

Doing the right things right



**Results and diffusion of large-scale
improvement actions**

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From knowing to acting

How can we make sure that patients in the Netherlands receive the most effective and safe care just the way they want it? We are often not sure about the best care for a certain illness and each treatment involves certain risks for the patient. However, what we know goes beyond daily practice: there is a big gap between research and practice.

For more than ten years, care institutions and governmental professionals have had the opportunity to create a quality system in cooperation with patients/consumers guaranteeing sound care for patients. In 2000, an evaluation study by NIVEL showed that most of the care institutions are falling behind with their systematic quality control and quality improvement. As a consequence, the government has decided to support care institutions more intensively and to make sure that custom-made action programmes are developed.

The first national action programme for hospitals is “Sneller Beter”¹ (Better Faster). The associated implementation programme is called "Sneller Beter pijler 3". Within this programme, eight hospitals have started two years ago to try to accelerate implementation of best practices, in order to significantly improve care for patients regarding safety and logistics. Ambitious new standards have been set, like less than 5% decubitus, reducing medication errors and wound infection by 50%, reducing access times, hospitalisation duration and through-put times, and improving the productivity of the operating theatres. In the mean time, a second and third group of eight hospitals have started with the same objectives.

¹ See www.snellerbeter.nl.

Approach evaluation study

Zorg Onderzoek Nederland (the Netherlands Organisation for Health and Research, ZonMw) has asked NIVEL to evaluate the implementation programme of “Sneller Beter” in cooperation with the EMGO Instituut (the institute for Research in Extramural Medicine)/VUmc (University Medical Centre Amsterdam) and the BEOZ (Policy, Economy and Organisation of Care) department of Maastricht University. This evaluation study involves collecting data from the management and internal programme coordinators of the participating hospitals, project leaders of the improvement projects and the consortium’s external advisors, by way of interviews and questionnaires.² Additionally, clinical data of the improvement projects (indicators), which have been registered by them in a central data base, are used.³

The evaluation concerns five priority areas:

- Patient safety, including: decubitus, post-operative wound infections (POWI), medication safety (MV) and safe incident reporting (VIM)
- Patient logistics, including: operating theatre productivity, working without waiting list (WZW) and process redesign(PHI)
- Patient participation
- Professional quality
- Leadership & organisation development (L&O)

² This consortium consists of the Quality Institute for Health Care CBO, the institute Policy and Management of Health Care of the Erasmus MC and the Order of Medical Specialists.

³ The following report gives an extensive description of the results and justification of the data collection: *Evaluatie Sneller Beter pijler 3: De implementatie van verbeterprojecten in de eerste acht ziekenhuizen* (see: www.nivel.nl/projecten/evaluatie-sbp3).

Advisors of the consortium support the eight hospitals in their implementation of the improvement projects. Several meetings have been organised for the project teams in the hospitals, to communicate and exchange knowledge.

What has changed in care?

A large change for most projects teams is the systematic measuring and monitoring of the project progress. The interventions' contents differ within as well as between several types of project. It partly concerns improving implementation of existing agreements within a hospital. More specifically, it might concern structural measurement of decubitus prevalence in decubitus projects and applying risk inventories on each patient; in operating theatre projects it might concern (re)defining the concept of emergency; and in process reorganisation it might concern standardising care processes, reducing planning moments and more flexible use of staff.

Striking results

Achieved improvements at project level

Below, the results per theme are given stepwise. The results are based on the available information in the central data base (as in May 2006). It is possible that information that is missing in the data base is present within the hospital involved. The percentages below refer to projects that have their zero and final measurements registered in the central data base.

- 12 of the 20 decubitus projects have achieved their aim (< 5% decubitus); 7 projects show changing results, the result of 1 project is not known. On average, the percentage decubitus is reduced by 43%.
- 8 projects out of 22 MV projects have achieved their aim; 6 projects have not, or not yet, achieved their aim, and the necessary data of 8 projects are missing in the central data base. On average, 35% less patients have a postoperative pain score higher than four at a

scale of 1 to 10. The number of unnecessary days of intravenous antibiotics has reduced, on average, by 57%.

