



This is an author produced version of a paper published in Total Quality Management & Business Excellence. This paper has been peer-reviewed but does not include the final publisher proof-corrections or journal pagination.

Citation for the published paper:

Andersson, Ann-Christine; Idvall, Ewa; Perseius, Kent-Inge; Elg, Mattias. (2013). Sustainable outcomes of an improvement programme : do financial incentives matter?. Total Quality Management & Business Excellence, vol. 24, issue 7-8, p. null

URL: <https://doi.org/10.1080/14783363.2013.791096>

Publisher: Taylor & Francis

This document has been downloaded from MUEP (<https://muep.mah.se>) / DIVA (<https://mau.diva-portal.org>).

Sustainable Outcomes of an Improvement Program: Do Financial Incentives Matter?

Ann-Christine Andersson (Ph Licentiate, PhD candidate) corresponding author

Division of Quality Technology and Management, Linköping University, 58183 Linköping, Development Department, Kalmar County Council, and Faculty of Health and Society, Malmö University, 205 06 Malmö, Sweden. anncha@ltkalmar.se

Ewa Idvall (Professor) Faculty of Health and Society, Malmö University and Skåne University Hospital, Malmö, Sweden, ewa.idvall@mah.se

Kent-Inge Perseius (PhD)

Nyckeln Competence Centre for Health Education, Kalmar County Council and the Department of Neurobiology, Caring Sciences and Society, Karolinska Institutet, Stockholm, Sweden. kentingep@ltkalmar.se

Mattias Elg (Professor)

Division of Quality Technology and Management and HELIX Vinn Excellence Centre, Linköping University, Sweden, mattias.elg@liu.se

Abstract

The purpose of this study was to evaluate whether an improvement program can contribute to positive sustainable improvements in an organization, and whether financial incentives are driving forces for improvements. The material was all projects (n=232) that applied for funding in a county council improvement program between 2007 and 2010. The projects were analyzed as to whether they received funding (n=98) or were rejected (n=95). In addition, a categorization of the projects' intentions was analyzed. Some projects were still ongoing, but 50 projects were implemented and sustained two or more years after being finalized. Implemented improvements were on different levels, from (micro level) units up to the entire (macro level) organization. In addition, 27 rejected projects were finalized without funding. Eighteen of those 27 were sustainably implemented. This study indicates that there are incentives other than financial at work if an improvement program will contribute to sustainable improvements in the organization. To encourage practice-based improvements is one way of incentivizing the intention and effort to become and perform better.

Keywords: Quality improvement, healthcare settings, improvement program, sustainable improvement, financial incentives

Introduction

Healthcare organizations face the challenges of managing future demographic development, citizen expectations, reduced financial resources, and increased use of medical innovations. Improvement programs are generally considered to be a strategy for coping with these challenges. Such programs have been initiated worldwide, and various methods are used to achieve improvement goals (e.g. Driver & Wachter, 2012; Kottke *et al.*, 2012; Oliver & Brown, 2011). Lombarts *et al.* (2009) investigated implementation of quality improvement programs in Europe. They found that all participating countries used different programs, from organization-wide policies and procedures to improvement of specific medical treatments.

Change research asserts that about 70 percent of all initiatives fail (Beer & Nohria, 2000). Driver and Wachter (2012) argued that in improvement initiatives, healthcare organizations have paid less attention to issues of organizational structure. Thus, a key ingredient in scholarly analysis is to identify better strategies for executing and sustaining improvement projects and programs. Can improvement programs contribute to sustainable improvements in the organization? Marshall and Harrison (2005) emphasized the need for researchers to analyze the relationship between incentivized and non-incentivized improvements to develop a deeper understanding of how to steer incentives.

Some questions raised concerns regarding the influence of financial incentives and their role in driving mechanisms for improvements. Financial incentives on the input side of improvement programs have been neglected and need further inquiry. Based on an empirical study of an improvement program, financial support from decision-makers (top-down) to improvement actors in professional organizations may increase the probability of sustainable improvements. The conditions for this argument are based on an improvement program in which improvement actors have a certain degree of freedom in defining, designing and

conducting improvement projects (bottom-up). Therefore, the purpose of this study was to evaluate if an improvement program can contribute to sustainable improvements in an organization, and if financial incentives is a driving force for improvements.

