



STRATEGY

for improving
the quality of nursing



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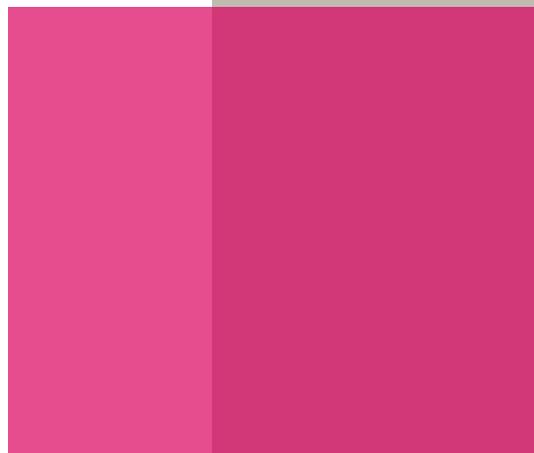
Introduction

Quality improvement relating to nursing can only be achieved if nurses and other care staff are willing and prepared to make the required effort and if management provides the necessary prerequisites. This places a personal responsibility on the nurse within the team and on management to play an active part in quality improvement in nursing care. The quality improvement strategy presented herein primarily focuses on nurses with the aim of contributing to:

- quality improvement in nursing
- discussions in a professional context
- identification of nurses' need for training and competence
- research projects focusing on the development and quality improvement of nursing
- design of the content of nurses' basic and specialist training

The quality improvement work of the Swedish Society of Nursing is dedicated to improve the quality and safety of health care systems.

The strategy for improving the quality of nursing comprises the following components: ethical responsibility, six core competencies, quality improvement work and improvement knowledge, continuous quality improvement and prioritisation, safety, learning and competence, knowledge-based care and its implementation and, finally, the implementation of the strategy, its conditions and objectives.



Ethical responsibility

Nursing care is provided by most nursing categories and responsibility for knowledge development within the field rests with the nursing profession.

Trust in the nursing profession is facilitated by the quality of the care provided. A prerequisite for trust among the general public and decision-makers is that all nurses adhere to and work according to their ethical code and safeguard the nurse-patient alliance (Swedish Society of Nursing, 2014).

Patients and their significant others have a right to receive information about the expected interventions and outcomes. Nurses also have a professional interest in describing, following up and learning from the outcomes of their patient-centered care, thus contributing to quality improvement in health care.

Good nursing care means that the encounter with patients and their significant others is always characterised by attentiveness and openness to the vulnerability of the person dependent on care. Respect for the person's dignity, integrity, autonomy and vulnerability in the care situation is vital for the experience of trust, hope and meaning as well as for alleviation of suffering caused by ill health.

Ethical aspects of nursing should be discussed and reflected upon individually and in groups. In order to highlight the foundation of nursing values and their importance for patients it is necessary to continually discuss these principles. The ethical dialogue can take place individually as well as in groups through the process of reflection (The Swedish Society of Nursing, 2010).



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Six core competencies

To meet societal expectations of good-quality and safe healthcare, the competence of nurses and other care staff constitutes a fundamental issue. Professional competence is built on specialised subject knowledge, personal skills, values and ethics (see fig. 1).

This “traditional” description of competence should be complemented by the six so-called core competencies proposed as being applicable to all healthcare professionals. These competencies have been deemed particularly crucial for achieving good-quality and safe healthcare (IOM, 2003; QSEN 2005; Cronenwett et al., 2007). They are also central when it comes to planning, implementing, evaluating and last but not least improving nursing care. For nurses to progress and thereby contribute to improve care, they need to develop their skills within the six core competencies.

Institutes of higher education, as well as municipal and county council care providers must prioritise support for such work. In addition, collaboration projects focusing on the core competencies should take place between different professional categories.

Person Centered Care. Person centered care means that the patient is regarded as a person, a fellow human being and expert on his/her own experiences and everyday life. A person who needs nursing care should be treated as a partner and an equal. By listening to the patient’s narrative, her/his needs, possibilities and resources can be identified, thereby forming the foundation for partnership in care.

Person-centered care is built on a set of widely diffused and transparent ethics as well as a relationship based on mutual respect and understanding and with regard for the person’s self-esteem and wishes (Ekman et al., 2011).

Teamwork & Collaboration. Collaboration between health professional groups must be improved to complete competencies, promote continuity, strengthen safety and improve patient outcomes.

Teamwork is more effective when professional competence is combined with a meaningful and holistic view of the

patient. Good teamwork is achieved when team members are not interested in prestige, have a clear goal, a good working climate and receive constructive feedback from supportive leadership (The Swedish Society of Nursing, 2013).

Evidence-Based Practice. The aim of evidence-based healthcare is to make use of methods that afford the greatest benefit for patients and that are the most cost-effective. It is grounded in knowledge that is systematically gathered, evaluated and subsequently compiled in the form of recommendations in knowledge reviews, national guidelines and nursing programmes.

Evidence-based practice can only be achieved by means of efficient implementation work that is based on the best available scientific knowledge, best practice and insights into each patient’s individual situation and experiences (Willman et al., 2011).



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Quality Improvement. Ensuring improved quality and safety of health care systems and nursing care processes requires continuously learning-led quality improvement (see fig. 2). This is implemented by following up and attempting to improve healthcare for different patient groups using a structure, processes and outcomes approach.

