patient choices; patients are not educated enough to understand objective data.”*

Figure 4. Estonian strategic priorities mapped onto the PATH conceptual framework



Legend: ++++ indicates the dimension is closely monitored

Though quality is usually formally included in a hospital's mission statement or strategy, there is no action plan for quality, or there are very limited statistics to assess it. It is seldom described in annual reports, and little discussed in governing bodies, as evidenced by the following statements: *“Development of a quality system and quality measurement are presented in the strategy, but we lack the expertise and the knowledge to draft an action plan. Some specialties discuss how to do it, but it remains at the specialty level and it is difficult to transfer it to the organizational level.”*; *“Quality is the first element in the mission but we have no quality development strategy.”*

The annual report is the principal means of management board accountability to the supervisory board. In the report, clinical effectiveness is marginally treated and responsive governance gets little attention. However, one hospital indicated that quality measures had recently been included in the annual report and had served as example for one other regional hospital: *“Annual reports are quite well detailed. The current format is quite good. We have a comparatively good survey about clinical activities and research, though the official part is limited to the balance sheet, as there is no pressure to go beyond financial indicators.”*

It was recognized that *“qualitative measures are lacking from reports”* (long term development plan, annual management project plan) and that *“priorities are stated on one side and data available on the other side but they are never put together”*. We also observed little formalization of targets: *“there are some targets but they are immediately outdated”*; *“the targets are not very ambitious”*; *“there are no formal targets, we just know that we want to improve this or that”*.

It is noteworthy that a system based on indicators (scorecard) to link management board members' bonuses to performance has been developed in one hospital. An objective calculation of the bonus had been proposed, but is not in use anymore.

Thus, we generally observe a major discrepancy between strategic statements, performance measurements and internal accountability structures. The discrepancy between stated priorities and performance measures was explained by a lack of data (though a lot of data are collected; see below), lack of familiarity with the tools and a lack of leadership for investing in an integrated performance management system. It could also be explained by the fact that the strategic documents might have been developed only to conform to requirements and are not used to ground strategic decisions (Jesse, 2008; Habicht, Aaviksoo, Koppel, 2006). However, there are exceptions to this general rule, with performance assessment streamlined and directly linked to budgeting. Internal accountability and continuous performance assessment are central to the organizational culture of one hospital.

- *“Budgets have been rewritten a few times as results of audits.”*
- *“An audit plan is built ever year based on interviews and requests. If an issue is observed, an action plan for improvement is developed; if there is really a big problem, it is brought to executive board.”*
- *“All reports are available on intranet to all staff.”*
- *“The central idea is that every middle manager should audit another process.”*
- *“The board gets a number of reports at regular intervals: health analysis (monthly, +- 50 indicators), internal audit, infection control (1 to 4 annually), client service report (2 annually),, waiting times (2 annually).”*

At the operational level (quality department or clinics), if figures are looked at, little action usually comes out of it except for more regular monitoring and analysis of complaints. *“There are some reports but nothing is done. Culturally, there is a lack of leadership.”* It was generally difficult or impossible for interviewees to provide examples of a quality measure analysis resulting in an action plan for improvement.

3.3. Quality management and quality improvement activities

While there has been a clear convergence in the strategic orientations of hospitals, as a result of pressure due to recent hospital closures and mergers, there is extremely wide diversity in their quality management, resulting from little external pressure for quality processes, which is left to individual initiatives and personal leadership.

Attention to quality and quality management varies at the executive management level and in the organizational structures. There is often a dichotomy between clinical quality and other aspects of quality (*“The quality department concentrates on non-clinical figures, while clinical quality is analysed in each clinic”*). Often, the interviewees pointed to physician resistance to paperwork or evaluation or at best

some fragmented and isolated initiatives from individual physicians (usually, in the domains of infection control or blood safety). Quality departments generally do not lead the clinical effectiveness process. They provide tools, while isolated initiatives come from physicians. They coordinate and collaborate, but do not impose any approach. Their sphere of responsibility is mostly limited to processes and/or patient surveys and complaints.

- Hospital A : *“A new approach was proposed, with one nurse or physician to act as a contact person for quality, to develop an informal network of people interested by quality management within the hospital. Some informal leaders are interested and even enthusiastic about the project.”*
- Hospital B: *“The quality department is composed of two people. In addition, quality managers are operating in two clinics. They cooperate but do not subordinate to other units. ... The focus is on quality of the clinical treatment and patient satisfaction. ... The Quality department is involved in developing guidelines in collaboration with clinics for providing for-fee services.”*
- Hospital C: *“Quality initiatives mainly originate from the management, as opposed to the staff. Sometimes it is difficult to explain to a doctor why the way he does is not the most cost-effective.”*
- Hospital D: *“Treatment quality is clearly the responsibility of the chief doctor. ... The relation with the local managers is very variable. Usually, they are interested but they do not want to make any additional paperwork; there is probably a lack of commitment from the clinical side.”*

The willingness of a quality department or clinical manager to do more was repeated by several people, but bottlenecks were also identified. A lack of management support and/or resistance to paperwork and evaluation from clinicians poses a major challenge when the clinicians have great bargaining power in a context of scarce human resources. (*“It is very difficult to motivate doctors to do something that they don’t want to. We tried to implement some soft feedback mechanisms, with some acceptance.”*). Quality was also marginalized when opposed to cost containment measures, with some thinking that quality might not be affordable. This should be reversed and the cost of non-quality should be emphasized: *“We have a plan to link quality to cost savings on the agenda, but we have no one to do the job.”* And finally, interviewees called for capacity building: more human resources devoted to quality, more access to training, more national and international examples of good practice of quality management.

