The establishment of teaching nursing homes – Norway’s experience

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• 5.3 million people

• 2.5 mill. live in or close to the three largest cities Oslo (1.3 mill.), Bergen and Trondheim

• Long distances & rural communities
Key Aspects of the Norwegian Health Care system

• Norway is a welfare state (health care, education, social services are public)

• Long term care predominantly publically financed & run

• Two major levels:
  – state owned hospitals (local, regional, national)
  – primary health care & social services at municipal level

(Statistics Norway 2015)
Key Aspects of the Norwegian Health Care system (2)

- Total number of hospital beds: ca. 17,500 (1/3 older people)
- Total number of health and care recipients: 340,000
- Total number of nursing home beds: 64,000 (ca. 450 homes)
- Other residential «homes»: 38,000
- Total number of home care recipients: 240,000 (ca. 430 municipalities)

(Statistics Norway 2015)
Why Establish Teaching Nursing Homes?

– Persistent critique of quality of care in Residential Aged Care Facilities
– Difficulties recruiting qualified staff – particularly nurses, physicians
– High turnover of staff
– Little prestige associated with providing geriatric care
– Little collaboration between educational institutions, research institutions & elderly care institutions
The aims and scope of the original Teaching Nursing Homes Program

– Improve and securing adequate competence of staff

– Improve the prestige of working with older people

– Create a culture in the nursing homes conducive of development of the services and research into the care of older persons

– Develop good learning environments for students

– Increase recruitment & retaining of staff
Fundamental TNH working relationships

- University (Medical faculty/Institute of Nursing & Health Sciences)
- University college (School of Nursing & Allied Health)
- Selected Nursing Home
Norwegian Teaching Nursing Home Program: Timeline

Inspiration: The US TNH programs

1980s

1996

1999-2003

2004

TNH-model development & pilot phase (5 TNHs)

Establishing TNHs: Consolidation- & expansion phase

38 teaching facilities across Norway (1 TNH & 1 THCS in each county)

TNH program is renamed: Centres for development of institutional and home care services

2010

2011

2015

5 regional Centers for care research

2008-2009
Problem clarification

Future Workshop

Gaining support from key actors

Develop initial model

Identifying active partners

Adjust model to local needs

Actively identifying local needs & initiate local projects

Develop interactions across institutions

Internal evaluation at each site

Internal national evaluation across sites

External evaluation by independent examiner

New organisational structure

Incorporate TNHs formally into h.c. system

TNHs take on regional & local responsibilities


National level

Regional level

Institutional level

National level

Phase 1 Phase 2 Phase 3 Phase 4

Planning Experimenting Evaluating Implementing
**Phase 1**

Planning

- Problem clarification
- Future Workshop
- Gaining support from key actors
- Develop initial model

**Phase 2**

Experimenting

- Identifying active partners
- Adjust model to local needs
- Actively identifying local needs & initiate local projects
- Develop interactions across institutions

**Phase 3**

Evaluating

- Internal evaluation at each site
- Internal national evaluation across sites
- External evaluation by independent examiner
- New organisational structure
- Incorporate TNHs formally into h.c. system
- TNHs take on regional & local responsibilities

**Phase 4**

Implementing

- Internal evaluation at each site
- Internal national evaluation across sites
- External evaluation by independent examiner
- New organisational structure
- Incorporate TNHs formally into h.c. system
- TNHs take on regional & local responsibilities
<table>
<thead>
<tr>
<th>Year</th>
<th>Phase 5</th>
<th>Phase 6</th>
<th>Phase 7</th>
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<tbody>
<tr>
<td>2004-2005</td>
<td>Renegotiate collaboration</td>
<td>Increase diffusion of models/results</td>
<td>Review and new</td>
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<td></td>
<td>with governmental &amp; local</td>
<td>of local development projects</td>
<td>strategic plan</td>
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<td></td>
<td>partners</td>
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<td></td>
<td>Review priorities,</td>
<td>Ensure equal access to developmental</td>
<td>Reorganisation</td>
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<tr>
<td></td>
<td>develop plans for future</td>
<td>support/resources regionally/locally</td>
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<tr>
<td></td>
<td>work</td>
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<tr>
<td></td>
<td>Continue local development</td>
<td>Identify/negotiate with local NHs for</td>
<td>New evaluation</td>
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<tr>
<td></td>
<td>work</td>
<td>satellite status</td>
<td></td>
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<tr>
<td></td>
<td>Respond to strategic plans</td>
<td>Support development of local satellite</td>
<td>Centers for care</td>
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<tr>
<td></td>
<td>from government</td>
<td>TNHs</td>
<td>research</td>
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<td>2010-2011</td>
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<td>2011-2015</td>
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Norwegian Teaching Nursing Home Program (1999-2003)

TNH in Tromsø, serving Northern part of Norway.