Many methods and working models are available for such quality improvement work. For this work to be successful, it is necessary, as a starting point, to use quality indicators and register data to enable comparisons and development work (The Swedish Society of Nursing, 2012 a).

Safety. The goal of a culture of safety is to minimise the risk of harm to patients and providers through both system effectiveness and individual performance. Safety work is necessary to learn from in order to prevent system-related mistakes or those caused by individuals.

Patients should not suffer preventable harm due to care and treatment, i.e., harm that would not occur if, for example, the right routines, knowledge-based methods and techniques had been used and if the patient had been cared for by nurses with the appropriate competence.

Responsibility for safe healthcare rests not only with the leadership, but with all staff members, irrespective of the form of care or organisational level (The Patient Safety Act, 2010).

Informatics. Several information and communication technology systems (ICT) applications are currently being developed and used that support different healthcare levels and are important for ensuring that care meets the increased demand for quality of care, safety and accessibility.

New ICT tools are intended to facilitate such work and contribute to improved quality but also with risk leading to greater complexity.

Use of medical record systems and quality registers needs to be refined to improve feedback to the healthcare system about its processes and outcomes (The Swedish Society of Nursing, 2012 b).

Quality improvement work and Improvement knowledge

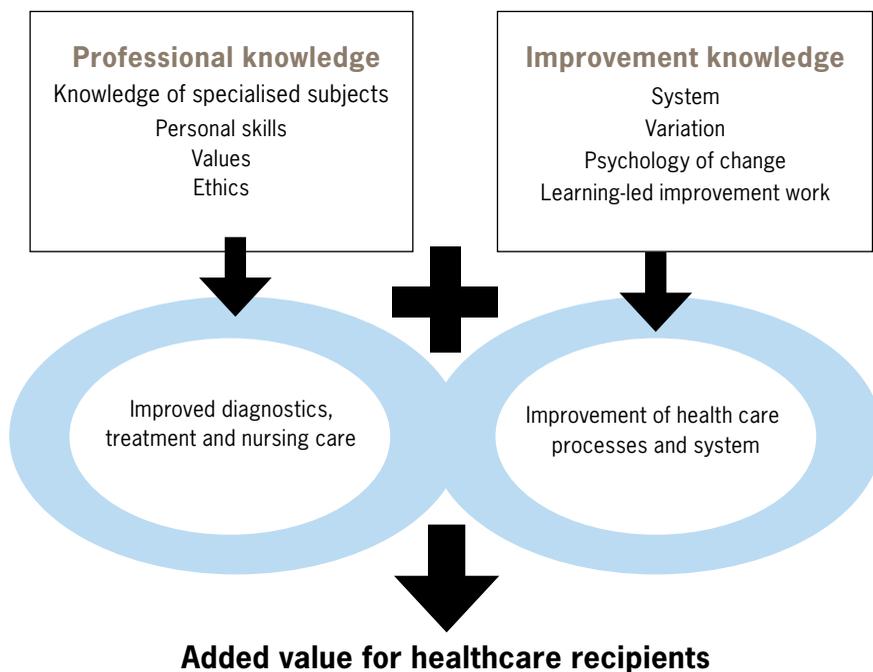
Quality improvement work in relation to nursing care should be systematic, long term, person-centred and carried out in cooperation with those concerned. It should be characterised by a preventive approach and mode of working, knowledge-based decisions and continuous quality improvement.

Quality improvement of nursing care should primarily take place in daily practice contexts that are familiar to the staff members concerned and carried out in close proximity to patients and their significant others.

Successful change that creates real improvement and better value for patients and their significant others demands both professional and improvement knowledge (fig. 1).

Batalden and Davidoff (2007) state that, in order to achieve improvement, all care staff members need to be aware that they have two duties: carrying out their ordinary work and also developing this work as well as the systems in which they operate.

Figure 1. The result of the linkage between professional and improvement knowledge.



SOURCE: Batalden P. & Stoltz P. (1993). A framework for the continual improvement of health care: Building and applying professional and improvement knowledge to test changes in daily work. *Joint Commission Journal of Quality Improvement*, 19 (10), 424-447.

Continuous quality improvement and prioritisation

What is regarded as good quality in health care varies over time. For example, strict bed rest for patients was a frequent feature of post-operative care in the 1950s, while current knowledge is the opposite, namely that physical activity after, for example, a hip operation, is necessary to prevent complications such as pulmonary embolism, pressure ulcers or delirium.

This also explains the shift from a retrospective follow up of agreed quality target levels to an ongoing and forward-looking process for quality improvement.

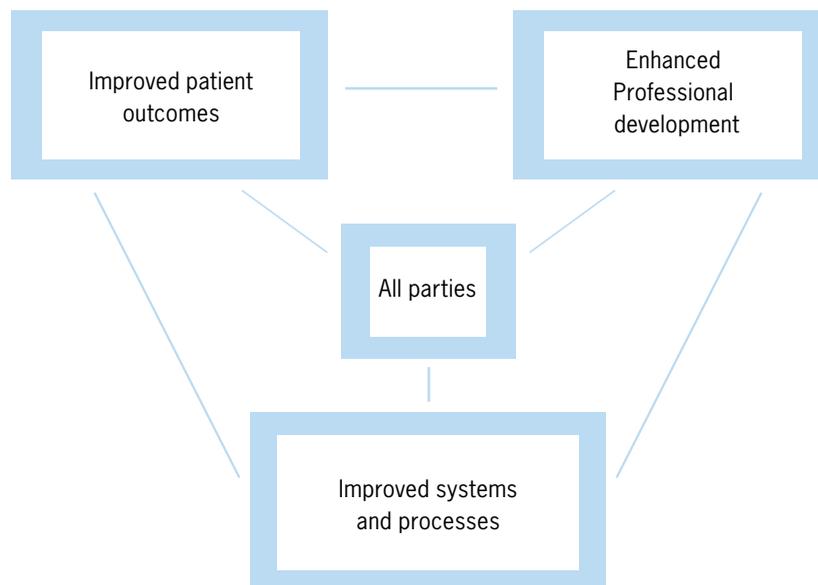
Batalden and Davidoff (2007) define quality improvement as the concerted and continuous efforts of all parties – staff members, patients and their significant others, researchers,