Two hospitals are taking a more consolidated and organization-wide approach, with strong commitment from management. One has already been described above as outstanding in its measurement, performance management and internal accountability culture. In this hospital, all the quality activities are grouped within a single department rather than dispersed. The quality department is responsible for health information and analysis, internal audits, client service management, quality management in general, infection control, transfusion control, a drug committee and a medical quality board. Clinicians resisted, and the internal audit system almost

died because of it. It was then written into the clinicians' terms of reference that they have to be auditors.

In another hospital, quality is streamlined in the organizational structure. The quality department concentrates on non-clinical figures, while clinical quality is analysed at the clinic level. In each clinic, there are heads of medicine, nursing and quality coordination. In addition, every clinic and the quality coordinators are represented on the quality of care commission, which develops guidelines and drafts forms (consent forms, etc.). Guideline compliance is monitored at the clinical level. There is a strong focus on auto-evaluation and professional realization of staff. The organizational culture is to "let the flower blossom": *"Management is responsible for quality and it is its duty to listen to good ideas that come from below."*

The quality improvement activities most often presented are as follows.

- Treatment of patient complaints and monitoring of patient satisfaction:

In the context of PATH collaboration, the survey questionnaire as well as annual surveys were harmonized and extended to all PATH hospitals in Estonia, after a lack of such coordination since the late 1990s. This provided a uniform tool for national comparisons between hospitals, as mentioned in several responses. However, one respondent noted that *"three years of comparisons to other hospitals in the group... did not discover anything new or revolutionary"*. Many interviewees cited patient complaints (a main responsibility of quality managers) as very high on the agenda. The management boards pay attention to patient surveys and complaints. Complaints are treated as they come and urgent actions may be taken while other indicators are only looked upon at distant intervals (once or twice a year). This focus is easily understandable in light of the importance of reputation, volume of care, occupancy rates and market share.

- Infection control activities:

When isolated initiatives are given as examples of good practice, infection control is regularly the first cited. Infection specialists are inclined to be very receptive to the continuous measurement and questioning of practices.

- Monitoring of complications or adverse events:

All hospitals report such monitoring. However, most highlight under-reporting of complications and adverse events. One hospital indicated that they were the first to make their complications rate public. It was believed to be a legitimate response to the public, who are increasingly well-educated and demanding. In the same time, patients have access to their records online. A management board member of this hospital believes that by making patient records accessible, the patients act as external validators of data quality and provide strong incentives to keep well-documented records. Conversely, another hospital indicated that having a central database that everyone can access was impeding reporting of adverse events due to fear of litigation. A third hospital reported that complication rates were made public on their own website as well as on the EHIF's, but that they were underreported because "the

doctors want to look better”. Finally, a fourth hospital mentioned the crucial role played by the quality department in registering complications. The methodology and feedback were discussed by the quality and clinical departments, and some individual doctors have now started to register complications more properly.

- Internal audit and quality assurance:

One hospital explained that the first quality step in response to the merger of numerous clinics with their own bylaws, was to construct an identity and develop a consensus on how to run a hospital. This was achieved by building on the principles of the EFQM model. According to a management board member, EFQM was good for building up an organization but a lot of paperwork was involved and much quicker changes are needed in order to preserve momentum. This observation calls for the simultaneous use of different quality management approaches. Another outstanding hospital has looked at the Joint Commission international standards, and some disciplines have their own certification approaches (ISO for laboratories, blood banks and radiology departments, for example).

- External audits:

The EHIF clinical audits were recognized and widely accepted as useful tools: “(The audit) *is appreciated because it works differently than the health statistics. They really look for similar cases (by specific diagnosis), and it works. They are very well prepared and we receive good feedback.*”

However, the EHIF role as facilitator of external audits using doctors and external experts is regularly questioned: “*We should be looking for an independent quality assessor. It is fine to have a contract between hospital and the EHIF and to include quality but who is to do the assessing? The buyer cannot be the assessor.*”; “*The EHIF is funding, controlling, and checking. It has to be an independent agency. But it is not clear which one could currently take over this task. Also, it is normal that the EHIF has to know what they buy and from whom and thus that they conduct audits.*”; “*Maybe there is a conflict of interest. It would be better if the funding structure did not analyze the data in PATH.*”; “*I would suggest having a regulatory centre to collect all data and make it available to the hospitals.*”

The last respondent also mentions the difficulty of external evaluations because of the small size of the country, where “*everyone knows everyone*”. This situation would call for an international external assessor or reliance on objective figures.

The EHIF is making its position with respect to quality very explicit. It considers its role as “active purchasing”, which includes buying not only for volume but also for quality of services as mandated. Furthermore, when the PATH project was initiated, the EHIF was selected as institution that would be able to support the quality initiative and development environment. In 2006, there was no single coordinating structure or mechanism for facilitating or assessing the implementation of the quality initiatives by the many stakeholders and therefore the accountability and quality improvement mechanisms were not clearly defined (Pölluste et al., 2006). Pölluste also noted that the Ministry of Social Affairs was not directly coordinating any activities related to

quality assurance of health services and it does not collect or analyse any quality-related data. There was a shortage of explicitly designated leadership, accountability and quality monitoring, and a shortage of support structures and information centres. Ministry of Social Affairs representatives mentioned areas for further improvement such as building further dialogue on hospital performance on explicitly agreed indicators (including selected clinical indicators), using such tools as annual reports and governance structures to debate performance and reviewing and improving regulations.