- All VIM departments have succeeded to set up a VIM committee that analyses incidents, reports periodically and initiates improvement actions.
- Out of the 27 WZW projects, 1 project has achieved its aim (access time less than 1 week); 17 projects have not, or not yet, achieved their aim. The results of 9 projects are not known. On average, the access time to the outpatient clinic has reduced by 31%. This amounts to an average access time of 32 days.
- 2 of the 26 PHI projects have achieved their aim (reducing the through-put time by 40%-90%); 4 projects show changing results and the results of 20 projects are not known. The through-put times of specific patient categories have reduced, on average, by 13 days.
- 2 out of the 26 PHI projects have achieved a second aim (reducing hospitalisation by 30%), 5 projects show changing results, and the results of 19 projects are not known. On average, the time of hospitalisation for specific groups of patients has reduced by 2 days.
- The results of the projects aimed at reducing postoperative wound infections are not yet known. A registration format has not been made available until later.
- After a year, the rate of productivity increase at the operating theatres is still not known.

The themes patient participation and professional quality have been adopted by a quarter to half of the projects, on average, during the first year.

Observed effects at project level

Apart from measurement of clinical results, project leaders of the improvement projects have been asked which results they think have been achieved. Therefore, the opinion of project leaders is important (total n=57).

- At a scale from 1 to 10, the general judgement of project leaders varies from 5 (OK projects) to 8 (MV projects), on average.
- According to 50% (OK and POWI) to 92% (PHI) of the project leaders results have been achieved.
- 43% (OK) to 82% (PHI) experience a positive relation between the project's cost and benefit.
- 25% (POWI) to 91% (WZW and MV) of the project leaders think that training in the improvement method was sufficient.
- The projects leaders also think that the waiting lists projects in outpatient clinics are more patient oriented than before.
- Only a few projects have managed to save cost. Some projects see an increase in cost.
- Productivity has risen in the OK projects.
- The work load has increased particularly in the OK and POWI projects.
- The project leaders who have been re-organising the care processes are more often enthusiastic about the improvement method than the remaining project leaders.

Differences between hospitals

Several differences between hospitals can be observed in the effects project leaders experience and the necessary boundary conditions. No single hospital is scoring positively in all parts, nor does a single hospital score badly in all parts. The data are too limited in extent to make a conclusive statement, but some hospitals do indeed score positive relatively more often than others.

Sustainability and spread within hospitals

The second year of the implementation program was focussed on sustainability and internal spread. To realise this, approach plans have been made for each hospital. The aim was to maintain the achieved results and to spread these to two or more departments.

Most project teams within the eight hospitals have continued the improvement trajectories in the second year. All agree that the new way of working has obviously been integrated in daily acting. To sustain the results, progress is reported periodically to the Executive Board by most of the project teams. In hospitals, projects that have been the focus of hospital policy over a longer period of time, especially, were spread to new departments and outpatient clinics. The core competencies of the improvement method are not yet present at all departments, but they are stimulated by using management contracts and annual plans with concrete objectives.

The extent of the spread differs per project type and hospital. Despite success stories, the WZW-project, for example, is not copied everywhere. Strikingly, there is more diffusion in themes people mastered already before “Sneller Beter”. A more detailed description of the results is presented in a research report.

Influencing factors

In the evaluation study, influencing factors have been studied at four levels. The following worked stimulating at:

Macro level

- The societal context, such as accent on market forces, performance indicators, DBCs, transparency and the choosing citizen and the health care insurer.
- The experienced win-win for everyone.

Hospital level

- The support of the Executive Board: time, extra administrative and ICT support
- Being part of a group of “forerunners” who receive extra (media) attention.
- The available external support and guidance.

Project level

- The involvement of enthusiastic medical specialists who can serve as a flagship.
- The presence of positive stimuli: continuous attention for the projects in the hospital, being able to maintain the results, fully or partly.
- The presence of success stories of the past.
- Measuring progress and clearly observing results.

Individual level

- Matching the project objective with a problem
- Receiving sufficient education in improvement methodology.
- Feeling colleagues’ support.
- Knowledge on how to measure and analyse result data (indicators).