care funders, care planners and teachers – that lead to a better outcomes for patients (health), improved systems and processes (care) and enhance professional development (learning) (fig. 2).

Continuously striving for improvement means balancing between different demands and resources, whereby good quality becomes a dynamic state.

Prioritisation needs to be transparent to ensure that the quality of care provided close to the patient is based on needs and delivered to those with the greatest need. Satisfaction of human needs cannot wait and should not be moved down the list of priorities.

Figur 2. The focus of quality improvement.



Source: Batalden P. & Davidoff, F. (2007). What is “quality improvement” and how can it transform healthcare? *Quality and Safety in Health Care*, 16; 2-3.

Quality and Safety requirements in Health and Medical Services and Social Services in Sweden

The quality and safety requirements are set out in The Swedish Health and Medical Services Act (SFS 1982), The Swedish Social Services Act (SFS 2001:453) and The Swedish Patient Safety Act (SFS 2010:659).

The Swedish National Board of Health and Welfare has issued management system recommendations and guidelines (SOSFS 2011:9) for systematic quality improvement work. These can be deemed a tool for achieving quality in the healthcare system, dental care, and social services as well as in organisations carrying out activities in accordance with the Act (1993:387) on support and services to some groups of disabled people (LSS).

The management system should be applied in order to systematically and continuously develop and guarantee the quality of practice. It can be used to plan, manage, check, follow up, evaluate and improve practice by means of locally developed and documented routines and processes.

Systematic improvement should comprise risk analysis, self-monitoring and handling of adverse events.

According to the recommendations, an organisation is characterised as being of good quality if it meets the requirements and targets laid down in law and other regulations pertaining to its operation and any decisions enacted based on such regulations (SOSFS 2011:9).

Safety

Every patient has the right to receive care that is safe and of good quality. People in need of nursing care should not be at risk of suffering harm due to mistakes that can be avoided. Staff members have the right to a work environment that minimises the risk of making mistakes and subjecting patients to unnecessary suffering.

Safety work constitutes a central aspect of nursing care. Unintentional mistakes and incidents frequently occur. The work situation may be stressful, which can contribute to mistakes. To err is human, which necessitates a shift in focus from searching for scapegoats to trying to find ways of avoiding the same mistakes being repeated.

Systems thinking is a more efficient method for achieving safe care than disciplinary methods that punish individual staff members who make mistakes. Punishment can prevent an open dialogue about risks as well as the incidents that have occurred. Systems thinking presupposes awareness that errors, adverse events and patient harms are often caused by deficient routines, work environments, staffing levels, leadership or organisation. The safety work needs to focus on creating good working conditions and on developing healthcare systems with built-in safety barriers that render human error more unlikely.

A safety culture characterised by prevention

To prevent adverse events the safety culture should be open and alert, thereby encouraging reports and discussions about adverse events and risks at work. Safety should not only focus on past incidents but also be proactive and preventive (see summary of facts, the Patient Safety Act).

Those who work in a unit are generally aware of the risks that exist. Several different causes can often explain adverse events, causes that in many cases could have been avoided by active prevention work. Incident analysis is a method for investigating events that have or could have led to harm. The aim is to provide the unit management with a basis for decisions about preventive measures that can improve patient safety (The Swedish National Board of Health and Welfare, 2009).

The Swedish National Board of Health and Welfare estimates that around 100.000 adverse events occur in Swedish

healthcare each year, which means that approximately 10 % of patients are affected. However, many of these healthcare related injuries are preventable. Besides physical harms caused by care, reports to Patient Committees around the country most commonly concern being encountered in an unsatisfactory manner. Lack of empathy and knowledge gives rise to mental suffering. Being encountered in a satisfactory manner is crucial for the way in which the person experiences nursing interventions. Nurses need to adopt the patient perspective, listen attentively to the patient's views and involve the patient and significant others as partners in the care.

Lack of communication within and between professional groups is regarded as one of the most common causes of adverse events. Communication is not only about providing and receiving information. All parties engaged in communication have their own experiences, points of reference and understanding which influence communication. A person who is quite certain that a message has been clearly delivered may be astonished to hear that others have misunderstood it.

The most important aspect of good team work is efficient communication, in which nurses often play a key role. One of the most common explanations for adverse events is a lack of communication between individuals or units.

SBAR is an established structure and tool for safe communication that shapes the care dialogue. SBAR is an acronym for Situation, Background, Actual condition and Recommendation. Information material about SBAR can be found on the website of the Swedish Association of Local Authorities and Regions (Sveriges Kommuner och Landsting, SKL).