The EHIF has taken a de facto leadership role in supporting health care quality development as explicitly stated in its mission statement. This role is seen in coordinating topic selection and commissioning professional societies' clinical guidelines, undertaking a limited number of clinical audits every year, reviewing documentation and reimbursement data, coordinating PATH, and more recently expanding and clarifying the quality clause in hospital contracts. These activities are supplemented with dissemination of information to providers, health care workers and hospital governing bodies, including supervisory board members. The other stakeholders are more observers than active participants. There seems to be a willingness to join the efforts but there is no well-articulated vision or strategy on how to do this at the health system level. The legitimacy of EHIF leadership is being questioned by hospitals and its scope of action could be limited. Thus, there is an urgent need for other stakeholders to take a more proactive role to steer the system towards a more supportive environment. The shortage of support structures and resource information centres for quality improvement identified in 2006 was mentioned on several occasions during the interviews. Respondents were eager to learn more, to exchange best practices, to have access to a toolbox and to attend training courses. This is one of the PATH expectations that has mostly been met (see below). The PATH has fostered a forum for PATH coordinators. It has been greatly appreciated and answers to the demand for external support, if not from institutional stakeholders, at least from other hospitals.

3.4. Indicator data and information systems

Information systems are well developed in Estonia's health sector, including numerous databases such as that of the EHIF (linked to all providers), various forms of regular medical statistics and bulletins of e-health developments. E-health is emphasized to manage patient registration, patient health cards, digital imaging and prescriptions. Furthermore, there has been some progress in consolidating the various databases. The consolidation of administrative and other information systems has also been considered an important step in hospital mergers. Currently electronic patient records are being tested in a limited number of hospitals and will soon be extended nationwide. Problems stem not from the quantity of data, but its quality (unreliable clinical complication coding, for instance) and access. Expectations for the electronic patient records are very high, and some people think their development warrants postponing that of more clinical effectiveness indicators, but the information collection method and definitions need to be agreed in the current phase. In the final analysis, technology cannot compensate for a lack of strategy, and differing aims of information systems might well justify parallel systems with simple quality indicators not otherwise available.

It was also noted that a lot of data are currently sent to central authorities, but there is little feedback to the providing hospitals, and it is often statistics-related and delivered too late for practical action. The EHIF has started to provide feedback to individual providers using its administrative database, but there is no regular short-term feedback loop yet for health statistics data collected by NIHD, which is currently constrained in its ability to provide feedback to individual sources due to legal requirements, confidentiality considerations and a lack of tools. Also, national feedback is currently available only after a two-year delay, justified by NIHD reporting requirements for data cleaning and validation. Hospitals maintain that the production cycle for comparative reports needs to be considerably shortened and feedback needs to be more frequent than annual if they are to be of use. NIHD agrees and remedies are underway, including steps to collect data directly from providers (as opposed to the current county administrations) and to improve the provision of timely, reliable and relevant data for both management and statistics. Interviewees said that the information system and indicators should provide an environment where hospitals can be accountable for reporting and performance-level responses since decisions are made at the hospital level in the current governance model. Parallel to medical statistics, the EHIF database could be used for more regular reporting as data are constantly fed into it, aside from the NIHD coordinated health statistics.

3.5. Experience with implementation of PATH in Estonian hospitals

There seems to be a discrepancy between the initial and subsequent judgements of PATH's impact. Several respondents indicated that PATH was a failure since some of the initial expectations have not been met. This is a very serious contention that will need to be addressed. But in the course of the discussions, it became very clear that although PATH had not met their expectations, it had had a very positive impact. This was because their expectations had been focussed on international comparisons that were the prime motivator behind PATH participation. *"PATH was a failure in general but it gave us good ideas. There are good indicators. Some extremely good ideas came out of PATH but the expectations for comparisons were not met."* In a small country like Estonia, it is believed by some that international hospital comparisons are easier than domestic, because of the competition for market share as well as the absence of potential benchmarks. Nationally, with a very small number of hospitals, there are transparency issues. Three of the six participating hospitals did not expect much from the international or national comparisons: *"It does not give us much information if we compare internationally. What makes the difference is how we change over time and the comparison with the other hospitals in Estonia. ... We did not send the data because we felt it was of no use. ... We focused too much on international benchmarking."*

The transparency issue is heightened if the data is to be disclosed to the EHIF, due to its dual role as performance evaluator and service purchaser, which some hospitals find conflicting. Positions regarding the EHIF assuming the role of PATH country coordinator are ambiguous and diverse.: *"Somebody had to take the initiative, and the EHIF took it. We have differences with the EHIF but also common interests. ... It is interesting but it comes from the EHIF so I would not take it too seriously. ... The EHIF is the worse coordinator possible because they are interested in spending*

less money and we are interested in having the real data.” The issues raised with regard to the EHIF generally center on data analysis and use, not the EHIF’s network coordinating role.

Another expectation was to have a ready tool of measurement and comparison. During implementation, it became clear that definitions had to be adapted to the Estonian context and data availability: *“There was a lot of arguing about what kind of data can be collected and how much manual work needs to be done, and it depends on how many resources the management is ready to give. ... The negative aspect of PATH is that there are always endless questions about definitions”*. This could be improved with more precise definitions from the international PATH organization, but it should be made clear that building indicator ownership is a difficult process that cannot be bypassed, as it is essential for improvements and an important step in local capacity-building. Three hospitals mentioned that the indicator for “operating theatre occupancy rate” had a major impact and was still regularly monitored. It is noteworthy that it is also probably the indicator that required most initial discussion over the definition and adaptation of data collection tools at start-up.

