

## Teaching Nursing Homes - The Norwegian experience 20 years on

Marit Kirkevold,

Avdeling for sykepleievitenskap,  
Institutt for helse og samfunn,  
Medisinsk fakultet,  
Universitetet i Oslo

### Abstract

The Norwegian teaching nursing home program was launched in 1997 to address the continued challenges and threats to quality in long term care. They included high turnover, inadequate recruitment of qualified staff, poor image and inadequate learning opportunities in long term care for students and lack of opportunities for knowledge and skill development for staff. Research into the particular challenges and needs in long term care was very limited. The aim of the program was to establish partnerships between selected nursing homes, universities and university colleges. Together the institutions would address the challenges by developing quality development programs, initiate research and improve teaching in collaboration. During the first project period (1997-2003), the teaching nursing homes proved to be efficient in launching quality improvement programs, improve teaching of students and staff and support relevant research. Following a formal evaluation, the program was established on a permanent basis in 2004. Since then, the program has gone through a number of changes, including growing in numbers, being widened to include home care services and changing focus from local developments towards also being vehicles for national quality initiatives. The strong network among the institutions contributes to the robustness of the program.

## **Teaching Nursing Homes - The Norwegian experience 20 years on**

This paper describes the current status and main characteristics of the Norwegian Teaching Nursing Home program (in 2011 renamed Development Centers for Nursing Homes and Home Care Services). The program was initiated in 1997 to improve the care of older people and was established on a permanent basis from 2003. It has gone through a number of changes over time, but is still supported by the National government through yearly financial support over the national budget. The early developments of the Norwegian Teaching Nursing Program were described in Kirkevold (2008). In this paper, the major focus will be on a presentation and discussion of the current goals and responsibilities of the Developmental Centers for nursing homes and home care services as well as how they are organized and run. The recent developments will be discussed in relation to the current needs for quality and competence development in the nursing home and home care services.

### **Background**

Teaching nursing homes or academic nursing homes have been introduced in many different countries around the world in order to address the persistent challenges in providing high quality care for older people in need of extensive and continuous health and personal care. The first programs were established in the US in the 1980s (Mezey et al., 1989; Schneider et al., 1985). Subsequently, similar programs have been/are being initiated in Canada, Australia, the Netherlands and Sweden and the UK, though with somewhat different aims and goals, focus and organizational arrangements (Barnett et al. 2011; Hockley et al., 2016). The different teaching nursing home initiatives have remarkably similar rationales despite the distance in time, geographical location and contextual conditions in the societies and health care systems of which they are a part. This highlights the profound challenges that many countries around the world have in terms of providing adequate and humane care to an ever increasing number of frail and vulnerable older people.

The Norwegian Teaching Nursing Home program was initiated at a time with significant challenges in terms of providing high quality care to nursing home residents due to difficulties in recruiting qualified staff. Due to demographic and social changes as well as restructuring of the health care system with more complex care provided in the community, Norway still faces challenges in terms of providing high quality care to frail older people (Whitepaper 26, 2014-2015). A recent study indicates that the competence of the nursing home and home care staff is inadequate to meet the complex needs of older people in the community (Bing-Jonsson et al. 2016). The current

developmental centers for nursing homes and home care services are charged with the responsibility of contributing to solve these challenges.

### **The Original Teaching Nursing Home Program**

The original teaching nursing home program in Norway was launched in 1997 as a four-year project. The idea was to explore whether it would be possible to develop selected nursing homes into teaching nursing home facilities through formal collaboration with local universities and university colleges. Initially, four nursing homes were included in the program. Later, one more was added with particular responsibility for providing and developing services to the indigenous populations of the Sami people in Northern Norway.

The rationale for establishing the program was the persistent critique of the quality of care provided in the nursing home sector as well as difficulties recruiting sufficient numbers of qualified staff and high turnover (Kirkevold and Kårikstad, 1999). These problems were considered to be “shared problems” by the nursing home sector and the education and research sectors. The assumption was that by establishing formal collaboration with the research and education sectors, the nursing homes would gain access to qualified researchers and teachers with interest and commitment to contribute to the development of the nursing home sector. By developing stimulating clinical practice arenas for nursing and other health professional students, the nursing homes would be able to improve their recruitment of qualified staff. Furthermore, the idea was to collaborate on quality improvement projects by bringing the different experiences and qualifications of the clinicians and teachers/researchers together to develop new ways of providing services. The universities and university colleges involved would benefit from the collaboration by gaining access to nursing homes committed to provide rich learning experiences for students as well as being prepared to collaborate on research projects relevant to the nursing home sector (Kirkevold, 2008).

