

ARE TEAMS MORE AT HOME IN THE HOMECARE ORGANIZATIONS?

IMPROVING RESULTS IN HOMECARE ORGANIZATIONS THROUGH SOCIO-TECHNICAL ORGANIZATIONAL CHANGE

MATHIJS ALMEKINDERS

The demand for healthcare services is set to increase significantly in the coming decades as a result of demographic developments such as an ageing population and the decline in the number of young people as potential workforce, socio-economic trends such as growing individualization and consumerism, and medical-technological innovations such as 'e-health'. Experts believe that this increase in demand will far outweigh the availability of qualified staff. In addition, homecare organizations are struggling to meet increasingly stringent performance targets. These targets are aimed at three substantial organizational aspects, namely the quality of care as perceived by clients, the efficiency of the company's operations and the quality of the work of caregivers. To instigate improvements in all three areas, radical changes must be made to current organizational forms, which are still rooted in traditional organizational principles. This begs the question, whether an alternative organizational form would provide more opportunities for homecare organizations to satisfy the increasingly stringent performance targets and respond adequately to increasing environmental turbulence. To this end, it has been decided to opt for the socio-technical systems approach with a team-based concept of organization. This theory has a proven track record in other sectors and serves as the basis for the implementation of modern organizational forms in this research.

The research question can therefore be formulated as follows:

Does the implementation of socio-technical organizational principles - in particular the concept of 'team-based' organization - in homecare organizations lead to the envisaged improvements in efficiency of care, in client satisfaction, and in the quality assessment of the work of caregivers?

The research object is Sensire, a large healthcare organization in the Netherlands. This case study aims to assess whether the implementation of the team-based organizational concept is practically feasible. The organization before and after the implementation of the team-based concept and the change processes involved will be described in a descriptive study. If the case study proves implementation to be successful and the new organization to satisfy the criteria of the theoretical concept, it is possible on the basis of evaluative research to determine whether the implementation has actually produced the desired results.

INDIVIDUALIZATION, INCREASINGLY STRINGENT DEMANDS AND DEVELOPMENTS IN HEALTHCARE

If the current situation remains unchanged, the healthcare sector will face serious problems in future. The demand for long-term care and support is growing as a result of a graying population. Between now and 2020, the number of chronically ill people requiring care and treatment will increase by 40 percent. In an effort to keep the costs of care manageable, the Dutch government has brought market forces into play, which will serve as a stimulus to procure high-quality and affordable care services.

A range of factors are at play, necessitating a radically different approach to enable care organizations to respond effectively to the above-mentioned changes.

A key demographic development in the care of the elderly is the graying population. The flip side of the ageing coin is the decline in the number of young people, resulting in a drop in labor supply and potential. In absolute and relative terms there will be fewer young people in future. The current workforce is ageing, while the recruitment of young care professionals is falling.

The homecare sector is labor intensive. The majority of employees operating in the homecare sector are female part-time workers. The availability of sufficiently qualified care professionals is essential to meet the increasing demand for homecare. The care sector is characterized by a high workload and high sick leave figures. It also suffers from a poor image. In order to satisfy healthcare demands, it is essential to retain existing staff and attract a substantial number of newly qualified care professionals. The quality of the work of caregivers is therefore vitally important to maintain access to care. Health professionals demand greater independence and autonomy in their work, more variety and more responsibility.

According to prevailing opinion, the activities of care professionals must correspond with their competences and aspirations. The elimination of hierarchical organizational layers impedes vertical growth. Consequently, employees can only develop their career horizontally or within their own job function. Employers wishing to attract sufficiently qualified care professionals must respond to these developments. In order to anticipate the impending staff shortages, huge financial and knowledge investments are required for the introduction and innovation of technologies in the care sector. In addition to the above-mentioned trends, we can also identify higher expectations and growing individualization of care clients, who are increasingly demanding greater diversity, flexibility and variety in the care sector.

On the basis of benchmark research, the Dutch Ministry of Health, Welfare and Sport and the homecare organizations have agreed to create greater transparency in the strategies, operations and performances of the sector. The sector-specific results of these surveys are increasingly demanded by care agencies, private health insurers and patient and consumer organizations. Pressure is exerted on those care organizations that currently perform below the best-practice target. Improving the homecare sector is one of the main aims of the government's policy of introducing market forces into the healthcare system.