PATH was considered a success in that “people studying these problems were brought together”. PATH work is considered positive not only for formal processes and indicators, but for the effects of people regularly meeting. *“It was very positive to have people talking together, even if they had different understandings.”* If this forum was appreciated by the PATH coordinators, there might be a potential to open it up slightly.

- One head nurse indicated that she would have appreciated being invited and would be glad to participate.
- One PATH coordinator said the clinical manager was cooperating in the regular meetings, but since PATH results were discussed with the clinical manager rather than with the CEO, the focus was more on clinical effectiveness than on strategic performance management.
- One head doctor noted that he would also be interested in having smaller hospitals join, even if they only measure the limited number of indicators that are most relevant for them.

The data collection burden was considered acceptable by one hospital and high by another: *“There is quite a burden for data collection but most indicators are available from the existing information systems and they are interesting”*.; *“One person was devoted to PATH. If all her work would have been for the hospital instead of PATH...”*

4. STRENGTHS WEAKNESSES OPPORTUNITIES AND TRENDS (SWOT) ANALYSIS

The principal findings are reorganized in table 3 to highlight the strengths and weaknesses in hospitals and the threats and opportunities in the environment for the development of a culture of measurement, for strategic performance management and for internal accountability and continuous quality improvement. The findings are solely based on the assertions of the persons interviewed without quantitative data to back-up their perception. In addition, the sample is limited to PATH hospitals and a limited number of persons in the hospital. So, inference cannot be made.

Strengths and weaknesses

There is a culture of measurement, but at management level it is of a limited scope, not covering the whole spectrum of hospital performance measurement. There is an imbalance, with a great focus on measures of volume and efficiency or financial indicators. The discrepancy between vision statements, strategic priorities and performance measure represents a failure to shift to active performance management. Hospitals are active in terms of quality management. There are numerous examples of good practice, which can provide a ground for cross-fertilization. However, this also reveals opportunities for improvement and levelling.

Opportunities and threats

Thanks to the recent reforms in hospital governance, there is a good opportunity to build on a sound two-tier governance structure with clear accountability and owners representing the public interest. A major driving force is EHIF contracting, which is very closely reviewed by the supervisory board, providing an opportunity to make quality more explicit in the agreements. At present there is a risk of the contract creating tunnel vision, with little focus on quality. This risk holds true for annual reports too. Introducing compulsory reporting of quality indicators or activities would help streamline quality in hospital performance management and make it more visible. With the reforms and mergers of hospitals, new hospital structures have been created, providing an opportunity to build a new organizational culture. However, this environment can lead to insecurity and competitive behaviour among hospitals in the same region or providing the same level of care. The EHIF has de facto taken a leadership role in driving the national agenda for quality of care but this role is questioned by some hospitals.

Table 3.

Cross-cutting themes	Strengths	Weaknesses	Opportunities	Threats
<p>General context</p> <ul style="list-style-type: none"> – background – Hospital reforms 			<p>Clear structures and regulation for hospital level governance adopted a few years ago. The hospital network is generally agreed in the hospital Master Plan.</p>	<p>Relatively new organizations and new hospital structures. The focus might still be on survival. Risk of competition rather than collaboration between hospitals in the same region or offering the same level of care.</p>
<p>Strategic priorities</p>		<p>An unbalanced approach to performance and quality management from both the mgt and the supervisory board perspective:+++ volume, prices, occupation rate; ++ patients complaints and patient safety; + clinical effectiveness, responsive governance.</p> <p>Discrepancy between strategic statements, strategic priorities, performance measurement and performance assessment. A There is a need to align the vision, mission and quality strategy to a number of indicators or action plan, for effective strategic management.</p>	<p>In a relatively new organization, there is an opportunity to build an organizational culture on quality by developing organization-wide activities. For instance, one hospital used EFQM as a first step after merge to build a common identity across numerous clinics.</p> <p>With a focus on survival in a difficult environment, the need for differentiation and to build a strategy is heightened. This gives rise to an opportunity for more visibility for clinical effectiveness, patient safety and responsive governance.</p>	
<p>Performance management</p>			<p>It is marked by high variation in the hospital management culture and practices that could be more coherent, but also provides opportunities for levelling and cross-fertilization.</p>	<p>Current perception or risk of being held hostage by physicians who are not very receptive to being evaluated and are perceived by the managers as resistant to questioning of their practice.</p>
<p>Performance measurement</p>	<p>There is a culture of measurement.</p>	<p>The scope of the culture of measurement is limited.</p>	<p>Contract is the driving force → when quality is included formally in the contract and made more visible, a much stronger emphasis on quality from the supervisory board might be expected.</p>	<p>The contract with the EHIF is the driving force → focus on volume, prices, occupation rate and to a lesser extent patient complaints and safety.</p>