Consequences of adverse events

In a report on adverse events SKL (2013a) scrutinised almost 10.000 in-patient medical care events in all county councils and 63 acute and emergency hospitals during the first six months of 2013. The patient records were scrutinised retrospectively. The method measures all adverse events, irrespective of whether they were avoidable. It was found that 15 % of all medical care events resulted in adverse events. Most of the harms were minor and healed quickly, whereas 44 % required

a longer recovery time. In total, approximately 5 % of adverse events led to permanent after effects or death. The most common types of adverse events are healthcare-related infections followed by adverse events caused by surgery, bladder repletion, drug-related harms and pressure ulcers.

SKL estimates that 1.3 million extra bed days are required annually for the physical care of adults who suffered from adverse events, the cost of which is approximately SEK 11.5 billion. Reducing the number of adverse events would lead to less patient suffering in addition to making substantial resources available for use for quality improvement of healthcare.

Safe healthcare environment

All healthcare staff has the right to an environment where the risk of making mistakes and exposing the patients to unnecessary harm and suffering is minimised. A work place that promotes health and safe care presupposes well-functioning systematic work in respect to patient safety and work environment.

The similarities between the Work Environment Act (SFS 1977:1160) and the Patient Safety Act (SFS 2010:659) are mainly in the areas of annual follow up, risk assessments, taking action, planning, investigating and reporting. SKL (2013b) recommends a combination of integrated patient safety and work environment efforts, as this combination contributes to efficiency, a holistic view and participation.

The Swedish Society of Nursing works towards making healthcare safer by highlighting the importance of nursing research. This is done by publication of the knowledge bases in the Re-Action series (www.swenurse.se). The aim is to provide nurses with access to current knowledge and arguments to enable them to react to errors and deficiencies as well as take action to prevent patients from being harmed or dying as a result of care. Some examples of published knowledge documents in the Re-Action series are: reducing the risk of bladder injuries, drug handling, the risk of falls/fall injuries and patient close analyses.

Safety and competence

A large international survey revealed that nurses' educational level and work load are directly linked to the risk of patients dying post-operatively (Aiken et al., 2014).

The results support the demand for more specialist registered nurses who work close to the patient. The study is critical of the proposal to save money by reducing the number of registered nurses. Increased societal demands on healthcare imply that nurses should be able to identify risks at an early stage, prevent costly measures, improve quality of life and reduce patient suffering.

Advanced combination treatments are associated with an increased risk of complications, side-effects and a greater need for psychosocial support, all of which require adequate staffing and a large proportion of specialist nurses.

A registered nurse with basic training should not have the same responsibility and duties as a specialist registered nurse. To achieve safe care, healthcare employers need to develop systems that utilise staff members' different competencies.

The Swedish Patient Safety Act

The Swedish Patient Safety Act (SFS 2010:659) stipulates that healthcare personnel are responsible for their own actions. A healthcare employee should always act on scientific evidence and best practice. At times the responsibility may be shared with another staff member, for example, if there are clear routines and instructions to that effect.

The Patient Safety Act places a clear responsibility on the employer to pursue systematic patient safety work to prevent adverse events.

Healthcare providers also have a responsibility to investigate incidents that have or could have led to adverse events. Patients and significant others should be encouraged in various ways to play an active role in patient safety efforts.

Learning and competence

Successful quality improvement work requires that staff members have the necessary prerequisites in the form of time and resources, competence or support to be able to identify and prioritise problems, analyse their causes, measure processes, variations and outcomes as well as take appropriate action. Management must be involved in the improvement work, not least by providing support in various ways, meeting the need for in-service training and allocating resources.

Quality registers and nursing care variables

It is important that the improvement work is based on facts, for example, data from national quality registers and quality indicators. The Swedish national quality registers are used for follow up, quality improvement and research within healthcare (SKL, 2010).

Quality registers can be an important tool for improvement work at local level, making it possible to compile and analyse data to follow healthcare processes and outcomes over time. At a national level, the registers can be used to determine which strategies and treatments result in satisfactory or unsatisfactory outcomes, for different patient groups.

The quality registers are also aimed at reducing differences in quality and patient safety between different care providers and regions. The register data allow comparison and evaluation of, for example, different treatment methods, the effects of medications and patient experiences. Analyses of similarities and differences between care providers contribute to improvement work at both unit and management level.

Besides comparing differences between units, it is also



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possible to follow the outcomes of one's own care unit in relation to national guidelines and evidence-based methods and targets. The national quality registers often lack data on nursing and rehabilitation (The Swedish Society of Nursing, 2012a).

For the registers to have a greater impact on the improvement work of all healthcare categories, it is necessary to develop and document variables that reflect each category and thereby every aspect of the patient's care needs.

General nursing variables

The Swedish Society of Nursing has proposed general nursing variables for the quality registers in the following areas: care or nursing care plan, pressure ulcers, falls, oral health, pain, nutrition, food intake and malnutrition, personal everyday activities, sleep problems, patient education and support for significant other's (The Swedish Society of Nursing, 2012a).

Several professional groups need to collaborate in the above-mentioned areas, for example, food intake and nutrition. A medical judgement is necessary to decide whether unintentional weight loss is caused by medical factors that require investigation or can be alleviated by specific medical treatment. For nursing care, this means identifying the risk of malnutrition or difficulty consuming food, taking measures that support food intake, prescribing a diet when no investigation is required and implementing and following up the nutritional intervention. Additional nursing care interventions are informing, educating and supporting patients and their significant others.

Other professional groups that can contribute their specific competence are dietitians, dentists and speech therapists. Naturally, patients and their significant others must also be involved to take advantage of their unique competence, thereby contributing to the improvement work.