Many homecare organizations traditionally separate thinking from doing, line from staff, and highly qualified from less-well qualified tasks. Operational staff have little regulation capacity to cope with variances and bottlenecks. In a traditional, hierarchical organization, employees feel restricted due to the division of tasks, duties and responsibilities. The structural complaints of clients are insufficiently addressed due to the division of labor. The client has no continuity of homecare and is seen by a number of different care professionals. The

standardization in care (including standard price lists, uniform treatment and standard treatment times) is thus having a counterproductive effect. It is in direct conflict with the need to adequately address complex care questions and greater demand for customization.

If the current policy remains unchanged, it will become increasingly difficult in the coming decades to meet the growing demand for healthcare services, both with regard to the labor market and in terms of affordability.

ORGANIZATIONAL STRUCTURE

To maximize productivity and increase efficiency, Frederick Taylor devised a form of work organization in the early 20th century, advocating the division of labor and standardization of tasks. Traditional organizational structures with their emphasis on precision, speed, clarity, control and reliability have undoubtedly achieved spectacular improvements in efficiency. This system is highly effective in a stable environment. However, organizations based on Taylor's approach face a number of problems, in particular if their environment is more dynamic and uncertain. A properly implemented division of labor requires a lot of coordination and synchronization mechanisms, resulting in greater mutual dependence, hence a greater risk of disruption.

Organizations operating in a dynamic environment are expected to deliver high productivity, flexibility, customization (diversity, variety) and innovation. These performance requirements are more difficult to achieve in 'classic' organizations due to a range of factors, including long lines of communication, communication problems, customization problems, low productivity, high overheads, high sick leave figures, inadequate decision making, fragmented and unclear responsibilities and management with insufficient time for primary tasks. Maximum division of labor poses a substantial obstacle to satisfying the performance targets in complex and dynamic organizational environments.

This study adopts a socio-technical perspective as a theoretical foundation to achieve an alternative organization form that is more in tune with modern requirements.

The socio-technical systems approach can be seen as a theory in the field of management science. It is based on an integral approach, focusing on the relation between behavior and organization culture (the 'software') on the one hand and 'structure and systems (the 'hardware') on the other. It is thus concerned not only with a change in structure and systems, but also with an attitudinal change among employees, their relationships and beliefs about their work and organization. The more complex the organization, the more sensitive and susceptible it is to disruptions and bottlenecks. The less 'susceptible' an organization is to internal problems, the better able it is to respond to the increasing complexity and dynamics of its environment. The ultimate objective is therefore to reduce complexity. In this process, traditional organizations with more complex structures and simple tasks can be transformed into simple organizations with more complex tasks.

In structural terms, the integral design chain establishes the logical 'order' of a series of redesign decisions that have to be taken:

1. defining the boundaries of the organization which is to be redesigned;
2. identifying the mission of the organization with corresponding objectives and strategy;

3. determining the design of the core processes;
4. designing the organization control processes;
5. designing the - technical - systems: the systems in the primary process first, followed by the operating systems and lastly the information systems.

The socio-technical approach is characterized by an integral approach and an integral focus in three performance areas:

- the quality of the organization: the ability to meet market requirements;
- the quality of work: the ability to reduce stress risks and increase learning opportunities;
- the quality of the employment relationships: the practice of internal collaboration.

As healthcare professionals are crucial to the long-term success of the labor-intensive homecare process, particular attention is paid to the quality of their work.

The nature of work changes in the course of time, and appraisal standards are culturally defined and therefore time dependent. De Sitter defines the concept of work as human activities that imply social interaction. The employee can only perceive work as meaningful when he or she is engaged in social interaction by participating in a situation of relative mutual dependence. In this context, work is part of a social environment. Consequently, any changes to the employee's work schedule have an impact on the environment of that labor process. This is a reciprocal process. Work only becomes meaningful when choices can be made. Rather than adopting a person-dependent, subjective perception approach, socio-technical systems take a person-independent, more objective structural approach. A structural approach focuses primarily on the interactions between people and the factors which help or hinder these interactions. The focus of attention is on the work itself: the characteristics of the job.

Certain structures have a greater potential to enable involvement, while others foster feelings of alienation and indifference.

