



# Norway

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**The 2018 Aging Readiness & Competitiveness Report:  
Small Innovative Economies**

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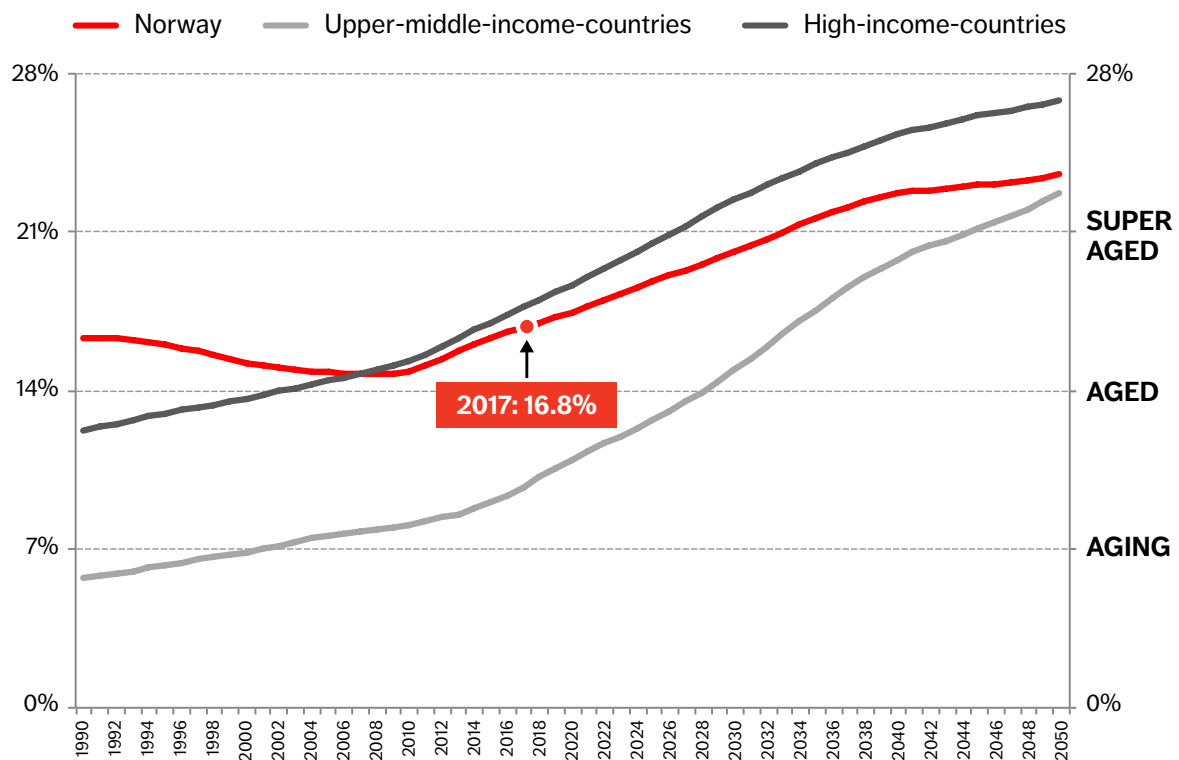
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Today, Norway faces transformations both demographic and economic. Its resource-rich economy, which has for decades successfully supported a robust social safety net, is being challenged by low oil prices as well as long-term risks from climate change and resource depletion.

Already an aged society, Norway has been experiencing a dramatic increase in the pace of aging since 2010, when its baby boomers began to turn 65 (Figure 1). Within the next 15 years, the nation is expected to enter a super-aged society, when the share of people age 65 and older exceeds 21 percent of the total population. The country is proactively adapting by modernizing the social safety net and workforce policies at the national level, with municipalities driving the development of innovative, cost-effective solutions to better accommodate an older population.<sup>1</sup>

Older adults in Norway represent a tremendous resource for the society, because they are:

**Figure 1. People Age 65 and Older as Percentage of Total Population**



Source: United Nations, Department of Economic and Social Affairs, Population Division