Quality indicators for nursing

The development of nursing care variables for the national quality registers takes place in parallel with the development of quality indicators for nursing care. A quality indicator is a quantitative measure consisting of defined numerators and denominators that can be used to record and evaluate quality of

nursing care. A quality indicator measures structure, process or outcome.

A structure indicator describes the various factors involved in nursing care. Process indicators measure actions performed, while result indicators measure patient outcomes (The Swedish Society of Nursing, 2013). Measurements are important for illuminating quality in different areas and for measuring and following up the activities of various units. The indicators provide tools for quality assurance.

The recommendations of The Swedish National Board of Health and Welfare comprise quality indicators for the treatment of diseases. These indicators are mainly focused on medical interventions and thus need to be complemented with quality indicators specific to nursing care.

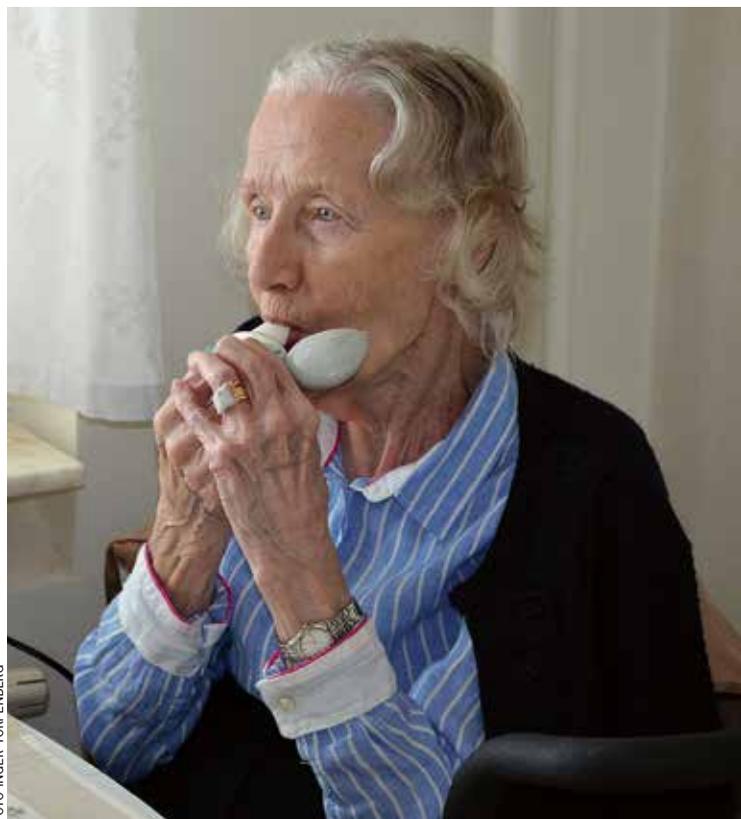


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Knowledge-based nursing care and its implementation

Evidence-based practice

The aim of evidence-based practice is to ensure that the patient receives medical care and treatment as well as nursing care based on best available knowledge and efficient use of care resources. Nurses have a responsibility to implement evidence-based nursing practice to make certain that patients are cared for in accordance with scientific evidence and best practice.

Evidence-based nursing practice can be described as both an approach and a process (Willman et al., 2011). The approach means the desire to use the best scientific knowledge available as a basis for care decisions. The process involves formulating questions, systematically searching for, compiling, critically examining, implementing and evaluating available research results.

The scientific basis and clinical important experience are integrated in care interventions. The implementation of scientific evidence is influenced by available resources as well as the patient's wishes and experiences (ibid). The employer has a responsibility to facilitate the implementation by enabling access to scientific articles in various data bases.

Knowledge and participation

Experience-based knowledge is an essential component of evidence-based care and is developed in everyday encounters with patients and significant others who find themselves in various situations.

Nurses build their professional clinical competence by reflecting both on scientific and experience-based knowledge and integrating them in daily practice. Together with the patient's needs and wishes, both these forms of knowledge constitute important corner stones of knowledge-based nursing care, are apparent in the internationally adopted Sicily statement on evidence-based practice.

Evidence-Based Practice (EBP) requires that decisions about health care are based on best available, current, valid and relevant evidence. These decisions should be made by tho-

se receiving care, and informed by the tacit and explicit knowledge of those providing care, within the context of available resources. (Dawes et al., 2005).

Knowledge-based healthcare

According to legislation, healthcare that includes health promotion and disease prevention should be grounded in scientific evidence and best practice and be designed to meet patient needs in the best possible way. Consequently, knowledge-based healthcare should rest on knowledge about what should be done and how it should be done, including both practical skills and the dialogue with patients and significant others.

Both the dialogue and the active participation of the patient and their significant others are necessary for enabling the nurse to explain and communicate the content of care as well as for understanding and dealing with the patient's expectations and motivation to undergo treatment. Superior nursing methods that promote patient health and quality of life can be applied by combining evidence-based nursing practice with nurses' experience-based knowledge and the patient's preconditions, wishes and active participation. In turn, this leads to improved resource utilisation due to minimising over- and undertreatment.

Implementation

New knowledge contributes to the development of healthcare. To establish evidence-based practice, the results of nursing research results must be integrated into practice. It may appear obvious that research results should be implemented in daily care. However, it is well-known that there is a gap between available knowledge and the knowledge used in healthcare today.