Cross-cutting themes	Strengths	Weaknesses	Opportunities	Threats
<p>Accountability</p>	<p>Numerous good examples of quality management at the hospital level, that need to be systematized and shared. Hospitals have experienced the EFQM and are adopting at different levels. Accreditation or certification (including international) at individual speciality or clinic level is in practice among some hospitals. Examples of individual performance and quality management/ measurement in areas of (a) OR use, (b) use of antibiotics, (c) measurement of complications, (d) (example from individual hospitals). Well established monitoring of complaints (1st focus) and on patient surveys (2nd focus)</p>	<p>Responsibility for quality in some cases is not clear and sufficient at the management board level. Some isolated or fragmented quality improvement initiatives have not been scaled up because of physicians' resistance to paperwork and to external evaluation.</p>	<p>The annual report is the main tool of management board accountability to the supervisory board. There are some individual initiatives to open up the scope of the annual reports. There are opportunities to use this channel to streamline quality and to put emphasis on aligning the strategic orientation with performance assessment. The annual reports are available in the public domain and thus increase transparency and public accountability.</p> <p>The EHIF has a de facto leadership role with several initiatives. Articulated a clear quality strategy, to act as a mentor and to foster quality rather than control it. Highly appreciated clinical audits (coordinated by HIF and implemented by senior specialists) as feedback: 1) raised awareness of quality issues and tools for quality management and 2) slowly built some trust (reassurance of not being publicly reported). Opportunity to continue building on this channel of communication with strategic board, By endorsing the Tallinn Charter, WHO member States committed to take action for high performance of the health systems to achieve measurable results. This raised awareness of government's role in steering the process for continuous performance improvement of health care facilities and for increased accountability.</p>	<p>Legitimacy of the EHIF's driving quality of care is questioned by some hospitals. The rationale for the EHIF to buy a quality product is understood but there are some fear of conflict of interest if the assessor is also the financer and is politically biased. The EHIF strategy with regard to quality is not understood by hospitals. Call for an external agency to be used as an evaluator and for objective measures but it is not clear who could currently fill this role.</p> <p>No clear leader of the hospital system governance and thus a void of responsibility.</p>

Cross-cutting themes	Strengths	Weaknesses	Opportunities	Threats
Transparency and participation	For some hospitals: acceptance of transparency -- and necessity to be responsive to the patient population	For some hospitals: fear of transparency -- complications rates under-reported	PATH forum found useful for exchanging best practices for quality management. Discussion at the professional level. Potential to agree with stakeholders on data access by (a) the public, (b) health system stakeholders, (c) hospitals, (d) individual providers. Clear agreement could facilitate the data disclosure.	Limited collaboration between some hospitals due to fear of giving a competitive advantage by sharing best practice.
Capacity building, training, toolbox		In general, request for capacity building.		PATH expectations for international comparative data not being met, with loss of momentum.

5. RECOMMENDATIONS

5.1. General recommendations

Based on the above findings, we suggest combining two approaches. On the one side, we identify opportunities to create additional external pressures to bring all stakeholders together and to build an environment that will create strong incentives for effective and comprehensive performance management. On the other side, there is a potential to build on the numerous interesting initiatives already being implemented. A balanced support of top-down and bottom-up is critical. The large variations among hospitals in practice indicate managers find ways forward and create opportunities for cross-learning, but also partly reflect a lack of central vision and steering of the hospital network.

1. Sectoral level: external incentives and regulations

The objective is to streamline quality as an integral part of strategic management, to provide incentives and tools for better aligning strategic statements and performance measurement and management. There is a need to raise the awareness of all stakeholders to assure consistency. Regulations (quality clauses in legislation, for example) could be updated, as could the terms of reference of strategic and management boards. Guidelines could be developed for training in good management practices in hospitals, annual reports could be made to include information on quality and financial incentives could be used not only to improve the clinical quality but also as rewards for better integrating hospital care with other health care providers and within the community (through the quality clause in EHIF contracts, for example).

This approach builds on the commitments emerging from the Tallinn Charter and calls for strong stewardship of the system. It is in line with international experience. A Dutch study has suggested that the combination of policy changes and increased scale of hospitals had a positive influence on quality management implementation, and sectoral changes were accompanied by activities to establish feedback loops at the hospital level. Similarly, the European MARQuIS study found that legal requirements for quality improvement strategies are important drivers of progress, along with the activities of national government and professional associations and societies (Spencer and Walshe, 2009). More specifically, statutory legal requirements were found to be the most important incentive for quality improvement initiatives.

2. Hospital level: capacity building, emulation and building a culture from within

Numerous interesting initiatives for quality management are already being implemented in Estonia. PATH and local initiatives have highlighted the major role of local emulation, learning from each other. This soft approach is often preferred within hospitals, where it is regularly used to overcome clinicians' resistance in a stepwise approach. Thus, we suggest providing external support to help build from within: fostering cross-fertilization, increasing exposure to national and international best practices, providing tools, training courses and facilities. The

current international trend prioritizes support for local quality improvement projects rather than standardized quality measurement and assessment procedures (EFQM, ISO, hospital accreditation, centrally constructed indicators as the Danish National Indicator project, Oryx/USA, UK indicators, etc.) at the initiative of the national regulatory bodies.

In hospitals, experience from improvement initiatives based on data from infection control and blood product usage – fields currently paving the way to quality management – could be used to improve clinical care and treatment. Hospitals' EFQM or other organization-wide quality activities should also be shared, and incentives should encourage this. Competition might impede sharing best practices, though, PATH has shown that the “every man for himself” culture can be overcome with time and good personal relationships.

3. Stakeholders

Hospitals generally do not perceive the EHIF as a neutral, independent body, as they fear economic consequences of unsatisfactory quality. The position of hospitals with regards to this role is ambiguous. Some still view the EHIF as a controller and not a promoter of continuous quality improvement activities, and they are sceptical of any quality initiative coming from it. However, the EHIF has written that it has both roles of quality controller and promoter. An EHIF communication strategy with boards and other stakeholders might be reassuring. Reassurance could be considered as a remedy to lessen the gap between the conceived and the real world. In the frame of PATH or a National Indicator Project, trust between the EHIF and hospitals might be increased if the EHIF outsourced data analysis and reports to an independent agency with good capacity and experience in data analysis and presentations.