In accordance with this approach, the key quality indicator is involvement: the question is not whether an individual has job satisfaction or not, but whether people are involved in their work. The quality of work is important, because employees who are confronted with interferences in their work and have few opportunities to cope with these interferences, are more exposed to stress; their work drains their energies. Work situations are considered active and motivating if the task demands and the sense of autonomy are relatively high. When the work is varied, personal and environmental variations can be handled more effectively. Furthermore, work is perceived as meaningful if employees are convinced they are making a visible contribution to the objectives of the organization. Employees who are responsible for their results and receive feedback are presented with an active learning opportunity. To prevent and reduce stress, it is essential for employees to have a balance between regulation (controlling) opportunities or regulation capacity on the one hand and the regulation (control) needs or requirements - complexity - on the other.

From this perspective, the concept of work is assessed on the basis of team or group interactions. The team is thus a vital link in socio-technical systems-based organizational change. Self-directed teams, teams with a certain degree of independence and autonomy, are

geared towards self-organization, enabling operational staff to react more effectively to problems and bottlenecks, changes in their working environment and specific and continuously changing customer demands. According to Van Amelsvoort et al (2003), the concept of self-directed teams is best reflected in competitive pressure; self-directed teams perform considerably better in uncertain and unsafe situations, delivering better quality services than employees working in more bureaucratic organizations. Teams can also be a source of involvement. The team members will need to work on the mutual working relationships, team dynamics, nurturing the team's maturity, which can all be clustered under the heading 'team development'.

The role of the team leader in developing and nurturing the team and monitoring teamwork is important in this respect. According to De Sitter (1982), good employment relationships are characterized by frequent communication between management and operational staff, consultation with regard to short-term and long-term problems and belief in the mutual benefit of teamwork, resulting in mutual respect and trust. Studies have revealed that the implementation of socio-technical organizational principles, including the concept of self-directed teams, has a long-term positive impact on the quality of the organization and the quality of the work delivered by these organizations.

In order to change from traditional organizational forms to socio-technical organizational forms, a number of differences need to be resolved:

- organization should be based on the entire chain of activities, rather than the traditional approach of structuring organization around different tasks;
- modern organizations allocate regulation capacity at a local level; traditional organizations, conversely, are based on central regulation capacity;
- in traditional organizations, central management is accompanied by influential aspect-based support departments; the socio-technical systems perspective takes integral management as its basic premise, supported by local staff and minimal central staff.

Small flexible teams made up of versatile team members, job enlargement, a high degree of autonomy and responsibilities are important building blocks of a modern organization. Traditional organizations are centered on small tasks and individual hierarchical control.

ORGANIZATIONAL CHANGE

Organizational change is traditionally characterized as top-down, think first and do later: design, then implement. The process to achieve this ultimate objective is divided into several easy-to-manage steps. This approach can be particularly effective for example in situations where drastic measures are required due to a sudden change in context. When employee participation is minimal, the major risk is unwillingness to accept changes. In participatory change processes, however, the organization's members look for suitable solutions to shared problems together. This in turn reduces the resistance to change and utilizes the expertise of the employees and results in faster acceptance of the new organizational forms and methods, and better design. If fast organizational change without alienating the employees is essential, it is advisable to combine elements of both approaches. Van Amelsvoort and Metsemakers (2002) call this the coarse/fine structure. With the coarse structure, a design on headlines is

drawn up by a select group of people in an attempt to accelerate the process of important, politically sensitive design choices. The fine structure is eventually developed through the participation of more people.

THE CASE STUDY

Since 1999, Sensire has witnessed the following development phases:

1. founded as Districtskruisvereniging Oost-Gelderland and three social service institutions: these merged into ZorgGroep Oost-Gelderland;
2. the foundation of Zorggroep OostNederland: further scaling up of activities. In 2000, joined by the care organizations Ouderenzorg Ruurlo/Vorden and Thuiszorg Hameland van Nispenhof;
3. expanding activities Zorggroep OostNederland (later 'Sensire') and joined in 2001 by the care organization Sorgh-Saem (assisted living-cum-nursing homes).

The ambition of Sensire to 'build up a working relationship based on mutual trust with the customer on the basis of equality, empathy and creativity' is difficult to achieve for an organization with a traditional structure. Due to task specialization, the work is divided into smaller tasks, carried out by a number of 'specialist' employees. Consequently, people requiring multiple care services are assisted by different employees. This is not conducive to building up a working relationship based on mutual trust. A bottleneck analysis highlights the large number of mutual dependencies between the sub-departments. This analysis reveals that many bottlenecks in the operational processes are the result of complex organizational structures.