The results from the so-called LUST study (*Longitudinell Undersökning av Sjuksköterskors Tillvaro*, which translates as Longitudinal Investigation of Nurses' professional life) demonstrate that there is a potential for increased use of research results among nurses (Forsman et al., 2010, Wallin et al., 2012).

Evidence is lacking within many nursing areas and nurses are not always aware of the degree of evidence that forms the basis of different nursing care interventions.

Clinical guidelines and care programmes are important tools in the efforts to provide more evidence-based practice. National guidelines often take the form of recommendations pertaining to larger areas of care, such as stroke and dementia care.

The recommendations are intended as decision-making support when dealing with problems that occur in clinical practice. It is very important that nurses follow national clinical recommendations to be able to offer all patients care based on the best available knowledge.

Patients should be offered adequate knowledge-based care, irrespective of personal characteristics, place of residence, age, gender, disability, education, social status, ethnicity or religious belief, sexual orientation, gender identity or gender expression. In addition to care on equal terms, a lower level of variation in a range of care processes is a central aspect of quality and cost efficiency in nursing.

There is convincing evidence that national recommendations and care programmes cannot implement themselves (see e.g. Wallin, 2009). Implementation research is aimed at

deepening knowledge about methods that support the implementation of best available evidence and the factors that influence this process.

In 2014 the Swedish government and SKL reached an agreement by which they consented to support knowledge management. Knowledge management concerns the existence of the necessary infrastructure to enable care to be managed by means of knowledge, including current local, regional and national prerequisites, such as national guidelines and local care programmes. The agreement encompasses measures to influence structures necessary for maintaining knowledge-based care in the long term, in the form of clinical research projects and national quality registers (The Swedish National Board of Health and Welfare and SKL, 2014).

Factors affecting implementation

Implementation is a complex process. The implementation of innovations and new knowledge requires consideration of the following:

- the character of the evidence or innovation to be implemented
- the healthcare personnel who are to learn something new and change their mode of practice



- the structure and function of the organisation, i.e.,
- the context in which the change is to take place
- communication pattern and support for change in the organisation
- the patient's experiences, perceptions and preferences. (Greenhalgh et al., 2004).

These barriers and facilitators are context dependent and should be taken into account when planning the introduction of new knowledge. It is important to take account of the patient's experiences and perceptions, as what is considered the best care based on current knowledge may be at odds with the care that the patient wishes to receive.

Leadership – the most important success factor

Leadership is one of the most important factors for successful implementation. The ability of leaders and managers to create a culture that is open to evidence-based knowledge is crucial.

The leader's ability and willingness to provide feedback, to underline the importance of practice based on evidence and to set a good example in various ways are also important. The implementation of evidence demands knowledge about how to find and evaluate such evidence as well as about implementation strategies. Many healthcare leaders and managers lack such knowledge, making it difficult for them to support the process.

The implementation of evidence-based practice is facilitated by a culture that places a high value on research and the use of research results. Thus, an essential aspect of leadership involves focusing on evidence-based practice and creating a culture that is supportive of, for example, ideas, training programmes and conferences that promote this aim. Barriers to the implementation of evidence-based healthcare frequently exist in organisations where there is a lack of time, resources and training opportunities. Leaders and managers who are constantly struggling with challenges such as cost-cutting and reorganisation may experience difficulties creating the conditions necessary for a successful implementation process.

Strong and clear leadership alone does not lead to change. Implementation takes time, in many cases several years from the introduction of a new method to the point at which it becomes part of the everyday routine. Successful implementation requires a systematic approach.

Factors found to have a positive effect on the implementation of evidence are local opinion leaders, training sessions, computerised reminder systems as well as follow up and feedback. Use of a theoretical model as a basis for implementation facilitates the systematic introduction of new knowledge (Seers et al., 2012).

There are several explanatory models and theories relating to implementation. One example of an implementation framework is the so called PARIHS model (Promoting Action on Research Implementation in Health Services) (Kitson et al., 2008). Another is the KTA model (the Knowledge to Action Cycle) (Graham et al., 2006), which describes a cyclical process. The structure of both models is flexible, so they can be used in a complex healthcare context. The models combine new research-based knowledge, the experiences of care personnel and patients and the context in which the knowledge is to be used.

The PARIHS model

A group of British nurses started to develop the so called PARIHS model in the 1990s (Promoting Action on Research Implementation in Health Services) (Kitson et al., 1998; Kitson et al., 2008; Rycroft-Malone et al., 2002). The model is aimed at creating deeper insights into the complexity involved in implementation.

The PARIHS model can be used not only as a practical tool to guide implementation but also to understand in an analytical way important factors and the linkage between them in the implementation of research findings. It describes several of components that should be considered before, during and after implementation.