First, some previous research is discussed, followed by a theoretical steering model for incentives as drivers for organizational improvement. Concepts and expressions used in this paper are then discussed, and a matrix of practice-based improvement strategies is presented. This matrix is then used as a foundation for the analysis.

Previous research

Both academics and policy actors have raised the question of whether financial incentives are a key ingredient for encouraging and driving improvement programs (Peterson, 2004). Dahlgaard et al. (2011) clearly express that it is not an easy challenge to improve complex systems such as healthcare. Questions about motivations to improve have been discussed amongst professionals and researchers (e.g. Beer & Nohria, 2000; Grol & Wensing, 2004). A matter of discussion is whether money (financial compensation) is an incentive for improvements (Peterson, 2004). In the U.S., an increasingly common way to handle healthcare quality is pay-for-performance (P4P) (Sloane, 2005). Healthcare providers are compensated according to a model where achieved targets, including quality and quantity criteria, are rewarded (Oliver & Brown, 2011). Berger (2011) argued that connecting payment with quality will increase the incentives for better and safer care. On the other hand, Rosenthal et al. (2004) discussed the risks inherent in this. Providers who are already performing well will benefit, while low-quality providers, who might need funding to improve, will be treated unfairly.

Another way to create incentives for improvement is the “naming and shaming” approach, by showing caregiver results in public. An argument against this approach is that it could

demotivate staff (Rosenthal *et al.*, 2004). A study by Gavagan *et al.* (2010) found no significant distinction among clinics with financial incentives or those that were not rewarded for their efforts. Both the intervention and non-intervention groups improved performance. The highest-ranked impact factors were dedicated, hard-working physicians and nursing teamwork. Financial incentives were in fifth place. A study investigating how to encourage participation in a national accreditation model found that small local health departments listed financial incentives as necessary to bear the cost of implementing accreditation. However, they also wanted infrastructural and quality improvement methodology support (The Incentive Research Foundation, 2002). Other researchers claimed that incentives make people only accomplish whatever yields financial rewards, and forgo other equally important issues. Wilford (2007) examined award incentives in relation to quality and performance. She concluded that most award winners are already high performers. Awards tend to be more a way to recognize those already performing well, rather than an incentive to encourage and drive improvements. Marshall and Harrison (2005) emphasized that the improvement impact does not have a linear relationship to the size of the incentive. On the contrary, financially based incentives are not the only thing motivating improvements. An important issue is engaging and encouraging the people involved. A Swedish study analyzed sustainable improvement in a child health promotion program (Edvardsson *et al.*, 2011). They found that supporting factors were: involvement of micro-level personnel, supportive management, and a positive and supporting overall organization. Important barriers included: shortage of time and resources, authorization, and lack of managerial support and involvement.

A theoretical steering model of organizational improvement incentives

Financial support, from decision makers to improvement actors may be directed to either the input or output side of an organizational system. It can also be positive (“carrots”) or negative (“sticks”) guided. The input side of financial support is resource oriented in the sense that it

may provide actors with money, competence, or time in exchange for improvement initiatives. The alternative is constraining or withdrawing resources if actors do not engage in improvement initiatives. The output side of financial incentives is performance oriented. Decision makers may reward actors for achieving specific goals (Behn, 2003) or arrange awards for the best achievements (Wilford, 2007). There are also negative strategies such as “naming and shaming” (Rosenthal *et al.*, 2004) (Figure 1).

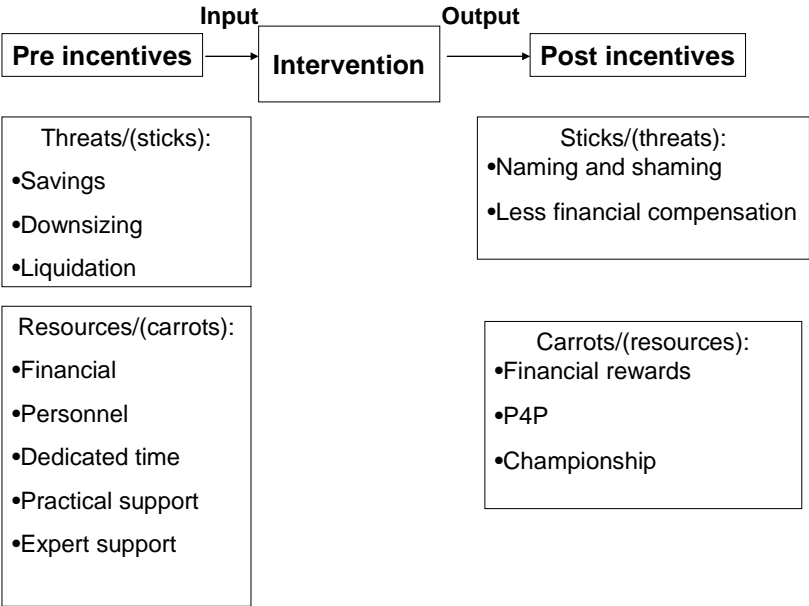


Figure 1. Steering model of organizational improvement incentives.