- **Healthy and highly educated:** They have the fifth-longest lifespan and healthspan in Europe. Seventy-nine percent of Norwegians ages 55 to 74 have at least a secondary education, one-fifth higher than the EU average,<sup>2</sup> and Norwegians boast among the highest internet usage rates.
- **Wealthy:** Ninety-four percent of Norwegians age 60 and older own their home and 15 percent own two properties,<sup>3</sup> and as of 2016, the

demographic group with the greatest average wealth in the country was couples over 67 living independently from their children.<sup>4</sup>

- **Productively active:** While wealthy, they are also more active in the workforce than their OECD peers, with more than 18 percent of those over 65 still working. Norwegian retirees also contribute to the community by volunteering, with the created value estimated to be over NOK

25 billion (equivalent to 45,000 full-time jobs) in 2016.<sup>5</sup>

- **Empowered:** Starting in 1992, every municipality was legally obligated to establish a Senior Council, which offers input into municipal policymaking. According to a 2014 survey of Senior Council members, nearly 70 percent believed they have fairly or very large influence.<sup>6</sup>

The government has made dramatic progress in unleashing the potential for active aging in recent years. Because of a series of actions beginning in the 2000s to build inclusive working environments and to reform the pension and health care systems, the government believes the institutions are well prepared for an aging population. It has shifted its focus to a holistic approach, captured in the 2015 national strategy for an age-friendly society called More Years–More Opportunities, which seeks to accommodate the aging population and unleash opportunity across transport, community planning, inclusive working life, and technology adoption.

Norway's high level of municipal autonomy has driven policy innovation, and today the central government is working to

coordinate the dissemination of effective solutions. To meet this goal, it introduced a comprehensive strategy for senior care reform called “Leve Hele Livet” (“live the whole life”) in spring 2018.<sup>7</sup> The strategy stresses Norway's person-centered approach to policymaking, with the goal of motivating and enabling older adults to master their own lives and live at home for as long as possible. Based on public consultation and stakeholder input, the reform consists of 25 concrete, proven solutions. With reform implementation slated to start in 2019, its progress and impact warrants watching.

Norway is building on its robust information and communications technology (ICT) infrastructure and tech-savvy population to provide cost-effective solutions for the aging population, while also exploring the opportunity to build a competitive export industry. A global leader in ICT connectedness and particularly e-Governance, Norway sets itself apart from other countries by placing emphasis on digital inclusiveness. It has made strides in recent years in strengthening society's capacity to enhance digital competence and to improve online accessibility.

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# Ecosystem for Policy and Social Innovation

In Norway, municipalities primarily drive policy innovation, tailoring locally appropriate solutions by leveraging the range of resources available and encouraging interdisciplinary, cross-sectoral approaches, with a consistent focus on the user.

While this has produced a host of effective models, scaling them up remains a challenge. In response, the central government and national-level organizations are directing funding toward implementation projects and increasing impact evaluation and knowledge sharing.

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## Key Enablers

Norway's remarkable ability to develop new approaches and adapt policy to emerging challenges and opportunities lies in a culture notable for its high level of trust and openness along with

a tradition of collective risk sharing and experimentation. A nimble administrative structure of municipal self-governance enables innovative models to emerge at the local level, with the central government and the association of local governments actively working to help disseminate and facilitate the sharing of best practices.

Norwegian culture features a **high level of trust**, which has been attributed to the society's homogeneity. Norway topped the 2009 World Values Survey with the highest percentage of respondents who agreed with the statement "Most people can be trusted."<sup>8</sup> This level of trust exists not only among individuals but also between individuals and government. Norway claimed the third-best score on Transparency International's 2017 Corruption Perception Index.<sup>9</sup> The widespread feeling of trust between Norway's citizens and its public institutions facilitates coordinated action and collaboration across sectors.<sup>10</sup>