To determine the impact of the traditional organizational forms on the different functions, a function analysis was carried out for the functions of Homecare Assistant, Carer, District Nurse and Homecare Manager and revealed a number of restrictions.

The scaling up of activities has generated more overhead activities and has increased the number of indirect employees active in support departments. The number of hierarchical levels within the line organization has increased. The number of senior managers and senior management layers in the line has grown from three to five. The Sensire care organization is thus becoming increasingly complex.

To address the increasingly stringent performance requirements and the problems associated with traditionally structured organizations operating in a dynamic environment, Sensire decided to adopt the socio-technical perspective.

On the basis of its mission, Sensire formulated a three-pronged objective:

- to increase the efficiency of care;
- to improve the clients' perception and appreciation of the care provided;
- to improve the quality of the work delivered by the care professionals.

The first step involved forming subsidiaries. Incorporating all products in one order flow was not practically feasible and not always desirable, as not all products have a strong

correlation. We can identify at least two different client groups: care for the elderly and chronically sick, and care for parents and infants. Overlap between the two groups is extremely rare. Distinguishing between these groups helps reduce complexity significantly. It was therefore decided to split the operating companies for elderly care and the chronically sick and to additionally break the companies down into geographical regions. The creation of more or less autonomously operating organizational units, which each respond to environment variables, reduces the central regulation need. Parallelization simplifies the input and the process, and reduces the interference between the different processes. The units focus on their own clients rather than on their own specialist production processes, thus increasing client focus. This small-scale regional organizational approach provides an insight into the care process of clients. It is then possible to build up relationships and generate trust and confidence: Sensire's core product. A clear distinction can also be made between clients with low-complex or simple care needs and those with high-complex or multiple care needs. Clients with high-complex care needs generally require 'heavier' physical care and nursing activities. Although these activities gradually become less time-consuming, they need to be performed more frequently.

This distinction should be incorporated in the parallelization criteria and should result in two types of teams made up of care professionals with their own specific qualifications:

- so-called 'service teams' delivering care for clients with low-complex care needs involving homecare assistants and - light - physical carers and
- so-called 'care teams' delivering care to clients with highly complex care needs involving homecare assistants, carers and district nurses.

The teams, being the smallest building blocks of the organization, are able through their autonomy to provide the requisite service and care for their own clients, and operate in accordance with the concept of 'self-directed team members'. The key criterion in this respect is the motto 'we care for our neighborhood'. This implies that the teams take and carry responsibility to serve their local client groups within the municipality to the best of their abilities. This re-structuring of the care process produces a more simplified organization with fewer 'cross-border' consultations. This is illustrated by the fact that the primary process previously was conducted over nine channels. In the new situation, only three channels remain.

The function analysis reveals an improvement in the majority of health conditions in the new situation compared with the previous situation. Stress risks are reduced and learning opportunities increased.

The star role model is applied to promote team coordination. In the star role model, the total number of regulation tasks of the team is divided into a number of sub-portfolios, which in turn are assigned to the individual team members.

The functions of Care Manager, Regional Manager and the Managing Director have one element in common: integral management.

Managers are authorized and responsible for the overall process, while support services are directed by the line.

In the new situation, developments within a specific product group, a region or location, no longer affect the organization as a whole, but are 'absorbed' at operating-company level. This approach additionally furnishes Sensire with a broader operating repertoire: within the central policy frameworks, operating companies can tailor their policy to their specific environment. The operating companies are thus relatively autonomous, accommodating a number of support services operating decentrally. The 'central remnant' is a compact concern organization involving fewer than 20 people: Concern Controlling, Research & Development, Marketing, Management Office and Concern Office. Two further support departments can be identified: the ICT Department and the Medical Contact Centre, including a 24-7 call centre.

At Sensire, the required care or care activity per client was previously highlighted on a planning schedule, completed by the relevant care professional. This produced highly complex planning schedules with hundreds of cards displaying all contact moments. The implementation of the new planning system has simplified the rota system and 'troubleshooting activities' to such an extent that it can be completed effectively by all team members together. This has increased not only the sense of involvement, but also the sense of responsibility for the reliability of the care provided by all team members.

Simple 'cockpits' provide an insight into the results of a number of key performance indicators. Each team is thus able to gauge whether the performance is adequate, which areas require extra attention and the impact of certain improvement measures or incidents.