Following the four year feasibility period, an external evaluation was carried out. The evaluation panel concluded that the program had been a success; it had led to enthusiasm among leaders and staff in the participating nursing homes with regard to staff development and participating in quality development projects. It had also contributed to improved services on specific issues which varied among the nursing homes due to different priorities with regard to which issues to address. The student placements had improved both in quality and numbers, and students were more satisfied with their clinical learning experiences than before (Kirkevold 2008).

The evaluation panel was, however, critical of the bottom up approach that had been employed (inspired by a participatory action research approach) (Badbury-Huang 2015) and recommended that the National health and care authorities assumed a more directive approach. They also recommended that a clearer leadership structure be established as they considered the collaborative model established between the nursing homes, universities and/or university colleges to be vulnerable in terms of lines of responsibility.

Following the evaluation, the Department of Health in 2003 decided to continue the program and established the teaching nursing home program on a permanent basis with dedicated financing over the National budget (Kirkevold, 2008). The Directorate of Health was assigned the responsibility for leading and running the program. The responsibility of ensuring collaboration with local universities, university colleges and other relevant institutions were delegated to the teaching home homes. Furthermore, each teaching nursing home was assigned a particular responsibility for supporting other nursing homes in their region by developing and testing transferable models for quality improvement and by collaborating and supervising other nursing homes that wanted to initiate quality improvement projects. The number of teaching nursing homes gradually increased and the goal of one teaching nursing home in each of Norway's 20 counties was reached in 2008. During the 1990s and 2000s, home care services became more and more important in providing care for older people as the municipalities across Norway established home care services around the clock and the National policy increasingly maintained that people should live at home for as long as possible (Whitepaper 50, 1996-1997; Whitepaper 28, 1999-2000). The home care services were faced with many of the same challenges as the nursing homes. Consequently, in 2009, one teaching home care service was established in each county.

### **From Teaching Nursing Homes to Development Centers for Institutional and Home Care**

The Norwegian teaching nursing home program underwent several changes between 2004 and 2009. The main idea of being centers responsible for contributing to quality improvement of nursing home services and providing rich learning experiences for students continued. However, the idea that the teaching nursing homes should conduct research was downplayed. The reasons for this were primarily skepticism regarding the ability to ensure high quality research in the nursing homes due to limited academic training among the staff. One idea of the original teaching nursing home program was never institutionalized – the creation of faculty-practice positions, which were meant to ensure academic staff in the nursing homes. Instead, the Directorate of health decided that the teaching

nursing homes should facilitate research initiated and conducted by the universities and university colleges.

In 2011, a new strategic plan was developed. The teaching nursing homes now changed names to Developmental Centers for nursing homes and Developmental Centers for home care services to reflect the fact that their major responsibility was to contribute to continued development of the services. This implied both conducting quality improvement projects and continuing to facilitate learning among staff and students from a broad range of fields and at different levels. Each Developmental center now had a major responsibility for serving the whole county and putting more emphasis on collaboration across institutions and home care services to improve services and facilitate knowledge sharing.

### **The Current program**

In 2017, based on a thorough external evaluation, the Developmental Center for nursing homes and the Developmental Center for home care services in each county were merged. The number of centers thereby was reduced from 38 to 20 across Norway (two had already merged previously). The rationale was to ensure larger and more robust centers and to facilitate collaboration across institutional and community-based care. Typically, the centers have about 4-6 core permanent staff, although the size varies depending on whether they are able to secure additional support FOR specific activities.

The major responsibilities of the Development Centers in the years to come are to contribute to increased quality of care through promoting evidence-based practice and provide methods and tools to support the development of learning-cultures in institutional and home-based care services. Furthermore, they are expected to be resources for local professionals and service providers who want to initiate development and implementation work and contribute to active involvement of users and their relatives in the these processes (<http://www.utviklingscenter.no/>). It is specified that their work should be guided by local and national prioritized strategic areas. The developmental centers are expected to carry out their work in close collaboration with educational institutions, the municipalities (who are responsible for primary care in Norway), national authorities and the county officer's office, who oversees the quality of services in its jurisdiction. The Development Centers are not expected to conduct research, but to facilitate research into the care services.

All Development Centers share the same vision and goals (see Box 1), but may interpret and/or operationalize them somewhat differently depending on local needs and to allow for sharing of responsibilities among the centers according to different expertise and interests.