This confidence in government is also a result of the **open, evidence-based policy making process**. According to the World Bank's Worldwide Governance Index, Norway has among the most effective governance and notably outdoes every other country in terms of safeguarding its citizens' freedom of expression, freedom of association, and participation in selecting the government.<sup>11</sup>

This policymaking approach is well demonstrated in the government's development of the latest "Leve Hele Livet" white paper.<sup>12</sup> In 2017, officials

traveled around the country to identify best practices in responding to aging at the community level. Thematic dialogue meetings were held with stakeholders, including older adults and family members, municipal government representatives, volunteers, and researchers. All stakeholders were encouraged to submit advice, which resulted in hundreds of letters—both e-mail and post—received. The government issued a white paper based on stakeholder input and additional research. A similar process was also applied to Norway's Dementia Plan 2020. Of note, dementia patients were invited for the first time to contribute to meetings with stakeholders and participate in the conversation.<sup>13</sup>

As in other Nordic countries and the Netherlands, **collective risk sharing** forms the basis of Norwegian society along with Norway's long tradition of consensus building in policymaking. One manifestation of this is the tripartite partnership institutionalized after World War II as a vehicle to address labor conflicts. Since then, an open and consensus-based process has been the norm for labor market policymaking in which the government, political parties, trade unions, and employer associations negotiate and reach common ground on key issues. Since the 2000s, this mechanism has been crucial to facilitating Norway's substantial measures to extend working lives, including the inclusive working environment agreement and the 2011 pension reform.

A small country with a narrow resource base and peripheral location, Norway desires access to international markets, and this also shapes its open mindset. This **openness** is manifested in its eagerness to seek Nordic cooperation in developing ICT-based solutions for aging and welfare technology<sup>14</sup> to secure a competitive position in the global market. Moreover, it is looking overseas for effective models to adopt. One example is the “everyday rehabilitation service,” which empowers older adults with declining health to master their own life through individualized care. Built on programs in Sweden and Denmark, the service is now available in more than a hundred municipalities in Norway.

While open to international cooperation and best practices, Norway also possesses a strong **indigenous capability for innovation**. Multiple experts interviewed for this study agreed that the highly educated population and a culture that encourages innovation and experimentation are key factors. “Our society pays great attention to how one can take the next step once he or she has an idea and turn it real. We incorporate this emphasis into the school system, even as early as in elementary school. This helps foster a culture of innovation,” said Jon Ingar Kjenes, CEO, Motitech.<sup>15</sup>

Indeed, several of the most interesting programs identified in this study emerged from students. A group of nursing students founded the non-governmental organization “Livsglede for Eldre” out of a desire to create solutions to enhance the social

**“Municipalities have every interest in promoting active aging and preventing the aging population from becoming a passive, care-receiving population.”**

– AINA STRAND, Project Manager, Strategy for Active Aging, Norwegian Ministry of Health and Care Services

and psychological well-being of nursing home residents. And in 2011, a group of teenage students created social enterprise “Generasjon M” (“the intergenerational meeting”), seeing it as a way to combat loneliness in older adults and provide part-time employment opportunities for young people.

Municipalities play a greater role in driving innovation in Norway than those in other countries, due to the high degree of **municipal autonomy** in Norway. Municipal self-governance has deep roots in the country, built on the belief that local governments are in the best position to determine priorities and to ensure the effective utilization of resources and quality of public services.<sup>16</sup> Municipalities have the sole responsibility for providing primary care and long-term care (LTC), motivating them to seek innovative, cost-effective solutions and to adopt technology to accommodate the aging population. “Municipalities have every interest in promoting active aging

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**“By making experience reports and toolkits available to municipalities, we decrease the risk of failure and thus increase their willingness to try new projects.”**

– LASSE JALLING, Head of Department of Research, Innovation and Quality at KS

and preventing the aging population from becoming a passive, care-receiving population,” said Aina Strand, Project Manager of Strategy for Active Aging at the Norwegian Ministry of Health and Care Services.<sup>17</sup>