This observation brings to light the question of who is to be responsible in Estonia to create a culture of continuous performance measurement and management. A multi-stakeholder approach is critical to creating a culture of continuous performance measurement and management. It is necessary to align the different developments in this sphere and to engage all stakeholders in a common vision, using the tools at their disposal (data, legislation, advocacy and academic influence, etc.).

5.2. Recommendations for scaling up PATH and/or building a national indicator project (NIP)

The PATH culture and infrastructure could be the basis for an incremental expansion, involving more stakeholders, adding more hospitals, further developing some dimensions, adding more PATH set indicators, adding non-PATH indicators (of financing, volume, occupancy, market share, etc.). It does not matter if ultimately the system is called PATH or National Indicator Project; what matters is how it well it is embedded in the national context.

The PATH system has been part of a major effort to get quality on the management agenda on all levels. A positive by-product is that non-project hospitals have shown an interest in PATH participation. This interest should be supported and more hospitals should be invited to participate.

PATH 09 Estonia could also facilitate the conceptual shift and trend towards integrated management, with a common understanding that funding, volumes and quality of the services and care are shared management responsibilities. PATH builds on a comprehensive definition of performance, and links its measurement to strategic management. This PATH feature could be expanded.

To get interest management in PATH and the idea that quality is an ongoing part of hospital activity and not something done after normal hours, it is crucial to insist on the integration of quality indicators and economic indicators. One can indeed have reliable quality data in areas other than financing and volumes. By integrating volume, occupancy or LOS indicators into PATH or another national indicator system, one can satisfy both resource and quality management needs.

The development of indicators of the interface between hospitals, primary sector and alternative levels of care might have a positive impact on quality awareness. The aim of such indicators is to correct the current imbalance in favour of volume and financial indicators at the expense of clinical quality indicators and responsible governance. The development process of those indicators might have a positive impact on the definition and awareness on quality is not only within hospitals but shared responsibility of patient pathway.

In moving towards an NIP, communication strategy and balance of indicators are critical. They need to not just cover technical quality, but to include a comprehensive view to hold the board responsible for managing an integrated approach. An NIP should build on tested indicators (OECD, AHRQ, etc.) to save the money and time, ensure quality definitions, calculations and descriptions. Another reason for using international indicators is to facilitate international comparisons. Process indicators have many advantages (big numbers in numerator, level of performance not under discussion, no need to be adjusted, more immediately responsive to improvement activities), but the burden of data collection is often very high, making process indicators impractical. Thus, the decision to focus on process indicators should be balanced with a burden of risk adjustment and analysis of processes leading to bad outcomes.

To get more information out of the EHIF national hospital patient registry, administrative data could be reused to measure the quality of care for specific diseases and procedures in a standardized manner. To initiate the process and get timely results, internationally developed and widely accepted indicators should be preferred (AHRQ, OECD, NHS), and feedback can be provided via channels similar to those of the EHIF clinical audit. Using administrative data for clinical feedback is a strong incentive to improving data quality, because it initiates data check activities such as auditing the information in medical records according to codes. This could support an accountability link between the supervisory and management boards in annual reports.

It is important to support the development of a cultural change from a “bad data, bad patients approach” to a concerned approach to problem-solving involving depth analysis of clinical pathways to find the causes of unsatisfactory results and apply medical audits, PlanDoStudyAct, Lean or other methodologies. PATH’09 Estonia

should be considered a learning experience. There is also an opportunity to expand the quality clause of EHIF contracts to include a statement that hospitals are responsible for training in problem-solving through process analysis. One might want to utilize hospital quality committees, coordinators and multidisciplinary facilitators to analyse and act on statistical outliers of quality indicators, as thoroughly as is done for case-based quality problems identified through patient complaints and adverse events. Updated feedback in an intuitive format showing trends over time and comparisons to relevant peer groups at a glance (with the possibility of digging further into the data from one's own hospital as necessary) is critical.

If public disclosure of performance data to facilitate patients' hospital choice should come on the political agenda, PATH and other proved indicators will be vital catalysts of national coverage and reliable data. PATH or similar initiatives could be seen as providing the basis of discussion of the limits and evidentiary relevance of published information. The measurement culture in such systems is a no-fault, system-failure culture that identifies failures in the clinical and organizational pathways, promulgated through training in a protected environment.

In addition, the potential benefits of PATH should be explored with respect to networking to create a cooperative, progressive way of thinking, as opposed to the competitive culture, while getting institutional stakeholders on board with long-term commitment. This could be achieved by establishing a PATH or indicator steering committee. A feasible organisational alternative might be to preserve the EHIF role as operational leader and establish a steering committee with members from the main stakeholders (the Hospital Association, EHIF, Ministry of Social Affairs, representatives of professional organizations and a patient representative, for example). The steering committee would not only reassure hospitals but also open forums such as the hospital PATH coordinator groups and raise awareness. The objective is to raise awareness of and share responsibility for building a culture of measurement and performance management not only among participating hospitals but also among the institutional stakeholders.

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Annex 1

**VIENNA STATEMENT
ON HOSPITAL PERFORMANCE ASSESSMENT**

**2nd International WHO Conference on PATH,
4 July 2008, Vienna**

Health systems in the European region are under growing pressure to optimize their performance so as to meet the health needs of the populations increasingly calling for more accountability and transparency. Functions carried out by hospitals are an integral part of and contribute to the performance of health systems. Incentive mechanisms encourage health care providers to improve their contribution to population health and to the quality of services delivered to patients. Monitoring and evaluation mechanisms such as external assessment, economic incentives, public reporting and internal continuous quality improvement tools are increasingly used to support quality improvement, accountability and transparency in hospitals. In this context, hospitals strive to continuously improve the quality and efficiency of their services and thereby contribute to strengthening health systems.