Concepts and expressions

The *intervention* of the improvement program analyzed in this study is a county council-wide invitation to apply for financial support to accomplish improvement projects. The expression *improvement* is used throughout this paper, since the changes in the studied intervention were positive, rather than just change, which can be both positive and negative. An *improvement* is defined as something done differently that works better than before (Beer & Nohria, 2000). The improvement *actors* are the invited applicants, employed in the organization, who bring up improvement ideas and needs from a practice-based perspective (Bakka *et al.*, 2005). The

decision makers are the steering board committee and the county council delegates who decide to fund or reject projects (Beer & Nohria, 2000). *Sustainability* can be seen as long-term maintenance of a system or organization, based on persistent and consistent (top) management support (Pettigrew, 2000). In this paper, *sustainable improvement* means an improvement lasting two or more years after a project is finished and implemented.

An *implemented* project was defined as an achievement of positive, sustainable improvements in the organization (Beer & Nohria, 2000; Berwick *et al.*, 2003). The term *status quo* was defined as a project that had been realized but did not reach a new level of performance (Berwick, 1996), the way of working after the project finished was the same as before (Weick & Quinn, 1999). *Failure* is persistence of (Schneider *et al.*, 1996), or relapse into past behaviors (Weick & Quinn, 1999). For instance, process mapping does not automatically lead to improvements. For rejected improvement projects that did not get financial support, two additional categories were included: *done anyway* and *different action taken*. In the former, project team members finalized the project according to plan without financial support. In the latter, team members carried out a specific project with a different aim.

Practice-based improvement strategies

The application intervention evaluated in this study stimulated bottom-up practice-based improvement ideas. An earlier study built a matrix of improvement ideas practitioners emphasize when, fairly freely, invited to accomplish improvement projects (Andersson *et al.*, 2011). The matrix consisted of five categories: Organizational Process, Competence and Development, Evidence and Quality, Process Technology, and Proactive Patient Work. Organizational Process is the ways in which organizations define, organize, and implement activities related to process improvements (Donabedian, 2003). Research has found that the biggest potential for improvements often occur between sub-processes (Dahlgaard *et al.*, 2011). Improving cross-functional processes can minimize those problems occurring between

functions, units, or departments. Healthcare is knowledge-intensive, and it is important for it to work continuously with competence and development. It is crucial to encourage staff members to develop their competence (Ting *et al.*, 2009). Therefore, the Competence and Development category is therefore an essential part of healthcare improvements. Concepts, methods and principles, often developed externally, can be seen as Evidence and Quality. Evidence-based medicine (EBM) is one of those principles, which aims to integrate practice with the best available methods or treatments based on systematic research (Sackett *et al.*, 1996). Different methods and techniques, categorized as Process Technology, can support activities and improvements. In healthcare, those are mostly connected to new treatments and devices (Berwick *et al.*, 2003). A growing part of healthcare is patients' own responsibility for their care (Klein, 2012), at the same time as increasing demands and desires from both patients and society (Wu & Hsieh, 2011). Proactive Patient Work is one way to meet those challenges.

Method and materials

The data that comprise the empirical base in this study originated from a county council all-embracing improvement program, which was financed by special grants awarded by the county council delegates and coordinated by the top management team. The present study used a case-study approach, investigating an intervention of this improvement program. All healthcare departments in the county council, primary healthcare centres, dental care centers and other units, were invited to apply for financial resources to accomplish improvement projects. A steering committee reviewed applications and recommended to the decision-making delegates which should be granted. The material in this study was all applicants that sent in an application (n=232) between 2007 and 2010. The applicants were contacted by phone and asked to participate in an interview. Those who were not reached by phone were sent an e-mail asking about participation and a time to be called back. Those who did not

respond got a second e-mail reminder between one and two weeks later. The interviews were conducted by telephone and took between five (no action taken) and 30 minutes. A semi structured interview protocol with different themes was used, based on evaluation models (McNamara, 2002; Taylor-Powell *et al.*, 1996). The themes were: goal achievement, sustainability, organizational effects, leadership and ownership, and other implications. First, the material was sorted in different categories, depending on whether or not the applications were funded. All applications were further categorized, and a quantification of the projects in each category was done. The projects in each category were then ranged in a matrix of improvements types the applicants were emphasizing. As described in the theory section, the matrix resulted from an earlier study within the same case (Andersson *et al.*, 2011). In addition, some examples of projects are presented.