The central government plays a central role in the **aggregation of best practices and dissemination of knowledge** across municipalities to promote innovation and reduce inequality across regions. In recent years, they have joined forces with the Norwegian Association of Local and Regional Authorities (KS), a non-profit organization for local governments. “By making experience reports and toolkits available to municipalities, we decrease the risk of failure and thus increase their willingness to try new projects,” said Lasse Jalling, Head of Department of Research, Innovation and Quality at KS.<sup>18</sup>

A successful example of this approach is the National Welfare Technology Program,

a collaborative effort between two central government agencies, the Directorate of Health and the Directorate of e-Health, and the Norwegian Association of Local and Regional Authorities. In addition to funding municipal programs that implement welfare technology solutions, it works to identify effective solutions and to disseminate recommendations across the country. Another more recent example is the “Digihjelpen” (or Digihelper) 2017, a collaborative project between the Ministry of Local Government and Modernization (KMD) and KS to help municipalities build capacity for digital training. The project has collected and systematized effective practices and experiences and has provided general recommendations.

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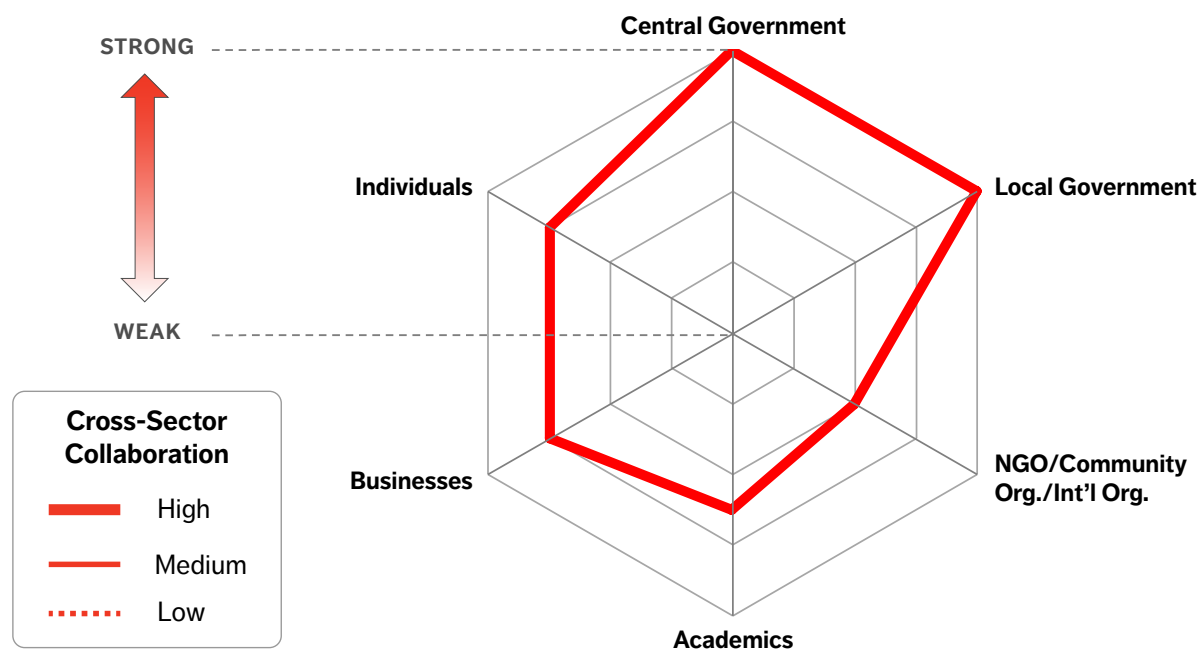
### **Attributes in Aging-Related Innovation**

To accommodate the needs of the aging population across the country, ranging from urban planning to care delivery to welfare technology development, Norway has adopted a user-driven model that is proving effective in serving the needs and interests of its older population. How to scale up implementation of tested, effective models is a key challenge and has drawn greater attention and effort from the central government in recent years.