We, the members of the PATH network,

Recognize that equity, solidarity, and participation are core values of WHO Member States as stated in the Tallinn Charter on Health Systems, Health and Wealth, and that accountability and transparency are essential to promote these. In particular, we recall the commitment made by the Member States of the WHO European Region through the Tallinn Charter on Health Systems, Health and Wealth to promote transparency and to be accountable for health system performance to achieve measurable results.

Endorse these values and commitments and encourage the evolution towards more hospital accountability.

Recognize that a comprehensive and holistic view of hospital performance which goes beyond traditional concepts of single performance dimensions is necessary to adequately respond to the needs of the population; that patients are central to all health care processes and that as such they must be empowered to contribute to hospital performance improvement processes; and that mechanisms should be developed to involve, motivate and enable professionals to function in teams and maximize their contribution.

Declare that we are committed to quality. Quality is a high level of performance which assumes a state of functioning that corresponds to societal, patient, and professional norms. It should be based on professional competences in applying existing knowledge, maximizing the use of available technologies and resources, increasing efficient use of resources, minimizing risk to patients, promoting patient

centeredness and working towards optimal health outcomes. Within the health care environment, hospitals should be responsive to community needs and demands, integrate services in the overall delivery system and commit to health promotion. Hospital performance should be assessed in relation to the availability of hospital services to all patients irrespective of cultural, demographic, economic, physical and social barriers.

Believe that performance assessment is a cornerstone to quality improvement processes and that while there are variations in the way performance measurement is currently used for performance improvement in European hospitals, it is important that performance assessment tools be adapted to the diversity of needs across the Region. It must be aligned to the strategic orientations of each hospital and should be embedded in its local context, thereby helping to test and revise the hospital's strategies.

Believe that quality improvement is further facilitated by learning from other hospitals, countries and professions. We support a collegial and constructive dialogue and believe that the PATH network is an appropriate mutual learning environment to identify international best practices.

Assume that the effort by hospitals towards continuous quality improvement is recognized and financially supported and that appropriate information systems are in place.

Understand that hospitals are only one of many actors in complex health systems and that they need to coordinate their efforts with other stakeholders and sectors.

Annex 2

LIST OF INTERVIEWEES DURING THE VISIT MARCH 23-27, 2009

1. Mr Urmas Siigur, Tartu University Clinic, head of management board
2. Mr Mart Einasto, Tartu University Clinic, member of management board
3. Mr Urmas Sule, Pärnu Hospital, head of management board
4. Ms Teele Raiend, Pärnu Hospital, head of quality management
5. Mr Tõnis Allik, North Estonia Medical Centre, head of management board
6. Ms Marina Kaarna, North Estonia Medical Centre, head of quality management
7. Ms Reet Malbe, North Estonia Medical Centre, head of unit for quality
8. Ms Ilona Reiljan, North Estonia Medical Centre, head of unit for quality management systems
9. Mr Peeter Ross, East Tallinn Hospital, member of management board
10. Ms Ülle Rohi, East Tallinn Hospital, member of management board
11. Mr Boris Kirt, West Tallinn Hospital, head of management board
12. Mr Gennadi Timberg, West Tallinn Hospital, member of management board
13. Ms Imbi Moks, West Tallinn Hospital, head of quality management
14. Mr Tarmo Bakler, East Viru Hospital, head of management board
15. Mr Jaak Lind, East Viru Hospital, head of surgery clinic
16. Mr Hannes Danolov, Estonian Health Insurance Fund, head of management board
17. Ms Mari Mathiesen, Estonian Health Insurance Fund, member of management board
18. Ms Helvi Tarien, Estonian Health Insurance Fund, head of health care department
19. Ms Jane Alop, Estonian Health Insurance Fund, specialist, department of health care
20. Ms Heli Paluste, Ministry of Social Affairs, head of health care policy unit
21. Ms Liis Rooväli, Ministry of Social Affairs, head of health information and analysis department
22. Ms Maris Jesse, National Institute for Health Development, director
23. Ms Kati Karelson, National Institute for Health Development, head of health statistics

Annex 3

GUIDELINES FOR INTERVIEWS WITH HOSPITAL REPRESENTATIVES; TOOLS FOR PERFORMANCE MANAGEMENT

Target audience for the interviews

From 6 hospitals (3 in Tallinn)

- Head of management board
- Members of management boards responsible for medical fields (s) and possibly one level down, to the head of surgical or internal cluster)
- PATH coordinator together with the quality coordinator

From the stakeholders:

- Estonian Health Insurance Fund (members of management board, departments)
- National Institute for Health Development (health statistics),
- Ministry of Social Affairs (health care departments, health information and analysis department),
- Hospital Association

The questions below define a general structure for discussion for meetings with hospital representatives. They will be adapted to the individual and to integrate the answers. The interview style is flexible and follows the discussion. Not all questions will be asked in each meeting. We aim at an open discussion. The follow-up questions will be formulated in a way to get very concrete examples and documents (e.g. examples of reports). We will ask for practical, everyday examples. For each topic, we will address the present situation as well as the short-term and long-term perspectives, bottlenecks, conditions for success, expectations, etc.

Part 1: Strategy and accountability

- What are your strategic priorities?
- How were they defined / by whom/ on what data?
- Are they described in a written document? Do you have a vision statement? Could we have a copy of it?