Results

The application intervention

This study was carried out in a county council in southeast Sweden. An improvement program was initialized in 2007, which originated from a decision by the elected members of the county council to invest SEK 30 million to encourage improvement initiatives. A key measure in the county council strategy was to increase “*the number of units that carry out improvement work in cooperation with staff members and patients*” (Landstingsplan, 2010-2012, p. 6 [quotation translated from Swedish by the authors]). At the same time, managers were expected to encourage and demand improvement work (Kvalitetswebben, accessed 2012-10-01). Members from all organizational divisions in the county council were invited to apply for money to accomplish improvement projects. The improvement program used a model of supporting and encouraging improvement ideas through financial incentives (e.g., applying for funding to accomplish improvements). A steering board committee reviewed all applications according to established criteria: 1) Improvement work carried out

systematically; 2) Projects focused on patient processes; 3) Projects involving patients; 4) Show results in public; 5) Emanate from research and evidence; 6) Projects involving IT systems supporting new ways of working; and 7) Hearings to locally develop new knowledge (Kvalitetswebben, accessed 2012-10-01). The projects were considered to emanate from practice-based initiatives. The board suggested to the decision-making elected members which applications should be funded or rejected, and the elected members made their decision based on these recommendations.

Outcome of the projects and improvement strategies

Two-hundred and two applicants completed the interviews, giving a response rate of 87 percent. Figure 2 shows the various outcomes of the funded (n=98, 48%) or rejected (n=95, 47%) projects. Applicants not participating in an interview (n=30), were evenly distributed between funded (n=16) and rejected (n=14). Projects judged as research projects (n=9) were categorized separately, since those were not funded from the improvement program, but referred to the Research and Development Committee for assessment. In this study, the research projects were not analyzed further.

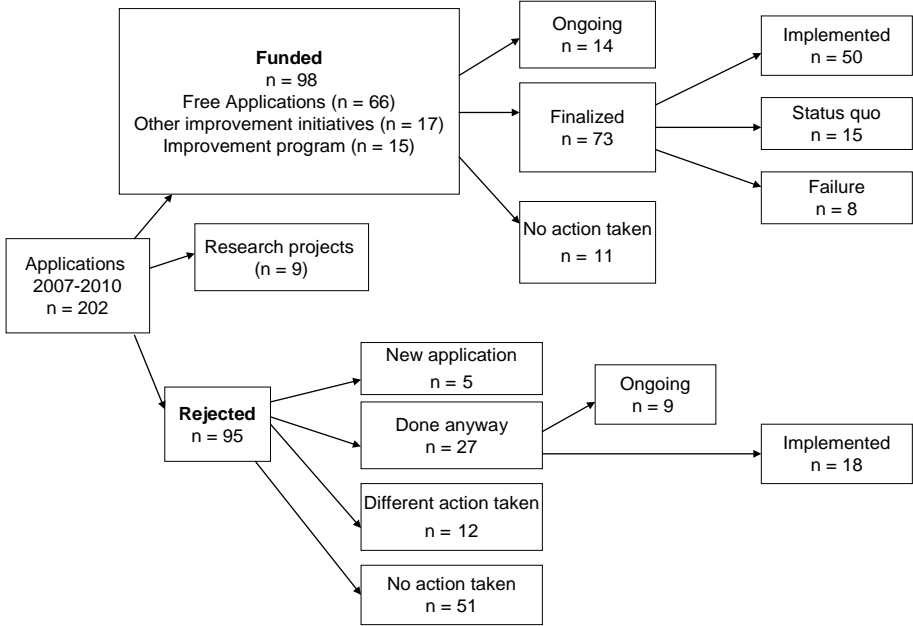


Figure 2. Outcome of the improvement projects.