Aging-related policy and social innovation in Norway place an **emphasis on the needs of users**, including older adults, their family members, and care professionals. This principle is manifested in projects across



**Figure 2. Driving Forces of Innovation and Cross-Sector Collaboration**



different sectors. The most prominent example is the InnoMed initiative led by the Directorate of Health. To promote needs-driven innovation, it focuses support on the pre-project phase—connecting entrepreneurs with end-users of welfare technology or care services, identifying the gap, and mapping solutions. The method has proved effective, with a majority of projects having moved into the implementation phase. Another example is the Senior Steps project, where older adults are equipped with an app-based platform to plot data on

their mobility experience around the city, which is then used for urban planning.

Municipal autonomy also facilitates a high level of **interdisciplinary collaboration**, which enables integrated care and more comprehensive services. In the municipality of Lindås, a team made up of civil servants—including a physiotherapist, a construction expert, and an economist—offers residents housing consultation to address the full spectrum of their needs. Similarly, the practice of preventive home visitation, which has been adopted in 25 percent

of Norway's municipalities, is built on a multidisciplinary team that consists of a nurse, a physiotherapist, and a social worker to provide comprehensive evaluation on the wellness of older adults.

Despite the enthusiasm among municipalities to test innovative solutions, experts interviewed for this study reported a feeling of “**pilot fatigue**.” As Arild Kristensen, CEO of Norwegian Smart Care Cluster, explained, “There is a calling from all parties that it is time to end the incessant piloting. It is totally unnecessary to do more tests at this point. Efforts should focus on how to implement effective models.”<sup>19</sup> Experts like Espen Aspnes, who is senior advisor at InnoMed, suggested this could be facilitated by improvements in impact evaluation. Aspnes stated: “The solution will not spread if you are unable to highlight concrete benefits.”<sup>20</sup> The central government has begun to address this challenge, including generating “benefit realization reports” to showcase benefits of innovative solutions and successful practices, but more work is needed.

# Community Social Infrastructure

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In 2017, Norway topped the list of the world's happiest countries,<sup>21</sup> and this well-being extends into later life<sup>22</sup> thanks in no small part to the robust and evolving community social infrastructure that ensures opportunities for active, engaged aging.

Innovative and successful efforts include the world's first national walking strategy, the municipality of Oslo's plans to cultivate an age-friendly environment, and young entrepreneurs building a social enterprise to enhance intergenerational solidarity. However, physical infrastructure, particularly access to public transport and accessibility in private housing, remains a key impediment.

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## Social Connection

The majority of older Norwegians independently ages at home. As of 2012, 96 percent of people age 67 and older live in private households, with 39 percent living alone and 52 percent as a couple.<sup>23</sup> As a result of urbanization and economic development, the average size of private households decreased over time from 3.3 in 1960 to 2.2 in 2011, in parallel with a steady increase in adults living alone. One-person households accounted for 40 percent of the total households in 2011, almost triple the 1960 level.<sup>24</sup> Living alone is most common among older people, particularly the oldest (Figure 3).

Nevertheless, family bonds remain strong.<sup>25</sup> The traditional family structure has been replaced by the modified extended family, meaning adult children and parents live apart from each other but keep in close touch.<sup>26</sup> Eight out of 10 older parents ages 60 to 79 have at least one adult child living within a 50-kilometer, or 30-mile, radius, and more than 60 percent spend time with their adult children at least once a week. More than just company, there are substantial flows of support between generations. While there is generous parental leave and extensive public childcare, grandparents often act as emergency assistance: more than six out of 10 now spend time caring for their grandchildren more than once a month. Meanwhile, adult children are active in their parents' lives and can generally

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– ANNE STINE HOLE, co-founder and CEO,  
Generasjon M