CHANGE PROCESS APPROACH: FROM THE CURRENT SITUATION TO THE NEW SITUATION

The formation of operating companies: de-concentrating senior staff and support staff

The transformation from a traditional bureaucratic organization, 'the mammoth tanker', to an organization derived from a socio-technical perspective, 'the flotilla of smaller ships' as it were, was first instigated by a number of senior line managers and a number of support managers and then fleshed out in more detail into a design plan. At this stage, there were a number of considerations in favor of adopting a top-down approach.

The creation of relatively autonomous operating companies was followed by an 'organizational innovation process' per operating company. A drastic change process such as this will only succeed if there is sufficient local ownership and enthusiasm within the operating company and if it corresponds adequately to the current change conditions, which differ per operating company. The coarse/fine structure was the preferred method, as it enables a speedy change process and encourages broad employee participation, which corresponds with the desired culture of the socio-technical redesign.

Early 2002: Sensire 'De Slinge' launched the coarse structure process.

In February 2002, a vision conference was organized involving a group of key players from Sensire 'De Slinge': a delegation consisting of various management levels including the works council. The coarse structure was redesigned by a so-called design group made up of a 'cross section' of the operating company. From a growing collective awareness within Sensire 'De Slinge' of the organizational vision, the environmental developments and the organizational

structure, two design conferences were organized. The design phase was concluded with a so-called round table conference.

The Managing Director of the operating company organized 'road shows' in all municipalities to explain the intricacies of the basic model to employees and to substantiate why this was the preferred model. It was decided to use two municipalities, Groenlo and Neede, as 'spearhead municipalities'. The employees of each municipality were expressly involved in a design group during the creation of the care and service teams.

Following the drastic changes generated by the implementation of the headlines of the new organization, the next phase was characterized by greater continuity and a more incremental development. The teams spent a year getting to know each other, becoming acquainted with the team frameworks and discovering how best to utilize the freedom afforded by teamwork.

Meanwhile, the subsidiary Sensire 'De Slinge' began fleshing out and implementing the fine structure in late 2003: step by step, from simple to difficult, offering high quality training and support with the employee as the process owner. The new planning system was broadly completed in May 2004, and a test version of the new system implemented in Neede and in Groenlo. The four star roles of 'planning', 'quality', 'production & promotion' and 'personnel' will be implemented separately in 2006.

Training courses are an important cornerstone of the development process. In addition to job-specific training courses, team members are encouraged to attend specific training in 'how to give feedback'.

The number of bottlenecks has been greatly reduced thanks to parallelization and segmentation, the establishment of regulation authorities with regard to operational activities and the implementation of integral management. The number of 'cross-border' synchronizations has been minimized. The teams are inter-dependent rather than co-dependent. In the new situation, 53 of the original inventoried 67 bottlenecks can be prevented or solved. In two cases, the consequences of the bottlenecks can be eradicated and in seven situations weakened. The remaining five bottlenecks cannot be influenced.

EVALUATION RESEARCH

The next step involves determining whether the implementation at Sensire of the outlined coarse/fine structure and the implementation of subsidiary structure and a team-based organizational concept according to socio-technical principles have delivered the desired improvements. This is represented by the parameters Efficiency, Client Satisfaction and Employee Opinion. To this end, a longitudinal evaluation research was conducted on the basis of verification measurements. Several measurements were carried out in those organizational components where the team-based concept had been implemented and in other regions of Sensire where the concept had not yet been introduced. The measurement design is known as the 'pre-test post-test control group design'.

The principal measuring instrument was the so-called Benchmark Measurement, conducted nationwide every three years. The measurement is conducted by external and independent organizations (Instituut Werk en Stress and PricewaterhouseCoopers Consulting). Most homecare organizations take part in this assessment. The measured result areas dovetail

completely with the socio-technical concepts. These parameters are measured according to the standard approach and compared with the results of comparable institutions. A list of 'best practice organizations' can then be drawn up, based on three criteria: Efficiency, Client Satisfaction and Employee Opinion.

The 2000 Benchmark was the first measurement to be carried out prior to the implementation of the subsidiary structure across the Sensire organization. This produced the pre-measurement for the municipalities earmarked for "team changes" and the other regions of the operating companies.

The second measurement was conducted after the transformations in Groenlo and Neede and the implementation of the coarse structure. Following the implementation of self directing teams in Groenlo and Neede, measurement three was carried out. The fourth measurement took place a year after the launch of the self-directed teams in Groenlo and Neede.