**Box 1: Current Vision for the Developmental Centers for nursing homes and home care services**

**Main goal:**

- The Development Center for nursing homes and home care services is a driving force for knowledge and quality in nursing homes and home care services in the county

**Specific goals:**

- Driving force for development of the quality of services on local and national prioritized areas
- Driving force for continued development of clinical practice for pupils, apprentices and students
- Driving force for competence development among staff
- Facilitator for research and development in the health and care services

**Purpose:**

- Contribute to collaboration across educational institutions, municipalities, county officer and the national authorities.
- Support good local initiatives for quality improvement- through economic support to selected municipal units in each county.
- Stimulate exchange of experiences and knowledge across the municipalities in the county and nationally.

**Approaches to quality development and learning projects**

The Development Centers have a long tradition of supporting smaller, locally initiated projects and this is still an explicit responsibility as expressed in the current vision (see Box 1 ). In recent years, they have also increasingly assumed the responsibility of contributing to the implementation of larger, national initiatives. In this section, I will highlight two examples of development projects that illustrate how the development centers work in order to contribute to improve care. In addition, I will provide examples of how the Development Centers facilitate student and work force learning.

Example 1: Agder living lab

The first example is a nationally supported project within the area of e-Health and welfare technology. The project is ongoing and is supported by the Norwegian Directorate for Health. It is a collaborative effort between the University of Agder, Center for e-Health and care technology, the Development Center for nursing homes and home care services, and, Grimstad municipality in Aust-Agder in Southern Norway in collaboration with different businesses involved with developing welfare technology solutions ([https://video.uia.no/media/t/0\\_stvikg4i/35281](https://video.uia.no/media/t/0_stvikg4i/35281)).

The focus of this project is to engage the users in the development and testing of different welfare solutions from crude ideas through to the finished product, by testing the innovations in different environments. The uniqueness of the project is the involvement of users, such as patients and family members, in the testing and evaluation of the equipment. The technology varies widely, from tracking systems to “smart” napkins/diapers to dressing assistance devices.

The project applies a participatory action-oriented stepped approach which is common in technology development projects (Bradbury-Huang 2015). Initially the focus of such an approach is on defining the need for a new technological solution; next, initial technological testing of early versions of the new technology is carried out; this is then followed by user tests in a welfare technology laboratory at the university. When the technology appears ready, the new device or technology is tested at home by real users (patients, family and or staff as relevant). Finally, the testing continues when the new technology is implemented in the health care services. Through this thorough development and testing process, with different stakeholders, new technological solutions can be designed to meet the needs of the users, their different helpers and the service providers. Experiences so far suggest that a number of user related problems may be discovered this way, thereby preventing the launching of products that will not work properly for the user groups they are intended for (Martinez et al. 2016).

The role of the Development Center for nursing homes and home care services in the project is to contribute to user-friendly, relevant and quality ensured welfare technology that may be used in a range of settings. This modelling approach may assured easier access to relevant technological tools for a wider audience. As the project evolves, one might expect that the spreading of the technology and new practices will be an important focus of the local Development Center as well as other centers in the national network.

Example 2: Developing learning networks within and across municipalities to improve patient security and quality of care of frail older nursing home residents

A major task of the development centers is to facilitate student and staff learning by creating good learning environments and by initiating projects to address specific learning needs. The Development Center in Hordaland (located in the city of Bergen) has led a number of different projects aimed at facilitating workforce development. In these projects they have applied the “learning network methodology” (White et al 2011). This is an approach where multi-professional local teams are established to work on a particular quality issue. This approach builds on the idea that learning and quality improvement go ‘hand in hand’; and, that by bringing staff from different institutions together to work on the same issue, will facilitate learning by sharing experiences as well as practical tools and methods. Several local teams from different units/municipalities comprise the learning network. The teams work partly on the issue locally in their own unit or departments, but meet regularly in network meetings to share experiences and discuss common problems across settings in terms of addressing the selected issue. An important element of the methodology is the use of systematic registration and evaluation of data which is presented and discussed in the network meetings. The systematic use of empirical data to document the process of change is found to stimulate progress and motivate the participants to keep addressing the issue.