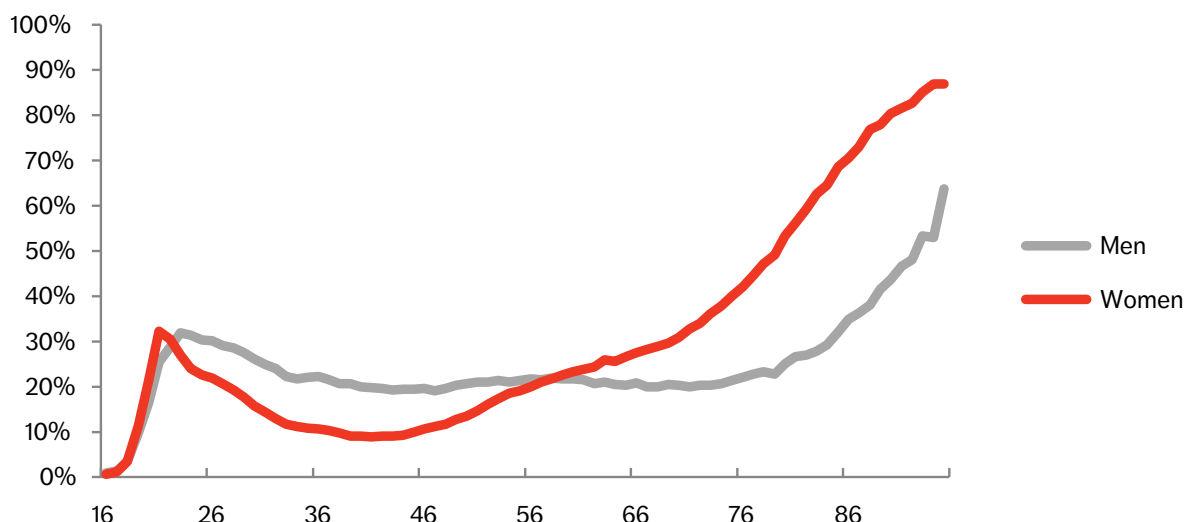
be counted on to provide help when necessary.<sup>27</sup>

Intergenerational contact is not limited to within private households and among family members. Norway has high levels of intergenerational solidarity. A variety of programs exist at the local level to promote intergenerational relations, ranging from sports tournaments to social events where older adults share motherhood experience with younger, pregnant women. An innovative example is Generasjon M, which connects generations with the aim of combatting loneliness among older adults through visitation services to nursing homes and private households by young people who work as visitation friends.<sup>28</sup>

The idea, developed by a group of students in their late teens, eventually turned into a company in 2011, receiving the support of



**Figure 3. Percentage Living Alone in 2017, by Age and Gender**



Source: Statistics Norway

various government agencies.<sup>29</sup> “We saw there was a lack of social activities available to the residents living in the nursing home across the street from our school, and meanwhile, we had classmates who had difficulty finding part-time work. So we were inspired to bridge the gap,” said Anne Stine Hole, co-founder and CEO of Generasjon M.<sup>30</sup>

The model of Generasjon M is creative in that it not only helps strengthen the social connection of nursing home residents and provide intergenerational ties but also helps address broader social challenges. Decades of immigration and technological advances have eroded job opportunities for Norwegian teenagers, particularly those

unable to tap into their parents’ social networks.<sup>31</sup> Participation in Generasjon M is one option for adolescents to gain their first professional experience—and in an increasingly indemand field. Like other countries, Norway will need a sharp increase in the number of qualified health workers to meet demand in the coming years.<sup>32</sup> “One of our long-term goals is to increase recruitment to the health care services by helping youth get a foot in the door,”<sup>33</sup> said Hole. Today, Generasjon M employs more than 90 visitation friends and is present at 20 nursing homes in the greater Oslo area, with efforts underway to expand nationally.<sup>34</sup>

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## Transportation

Recognizing that mobility is essential to older adults' active living and social participation, the Norwegian government has endeavored to build a safe and convenient transport system. The most prominent effort is its national walking strategy, which promotes walking-friendly environments to encourage more physical activity among older adults. Innovative programs are emerging to provide age-friendly transport services for older adults, but lack of easy access to public transport is an area needing further improvement.