Karasjok TNH, serving Sami community

TNH in Trondheim, serving mid Norway

TNH in Bergen, serving Western part of Norway

TNH in Oslo, serving East part of Norway
Norwegian Teaching Nursing Home Program (2004-2007)

TNH in Tromsø, serving Northern part of Norway.
1 ‘satellite’ TNH

Karasjok TNH, serving sami community

TNH in Trondheim, serving mid Norway
2 ‘satellite’ TNHs

TNH in Oslo, serving East part of Norway
4 ‘satellite’ TNHs

TNH in Bergen, serving Western part of Norway
3 ‘satellite’ TNHs

TNH in Agder, serving South of Norway
4 ‘satellite’ TNHs
Results from project period (1999-2003)

- The external & internal evaluation processes indicated that the TNHs did contribute to:

  - Increased competence of staff both formally & informally
  - Increased quality of care in selected areas (differed between institutions, bottom-up decisions about areas to improve)
  - Transferable models for competence development
  - Improved learning conditions for students
  - Increased enthusiasm about working in nursing homes among participating staff

- TNHs formally established by the Directorate of health & Social services 2004, based on directive from the National Assembly (through national budget)
From 2008:
• One TNH in each county (20)

From 2009:
• One Teaching home care service (THCS) in each county (20)

Total: 38*

* A few counties decided to merge to one larger center for both nursing homes and home care services

From 2011:
TNHs and THCSs renamed:
Centers for development of nursing homes and home care services

• 1 Sami TNH (Norway’s indigenous people)
Results after being permanently established (2004-)

• During the years after being established as a permanent program, the TNHs (USHTs) have continued to contribute to improve competence & quality of long-term care through:

  – Initiating & carrying through a large number of local projects addressing local issues/problems (e.g. improving nutrition, developing social activity programs, sensory gardens, staff training, rehabilitation, evidence-based practice training, etc)
  – Maintaining enthusiasm regarding quality and staff development (it was competitive to become local TNH partners)
Results after being permanently established (continued)

- The TNHs (USHTs) are active partners in implementing central governmental initiatives (e.g. "Care plan 2015", "Palliative Care plan" "Dementia plan 2015", "The Competence Improvement Initiative")

- TNHs (USHTs) are becoming increasingly attractive as research partners for universities & colleges

- TNH concept is now transferred to social service (and primary schools) by governmental initiatives
Ways of involving other nursing homes in their region

• Regular conferences/meetings
  – Annual conferences sharing knowledge/experience
  – Regular meetings to discuss common issues, collaboration

• Providing supervision/guidance/advice
  – How to conduct development projects
  – How to apply for funding
  – Sharing of new models/programs

• Collaborative development projects
  – Partnerships on common quality issues
How to succeed in implementing correct medication use in older patients in LTC

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Special advisor, Bergen Municipality
USHT
Implementing a quality care policy through capacity building and quality improvement

• Using "learning networks" to change the practice and improve quality of care

• A "learning network" is an acknowledged method for succeeding with quality improvement in medical care (orig. developed by Institute for health care improvement in Boston)

• Three sessions (each 3 days) over 7 months

• Local teams participate and work to implement practice change between sessions
Correct medication use of older patients in LTC – national recommendations & guideline
The LMG (Medication Round) – wheel

1. Identify patient and agree on LMG
2. Fill in check list, Observations & Blood tests
3. Identify medication related problems and adjust treatment
4. Dokument and evaluate
5. Multiprofessional meeting Using guide/evaluation tools

The process is cyclic, allowing for continuous improvement and evaluation.
Tools used in the systematic medication evaluations

- Procedure for systematic evaluation of patients’ medication lists, including check list and standardized blood tests

- Multi professional team (physician, nurse(s) & pharmacist if available)

- Checklists to be filled in before the LMG -meeting

- STOP-criteria (Screening Tool of Older People’s inappropriate Prescriptions)

- START-criteria (Screening Tool to Alert doctors to the Right Treatment)

- Known categorizations of medication-related problems in older people (Ruths, S., Viktil K., Blix Salvesen H., 2007).

- Interaksjoner.no (Druid-database) & National guide for systematic medication evaluations (IS-1998)
Mandatory measurements at nursing home

<table>
<thead>
<tr>
<th>Code</th>
<th>Type of measurement</th>
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<tbody>
<tr>
<td>1.01</td>
<td>% of longterm care patients who had a LMG last 6 months</td>
</tr>
<tr>
<td>1.02</td>
<td>% of medications where indication is documented</td>
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<tr>
<td>1.03</td>
<td>% of patients with a medication follow up plan</td>
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<tr>
<td>1.04</td>
<td>Average number of prescribed medications with an ATC-kode</td>
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<tr>
<td>Evt.</td>
<td>Local facility-defined measures</td>
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Results – Engen nursing home