The funded projects also received money from different sources, although considered as a part of the improvement program. Some (n=17) were funded from other improvement initiatives, like the Development department's overall funding of education in national quality registers (n=5), development of standardized care plans (n=6), or the county council's overall IT solutions project (n=4). Fifteen of the funded projects participated in another intervention within the county council improvement program. These were called Breakthrough Improvement programs due to the use of Breakthrough Series methodology (Institute for Healthcare Improvement, 2003). Six of those Breakthrough projects were implemented and five ended up in the status quo category, due to their intention of organizational process mappings.

Funded projects

Some projects were still ongoing when interviews were conducted in January and February 2012, but 50 (51%) of the funded projects were implemented and sustained two or more years after the project's finalization (Figure 2). The implemented improvements were on different levels, from (micro) unit level to the whole (macro) organizational level. In some cases, small projects were incorporated in large projects. For instance, some small projects that wanted to develop IT solutions were incorporated into the larger IT Web project "My Care Contacts". The projects that were categorized as status quo (15 of the 73 funded, finalized projects) were accomplished according to the project plan. Their aim was not to implement an improvement. Instead they did process mappings, hearings, study trips, or education. Therefore, no improvements were implemented, although the project was successfully accomplished.

Compared to the matrix built on the improvement intentions (Andersson *et al.*, 2011), most implemented projects (n=20) belonged to the Organizational Processes category. Those were

about how to make better use of existing resources. The Evidence and Quality category was second largest (n=12). It was a strategy from the county council to fund projects to encourage work with national quality registers. An example was the national diabetes register (NDR) in which projects were funded from the development department to join a national education initiative. Some of the projects in the Process Technology category developed methods and techniques that were not previously possible to perform in the county council, such as Fetal Nuchal Translucency, Kangaroo-Mother Care Method and an internal electronic search system for healthcare personnel. Projects in the Competence and Development category (n=5) implemented different ways of continuing education. Those funded had chosen more expensive education, such as a surgeon going abroad to learn and bring home trauma surgery knowledge. Proactive Patient Work projects (n=3) mostly developed and put information brochures to use.

Some funded projects did not start, and therefore categorized as no action taken (n=11). The main explanation was that the responsible initiating applicant had left the unit. Other reasons were that lack of time at the unit did not allow the project to start, or that the method to be implemented was no longer adequate. Projects categorized as failures (n=8) were those that stopped mid-way, were never completed or implemented, or had returned to the previous behavior. One example was the project introducing evening consultations for young diabetes patients, but there was no demand for that service; no patients came. The status quo projects were equally found in the categories Organisational Process, Evidence and Quality, and Competence Development. Examples of those were process mappings, and participation in different educations.

To sum up, 50 of the 98 funded projects were implemented and sustained two or more years after the completion. Most of those (n=20) were fund in the Organizational Process category

Rejected projects

Of the rejected projects, 27 (28%) were accomplished without funding, and 18 (19%) of those were sustained. Most of those projects (n=8) were about Organizational Process. The second largest category were Competence and Development (n=4). Two of the implemented rejected projects were about Proactive Patient Work. Only one of the rejected implemented projects was in the Process Technology category. That project did get help from one large, county council-wide initiative to implement electronically booking services. An explanation was that those projects often implied purchase of expensive equipment, and this was then not possible when the project was rejected.

Some applications that were rejected made a new application (n=5). Twelve applicants did not carry through the proposed project, but had done something else (different action taken) Six projects were in the Organizational Process category and three in the Proactive Patient Work category. The projects that were done anyway needed to make the improvement in any event, or might as well be carried out after writing the application. Other explanations were that reallocations of existing recourses made the improvement possible without financial support. The projects that had done something else found something else more urgent to improve when they did not get funding. Some respondents stated that one reason for continuing without funds was that, by initiating this application intervention, the top management in the county council encouraged and permitted improvement work. The overall improvement program had a stated goal that all mangers within the county council should demand improvement work at their unit.

A majority of the rejected applications (54%) did nothing (Figure 2). Most of those (n=20) were found in Organizational Process. Three were in Evidence and Quality. There were various reasons for projects where nothing was done. Some stated that the idea was expensive, and the unit could not bear the project costs without financial support. Other reasons included: shortage of time, not enough support from managers, and the applicant/initiator had left the unit. The rejected but implemented Evidence and Quality projects developed checklists and care plans that minimized the need for heavy documentation. The rejected but implemented Competence Development projects (n=11) introduced training educational visits at the chemistry laboratory and a cardiopulmonary resuscitation (CPR) instructor giving regular training at one of the hospitals. One of the rejected Proactive Patient Work projects provided smoking cessation support one day per week.