Factors of failure

First of all, absence of the stimulating factors mentioned before enhances the probability of “failure”. Not all projects are given the same opportunities in means and support by the hospitals’ management. Additionally, employees can be hampered by the feeling that it is risky to participate in the project. This, for instance, influenced the operating theatre projects.

Conclusions

The evaluation study showed that 113 improvement projects have been done in the first eight hospitals by 77 project teams. The evaluation demonstrates that the projects’ success strongly depends on the extent to which employees involved notice results and are appreciated for their efforts, for example by allowing them to invest the results in new improvements. In 20% of the projects, the aim of the programme has been achieved after one year. In one third of the projects the aim had not yet been achieved. For the remaining projects it is not clear whether improvement has been realised, because there are no measurement data.

At project level, these results are matching the success percentages of previous “Break through trajectories” that were supported by the Quality Institute for Health Care (CBO)⁴. This means that the large-scale action of improvement projects within the framework of “Sneller Beter” did not produce more positive results for patients, so far, than previous separate trajectories.

The implementation programme “Sneller Beter” did, however, have the effect that in the eight hospitals improvements are being tried systematically and at larger scale, and at multidisciplinary level. Also, the hospital’s top management

⁴ Splunteren P van, e.e. Doorbreken met resultaten, Koninklijke Van Gorcum, Assen, 2003.

has accepted the responsibility to control the cohesion between the initiatives and to make sure that the results are anchored in the annual policy cycle. Many project leaders believe that the Executive Board could assume a more active and more visible attitude.

The relation between cost and benefit, as experienced, differs for each type of project. In general, logistic projects are judged more positively than security projects, The least positively judged are those projects that are intended to improve the productivity of the operating theatre and to reduce the number of postoperative wound infections. The latter projects have a duration of two years; therefore, the results may change over time.

Results that have been regarded to be positive, such as the PHI-projects show that not all results can be categorised as belonging to the more objective indicators.

It was possible to indicate a few relevant success factors in the study. It is important to picture the presence or absence of these success factors before or during the implementation trajectory. Corrective measures must be taken as well as action that is adequate for each project, should these factors be missing.

The overall programme has been implemented largely according to the original action plan, in spite of the extent of the implementation program and the changes in the program board halfway the first year.

The program has made many people in the hospitals enthusiastic because they felt it was a win-win situation for everyone. Hospitals also strive to establish a positive image in order to improve their competitiveness for health insurers, patients and employees. Compared to previous improvement

projects, the accent is now more on measuring and monitoring results and providing feedback. Additionally, the projects have been spread more widely than in previous “Breakthrough trajectories”. The structural anchorage of targeted improvement in management contracts and the hospital’s policy cycle is also new. The fact that part of the result data are missing shows that the development is ongoing.

Future plans

The most important step in the next years is to realise the standards of “Sneller Beter” at a larger scale, because not all projects by far have achieved the aim. The current projects need to be monitored, in order to control the progress and the achieved results – this is a requisite. Inside and outside attention has stimulated the project teams and targeted working seems to be better anchored in the hospitals’ policy cycle. However, danger is looming that the new way of working can not be maintained when hospitals focus again mainly on daily production. Time and attention should continue to be focused on renewal and improvement. Continuous support, in administration as well as ICT, is needed to register, analyse and report the results.

“SNELLER BETER” AND THE EVALUATION STUDY

“Sneller Beter” is an initiative of the ministry of Health, Welfare and Sport, the Order of Medical Specialists, the NVZ, Dutch Hospital Association, and nurses and carers in the Netherlands.

NIVEL is conducting independent research in the progress and effects of the implementation programme in cooperation with the samenwerking met the EMGO Instituut (the institute for Research in Extramural Medicine, of the VU Medical Centre and the research group BEOZ of Maastricht university. This study is conducted at the request of ZonMw.

MORE INFORMATION

Please visit our site www.snellerbeter.nl for more information.

Reports and additional information about the evaluation study “Sneller Beter pijler 3” can be found at www.nivel.nl/projecten/evaluatie-sbp3.



BEOZ