The last Homecare Benchmark took place in late 2004. The 2000 and 2004 Benchmarks were used as verification measurements to gauge Employee Opinion. This involved comparing the employee results of Groenlo and Neede with the results of comparable groups at Sensire 'De Drie Beken'.

To gauge Efficiency, the 2000-2003 regional results of Sensire 'De Slinge' were assessed. No verification measurements were carried out to gauge Customer Appreciation. An assessment of the changes within the Groenlo / Neede experimental group must suffice.

On the basis of the measurements, analyses were conducted per parameter to assess whether the changes produced the envisaged effects and reveal statically significant improvements. An additional assessment was carried to gauge whether the changes in the experimental group were more pronounced than those in the control group.

EFFICIENCY

The comparative figures reveal that the production and the efficiency of the experimental group (the self-directed teams) are substantially greater than those of the control group. Sick leave figures and the number of indirect hours was approx. four percent lower in the experimental group than in the control group. These results continued to improve during the course of the research.

CLIENT SATISFACTION

Client satisfaction was measured using specific questions. Analyses were carried out on the basis of 52 questions and tested on the basis of statistical analysis. The consecutive measurements within the experimental group reveal that in 50% of instances a significant improvement was observed after the implementation of the team-based organization. In 44% of instances, there was no significant improvement and in three questions (six percent) opinions had worsened. The last few questions related to or were partly determined by external developments with regard to changes in financing (AWBZ benefits package, and the client's contribution) and assessments for the homecare sector.

All these questions were clustered into nine dimensions, six of which showed significant improvement, while three remained unchanged. Two aspects that may have made a positive contribution to client satisfaction were the increase in the percentage of hours worked compared with the indicated hours and the reduction in the average number of care professionals allocated per client. Both aspects were explicit objectives in implementing the concept of team-based working.

EMPLOYEE OPINION

Of the four consecutive measurements that were carried out, the experimental group showed a significant improvement in ten variables, while one dimension showed a significant deterioration and the remaining eleven remained static. Viewing the results substantively, the conclusion is that the 'energy sources' of control, clarity, personal development, coaching, social support and feedback have improved. The work stressors remained unchanged, while the outcome measures (satisfaction, involvement, fatigue, turnover intention, etc) either remained constant or improved.

Within Sensire, a control group comparable to the experimental group was identified. in which no concept of team-based working had been implemented, and whose Employee Opinions from the 2000 and 2004 Benchmark measurements were available. When evaluating the experimental and control groups separately to assess the extent to which differences occurred over the timeframe, it can be noted that the experimental group witnessed a positive change in seven energy sources and a significant negative change in one energy source. The control group witnessed three significant positive changes and two significant negative changes. In the experimental group, only the personal development, social support, involvement and fatigue showed significant improvements. This could be ascribed to the impact of the implemented interventions. The improvements are in line with the expectations of the socio-technical team-based concept. The turnover intention worsened in the control group while the experimental group showed no significant change. This again may be due to the implemented intervention. Indeed, the fact that the turnover intention has not worsened is particularly noteworthy, given the significant changes in the financing of homecare services and negative (media) reports.

It can therefore be concluded that the basic question whether implementation of a socio-technical organizational concept - and team-based organization in particular - in homecare organizations has improved the efficiency of the care provided, the clients' appreciation of the care, and the quality of the work carried out by care professionals, can be answered in the affirmative.

REFLECTION

This research has demonstrated that a redesign of the Sensire homecare organization is feasible. Traditional organizational forms were altered to satisfy the latest (social) performance targets. The redesign additionally appears to have delivered improved performances with regard to the crucial parameters of efficiency, client satisfaction and quality of work of care professionals. The experimental group (with a team-based concept of working) performed significantly better in certain components than the control group.

When assessing the research results, two methodological aspects must be taken into account: the internal validity, the accuracy of the findings and the external validity: the transferability of the findings to other organizations. With regard to internal validity, it should be noted that the measurements conducted were experimental measurements: the positive results may be due to the fact that the employees received extra attention. This is the so-called 'Hawthorne effect'. Specific and unknown factors such as extra involvement of staff and management, an inadvertent willingness to change and cooperate may also have contributed to the observed effects. Nevertheless, the results of the measurements carried out (Benchmark, WEBA and bottleneck analysis) are highly consistent, which may imply that the interventions were genuinely (partially) responsible for the improvements.