To sum up, 27 of the 95 rejected projects were done anyway and 18 of those were sustainable. The Organizational Process category was found in most of the rejected projects; eight of the implemented projects, and 20 of the no action taken projects.

Discussion

Complex organizations such as healthcare systems face challenges in motivation and incentives for improvements (Berwick *et al.*, 2003). The purpose of this study was to examine whether an improvement program influences sustainable outcomes in an organization, and if financial incentives are driving forces for such improvements. Marshall and Harrison (2005) highlighted that there was much not known about how to best use incentives to improve the behavior of healthcare professionals. Most research has focused on the output side of the incentive model (Figure 1), especially incentives like P4P (Sloane, 2005) and naming-and-shaming (Rosenthal *et al.*, 2004). Rosenthal *et al.*'s (2004) discussion about rewarding those

who are already performing well, is essential. If the healthcare system wants to improve, would it not instead be better to encourage those who are not performing well?

The incentive intervention in this county council improvement program chose to highlight practice-based initiatives and ideas, not results or outcomes. When starting such an improvement program, it is not easy to decide which steering model to use. In this case, there were some thoughts from management that improvements should be initiated from the staff, not implemented from above. However, the steering board committee and decision-making elected members stated some criteria in advance (Kvalitetswebben, accessed 2012-10-01). This can be seen as a way to let ideas be free but at the same time keep some control over the resource allocation. The approach of incentivizing the idea instead of the result is not common; but the results of our study indicate that incentives on the input side (Figure 1) could be just as effective to encourage improvements. In our interviews, some respondents claimed that the fact that the county council highlighted the issue and demanded managers encourage improvement work was one important factor for their improvement work. A Swedish study found that barriers to improvements could be lack of support and time (Edvardsson *et al.*, 2011). In our study, reasons why projects were not started were almost the same. The most common reasons were lack of time and resources, and that the initiating applicant had left the unit. This is a problem with locally initiated improvements, which depend on one individual motivating and advocating for the project (Stenberg & Olsson, 2005). Therefore the engagement and encouragement of the majority of the staff at the unit is essential so that the improvement idea will not die if that person leaves for any reason.

The results in our study indicate that financial incentives are not the only method to encourage improvements. A somewhat unexpected result was that 41 percent of those who

got their application rejected had either done the intended project or something else considered more important. Of all the rejected projects, 19 percent had accomplished and implemented a sustainable improvement, according to our definition. One reason may be that, as some respondents stated, once the application was written (often seen as the hardest part (Wilford, 2007)), the planning was done, and if the project was not too expensive for the unit to bear, they might as well go on with it. People were already engaged and dedicated to the project. Gavagan et al. (2010) also supported this explanation. Their study found that dedicated staff was ranked highest in impact factors, while financial incentives were fifth. At the same time, 11 of the funded projects never started and had their funding withdrawn. The main reasons were that the responsible applicant had left the unit, or, one can argue, the project was not necessary because then someone else, perhaps the manager, would have insisted on its accomplishment and implementation.

Illumination of the project outcomes (Figure 2) shows a simplified picture of the complexity of such an improvement program. Some projects in our model were categorized as status quo, meaning they had not reached a new level of performance (Berwick, 1996; Weick & Quinn, 1999). Most of those were process mappings as a first part of a continued improvement process. Others were educational, not leading to a directly observable improvement in the organization. Those projects were not failures, because their aim was not to implement an improvement. Considering interviewees' self-assessment, those projects were successfully accomplished and reached their goals. However, they did not fulfill the definition of sustainable implemented improvement (Beer & Nohria, 2000). At the same time, since most problems in healthcare occur between processes (Dahlgaard *et al.*, 2011), one could argue that those process mapping projects are essential to find the issues needed to improve. On the other hand, failures were different from status quo in that the project aim was reached but not

implemented, or there was a return to previous actions. One can argue about the failures as well. If the improvement idea was tested, found not to work, and therefore not implemented, is that a failure? In our classification, it is a failure according to the definition of relapse to past behaviors (Weick & Quinn, 1999). However, the respondents did not think their projects were failures. They tested it, found it not useful or lacking demand from their patients, and therefore stopped. Testing ideas on a small scale is quite a common way to work with improvements (Institute for Healthcare Improvement, 2003). At the same time, perhaps they should have done better pre-needs analysis of their project.