1. Antall langtidspasienter som har hatt legemiddelgjennomgang siste halvår

2. Antall legemidler med oppført indikasjon bak forskrivning

3. Andel pasienter med plan for oppfølging av legemiddelbehandling

4. Gjennomsnittlig antall faste legemidler med ACT-kode
Launching the LMG in all nursing homes in Bergen municipality (2013-2014)

- 21 municipal institutions
- 18 private institutions
  - 2208 nursing home beds
  - 267 residential care beds

All implemented the procedure for LMG for all long term patients in the nursing homes, using the Quality system
Recruiting middle and high school students to the TNH and the «health care worker» program

- TNH Sogn & Fjordane has developed a model for placements of secondary and high school students in nursing homes.
Program elements

The students:

- Participate in social activities with the residents, such as reading, dialogues, bingo, worship activities
- Are being taught basic skills, including hygiene and how to interact with old people (but not involved in intimate/skilled care)

Result:

The residents experienced increased opportunities for meaningful activities during the pupil practicum periods (individual activities, sosial events, activities in the units and across units).
Student experiences

- Student enjoyed being together with the residents, regardless of the activity or situation they were engaged in.
- Having placements together with nursing students was experienced as particularly valuable, as the nursing students provided supervision and taught the secondary school pupils new insights and skills.
- Being allowed to put on a «work outfit» was valued (part of the team)
- A good welcome and introduction to the NHs was essential to a positive experience
- Inactivity and lack of attention from the staff were experienced as «negative»
The role of physicians in TNH program

• Initially in the TNH project – strong support from the professors of geriatrics

• Few NH physicians at the time, mostly GPs covering NHs parttime

• Attempts to have placements of medical students in NHs difficult due to curriculum
The role of physicians in NHs in Norway

- Many municipalities are hiring dedicated nursing home physicians (preferably 100% positions)

- A new association for nursing home physicians was established in 2012 (ass. with GP association)

- A National center for nursing home medicine (multiprofessional) established at University of Bergen

- Young physicians increasingly consider NHs an interesting and meaningful career prospect
<table>
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<tr>
<th></th>
<th>67 nursing home units</th>
<th>Patients attended by this group (%)</th>
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<tbody>
<tr>
<td><strong>Table 1: Physicians working in nursing homes</strong></td>
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<tr>
<td>Total</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Men, N (%)</td>
<td>22 (60)</td>
<td>290 (54)</td>
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<tr>
<td><strong>Age, mean (SD)</strong></td>
<td></td>
<td></td>
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<tr>
<td>Youngest, 29-38 N (%)</td>
<td>12 (32)</td>
<td>180 (34)</td>
</tr>
<tr>
<td>Middle, 39-55, N (%)</td>
<td>13 (35)</td>
<td>136 (25)</td>
</tr>
<tr>
<td>Oldest, 56-67, N (%)</td>
<td>12 (32)</td>
<td>222 (41)</td>
</tr>
<tr>
<td><strong>Type of physician</strong></td>
<td></td>
<td></td>
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<tr>
<td>General practitioner, N %</td>
<td>25 (68)</td>
<td>295 (55)</td>
</tr>
<tr>
<td>Nursing home physician, N %</td>
<td>12 (32)</td>
<td>243 (45)</td>
</tr>
<tr>
<td><strong>Experience (4 (11%) missing), mean (SD)</strong></td>
<td>9.3 (7.8)</td>
<td>136 (25)</td>
</tr>
<tr>
<td>0-2 years, N (%)</td>
<td>9 (24)</td>
<td></td>
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<tr>
<td>3-10 years, N (%)</td>
<td>14 (38)</td>
<td>261 (49)</td>
</tr>
<tr>
<td>&gt;10 years, N (%)</td>
<td>10 (27)</td>
<td>110 (20)</td>
</tr>
<tr>
<td>Physicians without specialization, N (%)</td>
<td>16 (43)</td>
<td>242 (45)</td>
</tr>
<tr>
<td>Physicians with specialization, N (%)</td>
<td>21 (57)</td>
<td>296 (55)</td>
</tr>
</tbody>
</table>

N: Number  
SD: Standard deviation

(Jørgen Petersen & Christine Gulla 2017)
Summary: Strategies used to improve collaboration between community care, research and educational institutions

- Political strategies
- Structural-institutional strategies
- Culture building strategies
- Project-based initiatives (research, quality improvement)
- Clinical guideline based
- Educational strategies
Conclusions

• The Norwegian TNH/USHT program has become a significant partner at local, region and national levels with regard to improving quality of care for older people

• The TNHs/USHTs are seen as a significant vehicle for implementing national and local policy initiatives aimed at improving treatment & care of older people

• TNHs/USTHs promote innovative care models, student learning models and facilitate research

• The TNH model is integrated with home care services