The first learning network initiative was related to the quality of medication management in nursing homes. This continues to be a major quality issue in Norwegian nursing homes, as well as in home care services, and is related to polypharmacy among frail and chronically ill older people (Handler et al. 2006). Polypharmacy, with its associated problems of interactions and side effects, may seriously threaten the functioning and wellbeing of vulnerable patients. This problem is also reported in other countries (Handler et al. 2006). In order to address this problem, “The national security campaign” - a national initiative run by The National Knowledge center on behalf of the National Directorate of Health, initiated a program to reduce medication problems in Norwegian nursing homes. They introduced the concept of “Medication rounds” – a systematic review of all patients’ medication lists in a multiprofessional group consisting of the patient’s physician, the primary nurse, other relevant health care professionals and a clinical pharmacist if available. The approach entails systematic assessment and review of the patient’s medical, physical and psychosocial situation and treatment plan, including the total list of drugs. A major goal is to reduce the number of drugs, adjust the medication and dosage and adjust the drug regime to the current situation. This systematic, multi-professional approach has been found to improve the treatment and care of frail older people internationally (Paterson et al. 2010).

The goal of the Norwegian project was to implement and evaluate the effect of this approach more systematically and model an approach that could be copied by others. In this way, the aim was to contribute to staff development across the whole sector.



This initial project was carried out first in all nursing homes and residential centers in the city of Bergen (39 institutions). Subsequently, the other municipalities in the county of Hordaland were invited to participate. Local teams from the municipalities met regularly (three times over a period of approximately 9 months). An evaluation of the project documented significant improvements in terms of the number of patients who were subjected to a medicine round and the number of patients who had prescriptions with a clear diagnostic rationale. In terms of reduction in the number of drug prescribed, the results were more varied. Subsequently, the Development Center in Hordaland has launched similar learning network projects to address falls and pressure ulcers, also to accommodate national initiatives from The National Patient safety campaign” (<https://www.bergen.kommune.no/omkommunen/avdelinger/utviklingssenteret-for-sykehjem-og-hjemmetjenester/9641/article-114450>).

### Example 3: Creating rich learning environments for students

Facilitating student learning continues to be an important responsibility for the developmental centers. A recent example of an on-going project that addresses student learning is carried out by the Developmental Center in South Trøndelag (in the city of Trondheim) They are conducting a project to develop and test multi-professional supervisory teams to enhance the competence of supervisors and improve the clinical studies of diverse health care students in nursing homes. In particular, the aim is to contribute to improved multi-professional collaborative competence among the students. The project is being evaluated through process evaluation research.

(<http://www.utviklingssenter.no/prosjekt-tverrprofesjonelle-veilederteam.5936807-179690.html>).

Another example is the work AT the Development Center in Oslo to facilitate clinical learning experiences for students in the newly established MasterS in Geriatric Nursing established at the University of Oslo in 2011. This advanced practice nursing program, which builds on the international nurse practitioner training programs, required a whole new approach to clinical practice studies for the students. The Development Center in Oslo has worked closely with teachers at the university to create models for clinical practice in close collaboration with several nursing homes in a wide range of subjects, such as pharmacology, physical assessment, care of complex older patients and health promotion.

### **Discussion**

The Norwegian Teaching Nursing Home Program has been in existence since 1997. Over the years, the program has changed substantially, yet still retains the main characteristic of working to improve the care of older people in close collaboration with leaders and staff of participating nursing homes and home care services. Compared to similar programs, such as the early national programs in the US

(Mezey et al., 1989, 2008; Schneider et al., 1985), the Norwegian program has been remarkably sustainable. There are several possible explanations for this.

One important factor that has contributed to the sustainability of the program is the continued support of shifting national governments. One reason for this is that the Norwegian Teaching Nursing Home program has proved to be a robust and cost-effective vehicle for continued focus on quality development at the local level. Despite limited economic support (amounting to 2-4 positions at each site, supplemented by external funding secured to increase the quality improvement activities), these Centers have been able to motivate and support local initiatives through supervision, small economic funding and practical resources. Due to the local initiative, the projects have had a clear and immediate relevance, which have sustained the initiative and motivation. The local projects therefore have been important in maintaining support from the staff and local leaders who have experienced that their initiatives to improve care has been recognized and supported. This is in line with the recommendations of Mezey et al. (2008), who understood that TNHs should address quality concerns of the leadership and staff at the nursing homes as well as concerns among the residents and their relatives.