The evaluated projects in this study were all practice-based. Even if emanating from different levels in the organization, improvement actors were invited to come up with ideas of what to improve. The majority of both funded and rejected implemented projects were about Organizational Process. Dahlgaard et al (2011) emphasized that most improvement gains are found between (sub) processes. Our results indicate that this was also the experiences of practitioners. Many projects aimed to improve processes within and between units. The largest difference was in the Process Technology category. Only one of the rejected implemented projects was found there, which got help from one large county council-wide initiative to implement electronic booking services. The most common explanation to why those nine rejected Process Technology projects were not realized was that they were expensive. With no funding, the project did not have the resources to carry through. This was the only statement implicating the importance of financial incentives.

Conclusions

This study indicates that an improvement program can stimulate improvement work and contribute to sustainable improvements in an organization. The results also support the idea that there are incentives other than financial that can affect whether an improvement program

contributes sustainable improvements in the organization. Attention to improvements from management is sometimes enough to get improvement work started. Financial incentives are secondary. Another factor of importance could be that the projects are practice-based. The way the intervention is carried out, which encourages those the improvement ideas that are considered most important for those affected, is one way of incentivizing not performance but rather the intention and effort to become and perform better.

References

- Andersson, A.C., Elg, M., Idvall, I. & Perseius, K.I. (2011). Five Types of Practice-Based Improvement Ideas in Health Care Services: An Empirically Defined Typology. *Quality Management in Health Care*, 20(2), 122-130.
- Bakka, J.F., Fivelsdal, E. & Lindkvist, L. (2006). Organisationsteori: struktur – kultur – processer (in Swedish). Malmö: Liber.
- Beer, M. & Nohria, N. (2000, Eds.). *Breaking the Code of Change*. Cambridge, MA: Harvard Business School Press.
- Behn, R.D. (2003). Why Measure Performance? Different Purposes Require Different Measures. *Public Administration Review*, 63(5), 586-606.
- Berger, E. (2011). Value over Volume: Value-based Purchasing Brings Financial Incentives for 13 Core Quality Measures. *Annals of Emergency Medicine*, 58(6), A19-21.
- Berwick, D.M. (1996). A primer on leading the improvement of systems. *BMJ*, 312:619 (online) [<http://www.bmj.com/content/312/7031/619.full>], accessed 2012-10-01.
- Berwick, D.M., James, B. & Joel Coye, M. (2003). Connections Between Quality Measurement and Improvement. *Medical Care*, 41(1), I30-I38.
- Dahlgaard, J.J., Pettersen, J. & Dahlgaard-Park, S.M. (2011). Quality and lean health care: A system for assessing and improving the health of healthcare organisations. *Total Quality Management and Business Excellence*, 22(6), 673-689.
- Donabedian, A. (2003). *An Introduction to Quality Assurance in Health Care*. Oxford University Press.
- Driver, T.H. & Wachter, R.M. (2012). Can Healthcare Go from Good to Great? *Journal of Hospital Medicine*, 7(1), 60-65.
- Edvardsson, K., Garvare, R., Ivarsson, A., Eurenus, E., Mogren, I. & Nyström, M.E. (2011). Sustainable practice change: Professionals' experiences with a multispectral child health promotion programme in Sweden. *BMC Health Services Research*, 11:61 (online) [<http://www.biomedcentral.com/1472-6963/11/61>], accessed 2012-10-01.
- Gavagan, T.F., Hongyan, D., Saver, B.G., Adams, G.J., Graham, D.M., McCray, R. & Goodrick, G.K. (2010). Effect of Financial Incentives on Improvement in Medical Quality