- To whom is this document disseminated?
- Does it include indicators and quantified objectives? What indicators?
- How are you accountable for its achievement? How are you accountable for your hospital's performance (if no strategy)?
- How does your hospital strategy relate to the national strategy?
- Could you describe the relations between management board and supervisory board, as well as those of hospital quality managers and department heads with the management board (or somebody else). In addition, hospital relations with external partners as the Ministry and/or EHIF should be also checked.

Part 2: Performance assessment and management

- How would you describe the performance of your hospital? On what ground did you reach this judgement? What dimensions did you take into account? What are the supporting data?
- Go through each PATH dimension: how would you define it? What are your priorities in each field? Do you monitor this dimension? With what indicators? Are they included into the annual report?
- Do performance assessment and tools provide incentives for further performance improvement? How is the latter defined? What incentives are used within hospital?
- What do you think about external performance assessment (hospitals comparing themselves to each other, supervisory boards comparing hospitals, annual report comparable performance information, Ministry/EHIF comparing providers, international comparisons of hospitals, etc.)?

Part 3: Quality management

- Do you have a quality coordinator? Or other quality structures quality/infection/ safety committee or responsible staff?
- To whom does the coordinator report? How regularly? What is the content of the reports? Do they include indicators? If yes, which?
- What are the challenges for quality management? How visible/strategic is the role of the quality coordinator?

Part 4: Data and indicators

For this section, we will acknowledge the data hospitals provide to NIHD or the EHIF or even other information to Ministry but also how they use this data internally, why don't they use them more intensively, at what conditions they could make a better

use of it, how they inter-relate with the “internal” data, etc. We have to make a link between data for internal use and data for external reporting and assess how they support each other and if there are potential for more data collection for internal use, for external use, or for both use concomitantly.

We basically want to know: what data and information systems are within hospitals (e.g. clinical work, cost accounting, management ...), what type of reports and feedback loops are used; is the information generated used for decision making (both on general management and quality improvement).

Some more specific questions:

- What are the main databases? By whom are the data generated? To whom is it transmitted?
- How would assess the burden of data collection? Its usefulness? An administrative procedure or tool for management/quality improvement by the staff? Do you get some feedback from the organizations to which you send the data? Do you understand why they ask for it and how they use it?
- Are you able to compare to other hospitals or national reference points? On what indicators?
- What are the risks and opportunities in sharing data with other hospitals or public organizations? How confident would you be with more transparency? On what conditions? For what dimensions of performance?
- Would you say that you have developed a “culture of measurement” in your hospital? How do you see the evaluation? Could you give concrete examples?
- Would you say that what matters is being measured?

Part 5: Path

- Why did you participate in PATH? What were your expectations when you joined the PATH network? Were they met? How? What are your expectations for the next coming years?
- Who was the PATH coordinator in your hospital? What other staff were involved in PATH? In what roles? To whom did the PATH coordinator report on PATH activities in the hospital and results?
- What was the impact of PATH participation? What is your experience in past years in the network at both national and international levels?
- In which additional national or international level is your hospital is involved and what is your experience (comparing your data to that of others, taking managerial decisions, introducing changes based on the information, etc.)?

Annex 4

**THE OBJECTIVE AND AGENDA FOR CONSULTATION
IN OCTOBER 2009**

***Seminar to launch the study on governance practices in Estonian
hospitals and tools for performance management***

Tallinn Children's Hospital Polyclinic (Ravi 27, conference hall)

**October 22, 2009
Tallinn, Estonia**

The seminar will present the main findings from the 2009 external assessment of the hospitals, Estonian Health Insurance Fund and other stakeholders. The next steps in hospital performance measurement and management will be discussed in the light of key report findings. The study itself describes and analyses various aspects of the Estonian hospital sector, including: hospital governance and management practices; current use of indicators in hospital performance management; the position and expectations of stakeholders concerning development and potential uses of indicator systems; stakeholders' local technical capacity for coordination, data analysis, strategic decision-making based on evidence and strengths and weaknesses of indicator systems to support hospital performance management. Participant contributions will be collected included in the final report as relevant. The specific aim of the report and seminar is to empower the national coordinator to align PATH implementation with long-term strategic performance improvement objectives.

The presentation and discussion of the report will be complemented with a presentation of the Danish experience with the National Indicator Project (NIP), highlighting the lessons learnt from this experience.

The seminar is organized under collaboration of the World Health Organization Regional Office for Europe and the Estonian Health Insurance Fund. The working language of the seminar is English.

October 22, 2009

Agenda

10.30 – 11.00 Registration and coffee

Session 1. The current culture and systems of performance management in Estonian hospitals – results of the study

11.00 – 11.15 Opening (Mari Mathiesen, Estonian Health Insurance Fund;
Jarno Habicht, WHO Regional Office for Europe)

11.15 – 12.15 Performance management and developing a culture of measurement and continuous quality improvement in Estonian hospitals – key findings from the study
(Ann-Lise Guisset, WHO Regional Office for Europe)

12.15 – 13.00 Discussion
(facilitated by Ann-Lise Guisset)

13.00 – 13.30 Lunch and refreshments

Session 2. Fostering a culture of measurement and continuous improvement

13.30 – 14.30 Lessons learnt from the Danish experience with National Indicator Project – Success factors for implementation and improvement in quality of care
(Jan Mainz)

14.30 – 15.00 Discussion of indicator project development

15.00 – 15.30 Discussion of incentives and tools for performance reporting and management in Estonian hospitals
(facilitated by Ann-Lise Guisset)

15.30 – 16.00 Summary and closure
(Estonian Health Insurance Fund and WHO Regional Office for Europe)

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