Another possible explanation of the continued success of the Norwegian TNHs program is the long-term networks established between the regional TNHs/Development Centers and other nursing homes/home care services in the region. These networks facilitate initiation of new quality improvement projects and research projects. A recent publication by Davies et al. (2014) highlights the challenges of developing sustainable care home networks for research in care homes and the need for long-term commitment on the part of both research institutions and care homes. Furthermore, they found that the managers in care homes emphasized that the research had to be relevant for residents and staff in order to succeed. The authors recommend that networks are established and measures put in place to maintain them, in order to promote sustainable culture change in the nursing homes.

A third factor contributing to the success of the Norwegian program is the fact that the Norwegian government has been able to use the Developmental Centers as a “vehicle” for implementing national policies and guidelines. In this way, the Developmental Centers have contributed to national quality improvement within specific areas, such as medical treatment of older patients, fall prevention and, nutritional care and palliative care. Because the Development Centers have had the ability and capacity to work locally to implement national initiatives, the health authorities have seen them as effective policy implementers. This has maintained their position as essential actors to improve care nationally, which has ensured continued national support. This is in line Mezey et al

(2008) who consider implementation of evidence-based guidelines to be one of the responsibilities that TNHs are uniquely equipped to take.

A fourth criterion that may have contributed to the success of the TNH program has been the flexibility of the TNH program. The network of teaching nursing homes and, subsequently home care services, in close interaction with the Directorate of health, the local municipalities and selected institutions and units, have been able to adjust to meet changing needs over time. The national-local inter-level organizational structure seems to have been efficient in being able to both allow for changes and for maintaining a relative stability of the vision and focus of the centers over time. Because the development centers have remained rather small, staffed with a few key committed actors, they are flexible units which can quickly adjust their activities and focus when needed. Yet, even if each of the Development Centers is rather small, the strong network between them has made them robust. National meetings and a common vision and goals have created a strong network that has facilitated the implementation of national initiatives. As such, they might exemplify how it might be possible to achieve the goals promoted by Davies et al. (2014).

Some of the changes and current characteristics of the Norwegian TNH-program might also have introduced potential threats. A major change for some of the Development Centers is they are no longer located in a nursing home/home care service. Rather, they have been relocated outside a specific institution/home care service. Often, they are located together with the central health and care leadership/management in the municipality or other quality, teaching or research support services. The rationale for this decision has been that the Development centers are to serve all the nursing homes/home care services/districts in a municipality/region and that being located in one particular nursing home/home care service may reduce the access for other nursing homes/home care services. Furthermore, easy access to the leadership in the municipality and/or other similar units may ensure support from the leadership and collaboration with other relevant units. However, a potential threat is that the increased distance of the Development Centers to the staff and daily workings and challenges in the nursing homes/home care services, might reduce their legitimacy among the local management and staff and thereby threaten the ability of the Development Centers to facilitate positive change and learning cultures in the nursing home/home care services. Mezey et al. (2008) maintains that a key aspect of teaching nursing homes is that the teaching, quality improvement and research activities are integrated activities of the institutions designated teaching nursing homes. This might be more challenging to maintain when the designated teaching nursing home staff move out of the nursing homes/home care services, because they will be less visible and integrated in the daily working of the institutions.

The original plan of the Norwegian TNH program was to address the challenges in the nursing home sector through multi-professional collaboration. The inclusion of the physicians and medical students was seen as an important element. Unfortunately, this proved to be difficult. The major reasons for that was a great lack of qualified geriatricians with substantial impetus to educate geriatricians for the geriatric departments in the hospitals. Moving some of the medical education to the nursing homes proved difficult due to curricular constraints and lack of qualified supervisors in the nursing homes. General practitioners (GPs) were mostly serving the nursing homes part-time in addition to their GP-practice. This limited their capacity to participate in education efforts, supervision and quality improvement projects. The lack of participation of physicians and medical students pose a threat in terms of the capability of the Development Centers to contribute improving the medical care of nursing home residents. In recent years, more nursing homes have increased the physician hours and some have hired physicians in fulltime positions. These are important developments that may increase the likelihood of developing educational practice models for medical students and increase the commitments of physicians in improving the care. The recent establishment of national research schools for general practice and municipal health and care services are other initiatives that might support this.

## **Conclusion**

The Norwegian teaching nursing home program has become an integrated part of the municipal health and care services in Norway. The main aim continues to be quality improvement through locally and nationally initiated quality development projects. Close collaboration with the education and research sectors continues to be an essential part, facilitating good learning experiences for students and initiation of relevant research to underpin the care provided. The Development Centers are key actors in the implementation of new research-based guidelines and approaches across the continuum of care.