- Indicators for Primary Care. *The Journal of the American Board of Family Medicine*, 23(5), 622-631.
- Grol, R. & Wensing, M. (2004). What drives change? Barriers to and incentives for achieving evidence-based practice. *The Medical Journal of Australia*, 180, S57-60.
- Institute for Healthcare Improvement (IHI). (2003). The Breakthrough Series: IHI's Collaborative Model for Achieving Breakthrough Improvement. Available at [<http://www.ihl.org/knowledge/Pages/IHIWhitePapers/default.aspx>], accessed 2012-10-01.
- Klein, K. (2012). Redefining the Clinical Relationship in the Era of Incentives. *The American Journal of Bioethics*, 12(2), 26-27.
- Kottke, T.E., Pronk, N.P. & Isham, G.J. (2012). The Simple Health System Rules that Create Value. *Preventing Chronic Disease*, 9 (online), [http://www.cdc.gov/pcd/issues/2012/11_0179.htm], accessed 2012-10-01.
- Kvalitetswebben, county council of Kalmar Web site (in Swedish), available at [http://www.ltkalmar.se/lttemplates/SubjectPage_7318.aspx], accessed 2012-10-01.
- Landstingsplan 2010-2012. Kalmar county council (in Swedish).
- Lombarts, M.J.M.H., Rupp, I., Vallejo, P., Suñol, R. & Klazinga, N.S. (2009). Application of quality improvement strategies in 389 European hospitals: results of the MARQuIS project. *Quality and Safety in Health Care* 18, (Suppl I), i20-i37.
- Marshall, M. & Harrison, S. (2005). It's about more than money: financial incentives and internal motivation. *Quality and Safety in Healthcare*, 14, 4-5.
- McNamara, C. (2002). A Basic Guide to Program Evaluation. (online) [<http://www.tgci.com/magazine/A%20Basic%20Guide%20to%20Program%20Evaluation.pdf>], accessed 2012-10-01.
- Oliver, A. & Brown, L.D. (2011). Incentivizing Professionals and Patients: A Consideration in the Context of the United Kingdom and the United States. *Journal of Health Politics, Policy and Law*, 36(1), 59-87.
- Peterson, E.D. (2004). Should we link payment to quality? *American Heart Journal*, 148(5), 56-58.
- Pettigrew, A.M. (2000). Linking Change Processes to Outcomes. In: Beer, M. & Nohria, N. (Eds.), *Breaking the Code of Change*. Cambridge, MA: Harvard Business School Press.

- Rosenthal, M.B., Fernandopulle, R., Ryu Song, HS. & Landon, B. (2004). Paying for Quality: Providers' Incentives for Quality Improvement. *Health Affairs*, 23(2), 127-141.
- Sackett, D.L., Rosenberg, W.M.C., Gray, M.J.A., Haynes, B.R. & Richardson, W.S. (1996). Evidence Based Medicine: What It Is And What It Isn't: It's About Integrating Individual Clinical Expertise and the Best External Evidence. *British Medical Journal* 312(7023), 71-72.
- Schneider, B., Brief, A.P. & Guzzo, R.A. (1996). Creating a Climate and Culture for Sustainable Organizational Change. (online) [http://media.wiley.com/product_ancillary/64/04702605/DOWNLOAD/chapter41.pdf], accessed 2012-10-01.
- Sloane, T. (2005). Paying for improvement. Incentive models need to be refined to reward incremental quality advances. *Modern Healthcare*, 35(50), 20.
- Stenberg, J. & Olsson, J. (2005). SALAR report "Transformera system– från öar till helhet" (in Swedish) (online) [http://www.skl.se/vi_arbetar_med/halsaochvard/kvalitetsutveckling/transformation], accessed 2012-10-01.
- Taylor-Powell, E., Steele, S. & Douglas, M. (1996). Planning a Program Evaluation (online) [<http://learningstore.uwex.edu/assets/pdfs/G3658-1.pdf>], accessed 2012-10-01.
- The Incentive Research Foundation (2002). Incentives, Motivation and Workplace Performance: Research & Best Practices (online) [<http://www.loyaltyworks.com/incentive-program-research-articles/ispifullpdf.pdf>], accessed 2012-10-01.
- Ting, H.H., Shojania, K.G., Montori, V.M. & Bradley, E.H. (2009). Key Issues in Outcome Research. *Quality Improvement: Science and Action*. American Heart Association (online) [<http://circ.ahajournals.org/content/119/14/1962.full.pdf+html>], accessed 2012-10-01.
- Weick, K.E. & Quinn, R.E. (1999). Organizational Change and Development. *Annual Review of Psychology*, 50, 361-386.
- Wilford, S. (2007). The Limits of Award Incentives: The (Non-) Relationship between Awards for Quality and Organisational Performance. *Total Quality Management and Business Excellence*, 18(3), 333-349.

Wu, I.L. & Hsieh, P.J. (2011). Understanding hospital innovation enabled customer-perceived quality of structure, process, and outcome care. *Total Quality Management and Business Excellence*, 22(2), 227-241.