In the PARIHS model, the three most important implementation factors are:

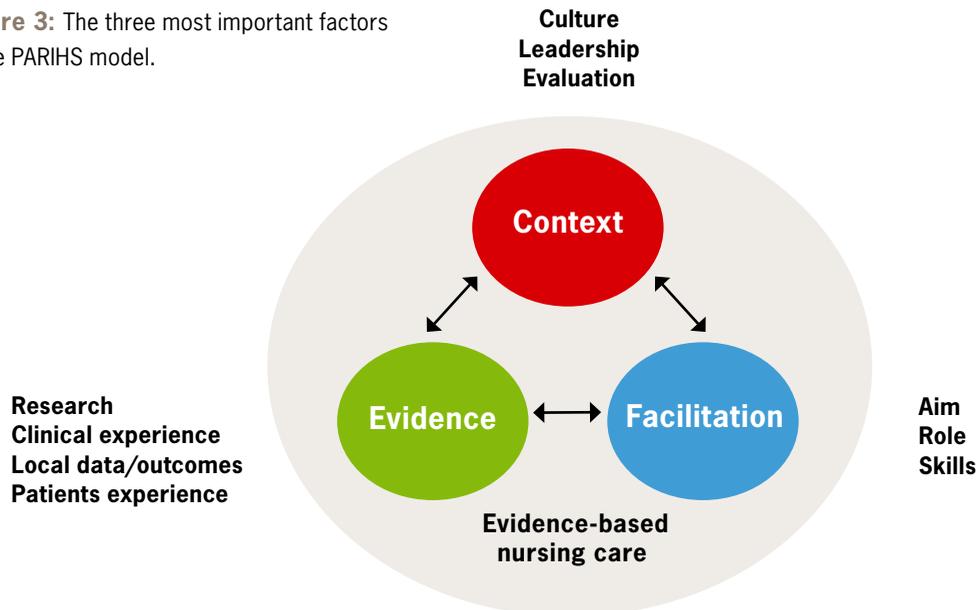
Evidence is broadly defined as research, clinical experience, the patient's experiences and local data/information. The latter includes, for example, data from medical record follow-ups or patient questionnaires. By its broad description of the concept of evidence, the model underlines the need for interaction between research based and experience based knowledge to create the most favourable implementation conditions possible (Rycroft-Malone et al., 2004).

Context describes the organisation's culture, leadership and evaluation mechanisms, which constitute the very bases for successful implementation. The model's description of culture and leadership is related to the way in which a learning organisation is described. Such an organisation is characterised by a high level of preparedness to change in the form of, among

other things, decentralised decision-making, good manager-staff relations as well as a supportive and inspiring leadership. The evaluation component focuses on the use of different methods of evaluation and providing feedback on healthcare processes and outcomes at individual, group and unit level (McCormack et al., 2002).

Facilitation is the "lubricant" in the organisation that facilitates the implementation of research results. In the PARIHS model, this is the responsibility of a facilitator, an individual with a special role, who has knowledge of and skills in supporting individuals and groups to transform evidence into practice. The facilitator's role is to make the evidence comprehensible and applicable as well as to support the implementation of an efficient change process. This role can take various forms, from assisting with practical tasks in a specific organisational quality improvement project to functioning more like wide-ranging support for development and renewal (Harvey et al., 2002).

Figure 3: The three most important factors in the PARIHS model.



Source: Harvey et al. (2002). Getting evidence into practice: the role and function of facilitation. *Journal of Advanced Nursing*, 37, 577–588.

The KTA model

Another implementation model that is increasingly used is the Knowledge to Action Cycle (KTA) (fig. 4) developed by Ian Graham, a medical sociologist, and an interdisciplinary group of nursing researchers (Graham et al., 2006). The model is based on studies in a field of theory termed “theory of planned action” and provides a systems perspective on how to retrieve relevant documents as a knowledge base, adapt the knowledge to current clinical conditions and subsequently implement it in a planned manner. Like the PARIHS model, many studies have focused on the KTA model, but neither model has been evaluated in prospective studies.

The KTA model consists of two main components. First, the question of what constitutes adequate healthcare is considered to develop a knowledge-based tool (guidelines, decision support etc.) by means of a synthesis of the available knowledge base (research reports and clinical experience).

Second, clinically useful knowledge is derived from a broad knowledge base. This knowledge is applied in cyclic work to bring about change and, in many respects, resembles the PDSA (Plan-Do-Study-Act) wheel (see fig. 5).

The KTA model comprises the following steps:

- identifying the clinical problem and selecting relevant knowledge
- adapting this knowledge to the local context
- identifying barriers to translating the knowledge into clinical practice
- selecting, adapting and introducing appropriate interventions to pave the way for the implementation of new knowledge
- monitoring how the new knowledge is applied
- evaluating the outcomes and
- sustaining use of the new knowledge

Similar to the PARIHS model, the KTA model is dynamic and flexible and thus suitable for use in such a complex activity as healthcare.

The cyclic process represents an ideal. In reality, the work to implement change is often less structured and, in some cases, it may not be necessary to accomplish all phases of the process (Graham & Tetroe, 2010).

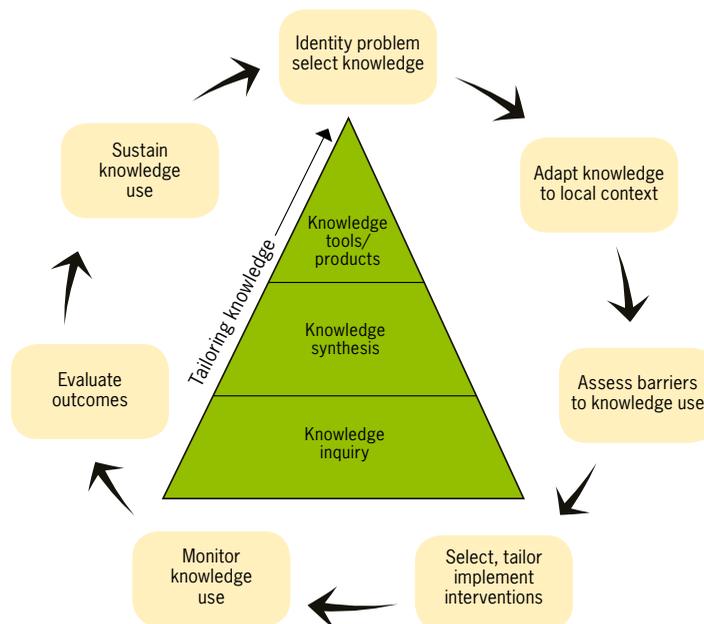


Figure 4. KTA, The Knowledge to Action Cycle.