External validity is generally difficult to quantify. The 'Sensire' case study was centered on the correlation between enhancing environmental dynamics and sharpening performance targets and meeting these targets through organizational change. In this respect, this research makes a general contribution to further theory formation. Grappling with the dilemmas of 'large scaleness' (care chains, innovation ability, market position, etc) and 'small scaleness' (on a human scale, short communication lines, customer retention, etc) is not only prevalent in the homecare sector. In this respect, this research provides indications to deliver successful solutions in sectors facing similar problems and circumstances.

A detailed description of the start and end situation and the change process provides an insight into how the changes were implemented in practice. Many factors come into play during this process, and there are many pitfalls that must be avoided. All the parties concerned - management, central staff, support staff and clients - play a key role and must receive appropriate and constant attention. Change processes can be highly protracted, with periods of enthusiasm followed by periods of disappointment. This requires an appropriate level of involvement and commitment from management, as well as clarity, unequivocal targets, guidance and clear operating procedures. The results have undoubtedly also been shaped by the shared vision of managers, and the availability of the appropriate tools and opportunities to embrace and implement the changes. It is not possible to establish with certainty whether the above can also be applied to other - home - care organizations and whether the implementation of similar reorganizations would produce similar results.

LESSONS

There are a number of lessons to be learned from the case study and research described above. These include the following:

- a clear strategic need to change and commitment from management is essential;
- self-direction entails not only structural change but also cultural change across the entire organization;
- team development and managerial development require constant attention; staff should not be overstretched during the change process due to the already high workload/ turbulence;
- the process will be greatly facilitated by the timely availability of the requisite tools and instruments;

- excessive success of the implementation could result in unrealistic expectations and even more work pressure, which will eventually be counterproductive.

The above-mentioned socio-technical organizational methods must be implemented integrally.

The results of Sensire 'De Slinge' have created a broad support base in this respect. Intramural and extramural care can now be organized in accordance with socio-technical principles.

THESE INSIGHTS ARE BENEFICIAL TO FOLLOW-UP RESEARCH:

- the Homecare Benchmark is particularly useful. It is recommended that the wealth of data from this periodic national research is used to assess those factors that have a positive and negative effect on the results.
- most operational work in care organizations is carried out by employees working on their own. This research has revealed that teamwork provides added value for employees. It is worth investigating which other forms of - virtual - teams could offer added value in similar or specific situations.
- the possibilities that ICT can bring to team performances in particular are not sufficiently exploited at present. Modern ICT systems are ideal team reporting tools. They improve the learning opportunities for the team and enhance teamwork.

Follow-up research is possible and indeed desirable in these and other areas.

CONSIDERATIONS

This research was conducted in response to a number of social changes, both present and future, that necessitate the restructuring of care organizations, making care accessible to a growing group of clients. As has been demonstrated, a socio-technical approach can make a valuable contribution. However, restructuring and redesign alone will not suffice. Other considerations must also be taken into account to safeguard the access to care services.

If the current policy remains unchanged, healthcare costs will grow exponentially. There will be a sharp rise in the demand for care due to the ageing population, increasingly stringent demands and expectations of the elderly, and medical developments and technologies.

The increasing demand for care cannot be absorbed by improving efficiency alone. Other solutions must also be found to bridge the growing gap between care demand and care capacity.

One feasible option is to combine technology with personal attention. Reducing the need for care through prevention and reducing uncertainty among care professionals are key points in this respect. Feelings of security can, for instance, be nurtured by responding immediately to a demand or request for help. The use of 'telecare' technology can significantly increase the self-care capacity and reduce the need for professional help. The far-reaching use of ICT enables care professionals to respond to individual client's wishes and determine whether care is required and, if so, how urgently. The appropriate care expert can then be contacted to assist the client. Trials with audio/video links between the client and care professional via the client's

TV set have shown an improvement in the client's sense of independence and security, the efficiency of the work carried out by the care professional, and a reduction in care consumption.

LASTLY

To rectify the plethora of problems, which decrease access to care for the elderly, a multi-pronged approach is required. Organizational redesign and restructuring are undoubtedly essential, but will over time prove equally restrictive. New technologies must therefore also be embraced alongside efficient and effective 'human contact moments' between the care professional and the client. Today's decision makers, yesterday's baby boomers and tomorrow's elderly must take full responsibility for organizing care organizations adequately to satisfy the growing demand for care services.