## **References**

Aslaksen HMH. **Agder Living Lab:** [https://video.uia.no/media/t/0\\_stvikg4i/35281](https://video.uia.no/media/t/0_stvikg4i/35281)

Barnett K, Abbey J & Eyre J (2011) *Bridging Education, Research and Clinical Care – the Teaching Nursing Home: Discussion Paper*, Australian Institute for Social Research. Adelaide: The University of Adelaide.

Bing-Jonsson PC, Hofoss D, Kirkevold M, Bjørk IT, Foss C. (2016) Sufficient competence in community elderly care? Results from a competence measurement of nursing staff. *BMC Nursing* 14;15:5. doi: 10.1186/s12912-016-0124-z. eCollection 2016.

Bradbury-Huang H (2015) *The SAGE Handbook of Action Research*, 3rd ed. Los Angeles: Sage.

Davies SL, Goodman C, Manthorpe J, Smith A, Carrick N, Iliffe S. (2014). Enabling research in care homes: an evaluation of a national network of research ready care homes. *BMC Med Res Methodol.* 5;14:47. doi: 10.1186/1471-2288-14-47.

Handler SM, Wright RM, Ruby CM, Hanlon JT. (2006). Epidemiology of medication-related adverse events in nursing homes. *The American Journal of Geriatric Pharmacotherapy* 4(3):264-272.

Hockley J, Scott AM, Watson J, Harrison J, Randall M. (2016) *The Vision for a Teaching/Research-based care home*. The University of Edinburgh.

Kirkevold, M & Kårikstad V (1999) *Teaching Nursing Homes. National Plan for Establishing Resource Centres for Teaching, Practice Development and Research in the Nursing homes in the Municipalities*. Bergen: National Communication center for geriatrics.

Kirkevold, M. (2008). The Norwegian Teaching Nursing Home Program: Developing a model for systematic Practice Development in the Nursing Home Sector. *International Journal of Older People Nursing* 3: 282-286.

Martinez S, Bjerås S, Ludvigsen AE, Fensli R (2016) Agder Living Lab: From Ideas to Large-Scale Deployment and Long-Term User Adoption of Inclusive Health Solutions. In: Di Bucchianico G, Kercher P (eds) *Advances in Design for Inclusion. Advances in Intelligent Systems and Computing* 500. Springer, Cham.

Mezey MD, Lynaugh JE, Cartier MM (1989) *Nursing homes nursing care: Lessons from the Teaching Nursing Homes* New York: Springer.

Mezey MD, Mitty EL, Burger SG. (2008). Rethinking teaching nursing homes: potential for improving long-term care. *Gerontologist* 2008 48(1):8-15.

Patterson S, Hughes C, Crealey G, Cardwell C, Lapane K (2010) An Evaluation of an Adapted U.S Model of Pharmaceutical Care to Improve Psychoactive Prescribing for Nursing Home Residents in Northern Ireland (Fleetwood Northern Ireland Study). *Journal of American Geriatric Society* 58 (1): 44-53.

Schneider EL, Wendland CJ, Zimmer AW, List N, Ory M. (1985). *The Teaching Nursing Home: A New Approach to Geriatric Research, Education and Clinical Care*. New York: Raven press.

Whitepaper (Meld. St. 26) (2014–2015). *The primary health and care services of tomorrow – localised and integrated*. Oslo: Norwegian Government.

Whitepaper (St meld nr 50) (1996–97) *Handlingsplan for eldreomsorgen — Trygghet - respekt – kvalitet. [Action plan for elderly care – Security – respect – quality]*. Oslo: Norwegian Government.

Whitepaper (St.meld. nr. 28) (1999-00) *Innhald og kvalitet i omsorgstenestene [Content and quality in the care services]*. Oslo: Norwegian Government.

White DE, Straus SE, Stelfox HT, Holroyd-Leduc JM, Bell CM, Jackson K., et al. (2011) What is the value and impact of quality and safety teams? A scoping review. *Implementation Science* 6(1):97.

## Key points

- The Norwegian teaching nursing home program, initiated in 1997, has proved to be a sustainable national program for improving the quality of care of older people in long term care
- The program has gone through substantial changes over time in order to adjust to changing needs and challenges. The flexible nature of the program has contributed to its success.
- The program was widened to include home care services in 2009 and the teaching nursing homes and home care services were renamed Development centers for nursing homes and home care in 2011.
- The sustainability of the program may be related to several criteria, including continued support from the Norwegian government, a national network and a combined focus on local development initiatives and national quality initiatives