Source: Graham et al. (2006). Lost in knowledge translation: time for a map? *The Journal of Continuing Education in the Health Professions*, 26(1), 13–24.

The PDSA wheel

The PDSA (Plan-Do-Study-Act) wheel (fig. 5) is an iterative tool, i.e., repeatedly used, frequently employed to improve quality and safety in healthcare

In the first phase (Plan), a problem/need is identified and a decision taken about which change should be tested to bring about improvement.

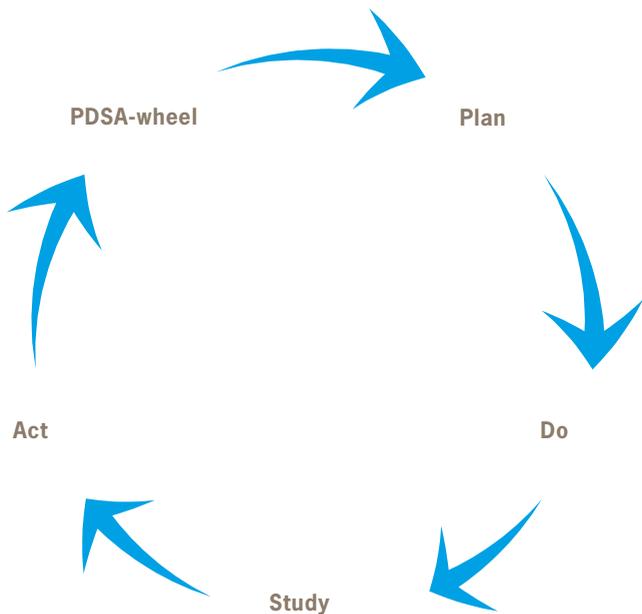
In the second phase (Do), the change is tested on a small scale.

In the third phase (Study), the implementation and effects of the change are studied.

In the fourth phase (Act), it is determined whether another turn of the wheel is required to find out if other changes or further tests are necessary to ensure that the change will lead to improvement.

Figure 5: PDSA-wheel

Source: Deming E. & Batalden P. (1993) *The new Economics for Industry, Government & Education*. Cambridge: MIT Press.



Quality improvement strategy

Maintaining, developing and improving quality and safety of nursing care necessitates interventions on the part of nurses themselves together with students, academics, other professional categories and staff members in addition to unit managers within the healthcare services. Managers/leaders on all levels in healthcare organisations must be actively involved in the efforts to improve quality in nursing care in addition to assuming greater responsibility for ensuring that there are enough of specialist registered nurses in addition to ongoing in-service training and skills enhancement for all staff members.

Managers/leaders must possess nursing competence to

be able to identify the need for quality improvement and nursing care development within nursing care and lead this development. They should not only focus on economic results but also on quality outcomes, i.e., improved patient health, improved healthcare processes as well as greater awareness and understanding of the outcomes among all parties involved.

The present strategy describes the nursing care measures that need to be taken to achieve systematic quality improvement and, given the right conditions, these measures can reduce the gap between what we wish nursing care to be and what it is in reality.



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Required measures

Quality improvement in healthcare can be described from a macro perspective, on the one hand, and from a meso and micro perspective, on the other. The micro level is the lowest level (or the center). In the context of healthcare, the micro system represents the encounter between the patient, their significant others and the care team and is where the real value of care is created. Although the micro systems are in close proximity to the patient, they often constitute a part of the larger meso and macro systems at the unit, hospital, county council or national level of care.

Measures required for quality improvement of nursing care can be summarised on the following three levels.

Measures required at the micro level:

- Improved nursing care competence must be assured in the team in order to prevent adverse events and ensure that patients are encountered in a satisfactory manner, receive diagnosis more quickly and in order to reduce waiting times.
- Together with all staff, nurses must work proactively to prevent adverse events that harm the patient and are caused by mistakes and errors that could have been avoided.

Measures required at the meso level:

- Nurses need easier and guaranteed access to data bases containing scientific literature.
- Nurses need to increase their clinical use of research results and become more familiar with the principles of evidence based practice.
- Nurses should prioritise nursing interventions with a strong evidence base and implement them in clinical practice.
- Nurses should use guidelines and care programmes for their work to be knowledge-based.
- Nurses should be given access to continuous professional development to be able to contribute to quality improvement and patient safety work (The Swedish National Board of Health and Welfare, 2012).

Measures required at the macro level

- Nurses should become more aware of the knowledge base that underpins nursing care, to improve nursing quality.
- Nurses need to be involved in the work to develop quality indicators in nursing care.
- Current knowledge in different areas of nursing needs to be charted and systematic literature reviews conducted within core nursing areas.
- More nursing areas need to be covered by national guidelines and care programmes, and the strength of the evidence and recommendations must be clear.
- National quality registers should be developed to include nursing care variables.
- Nurses need to develop quality indicators in nursing care for the National quality registers.
- Research into methods that support implementation and factors influencing change processes should be intensified.

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