In 2012, Norway introduced its national walking strategy, the first of its kind in the world. The government promotes walking for its multifold benefits related to climate change, community building, and public health,<sup>35</sup> and incorporates walking into its transport-related effort to support active aging.<sup>36</sup> To implement the strategy at the local level, in 2014, the central government released guidance for municipalities to develop strategies for walking and to construct walking-friendly footpaths and facilities.<sup>37</sup> So far, a number of both large and small cities have established their own walking strategies, with the city of Kristiansand developing a walking strategy specifically for older adults.<sup>38</sup> As of 2016, 147 kilometers of new foot and bike paths along main roads had been built—84 percent of the target the government set for 2014 to 2017.<sup>39</sup>

While the walking strategy is aimed at enabling older adults to walk safely and more frequently, public transportation remains an important mobility tool. However, frail older adults tend to have difficulty using it. According to a study by the Institute of Transport Economics, 48 percent of people ages 85 to 89 and 63 percent of those 90 and older have trouble using public transportation due to health issues.<sup>40</sup> A special transport service—also called the TT-service—is available for people who are unable to use conventional public transport. Recipients are provided with a predetermined number of taxi rides free of charge, with the number varying by municipality (for example, in Oslo, the number is currently 70 trips per year).<sup>41</sup> However, most older adults are unaware of the TT-service. Only 15 percent of older adults benefit from the service, and of those only 30 percent feel it satisfies their transport needs.<sup>42</sup>

Experiments are underway to find new mobility solutions. In September 2017, Oslo municipality started a pilot project called Age-friendly Transport in Norde Aker District in cooperation with the publicly owned transport company Ruter. Age-friendly Transport is a door-to-door minibus service for adults age 67 years or older who can preorder the service and pay the normal discounted bus fare.<sup>43</sup> The drivers have received special training and are familiar with the needs of older passengers, and the vehicles have been adapted to accommodate both walkers and wheelchairs.<sup>44</sup>

The ease of use and low-cost nature of the service mean that older adults do not have to weigh current traveling needs against future needs the way they do when using the TT-service. The program has been well received among older adults, and there is strong interest from other districts to replicate it. “The response has been just staggering. It is obvious we have really met a need here. The service does not only meet the needs of people going from point A to point B, but the bus itself has also become a meeting place. The oldest user we have is 104 years old. She had not ventured outside of the nursing home for several years, but with the new service, she felt confident enough to go out and explore her own city,” said Anne Berit Rafoss, Special Advisor of Oslo City Council.<sup>45</sup>

Nevertheless, public transport remains the primary barrier to older adults’ mobility and an area needing further improvement. With Norway’s low population density<sup>46</sup> and an elongated, mountainous topography, building an extensive, easily reachable transport network represents a major challenge. Common complaints by older adults include long distances to bus stops and train stations, infrequent service, and the lack of rest opportunities on the way to the stop or while waiting. The situation deteriorates significantly outside major urban centers. According to a survey by the Institute of Transport Economics, only 2 percent of those residing in rural areas reported the frequency of public transport more than once per hour, compared with 85 percent of those residing in major cities.<sup>47</sup>



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Oslo City Council

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## Accessibility

Accessibility represents a significant challenge for older people in Norway. In a 2016 national survey, nearly one in three Norwegians age 67 and older reported a disability.<sup>48</sup> And a survey by the Institute of Transport Economics in 2016 shows that nearly half of respondents with disabilities reported difficulty in getting on and off transit vehicles and the existence of too many physical obstacles at bus stops and train stations.<sup>49</sup> As of 2016, 9 percent of nursing homes, 15 percent of commercial

buildings, and 21 percent of cultural venues were still not accessible to people with disabilities.<sup>50</sup>

Norway introduced its Anti-Discrimination and Accessibility Act in 2008, which was its first disability-specific, nationwide non-discrimination law. The Act establishes inaccessibility as a matter of discrimination, including in the built environment, transportation, and ICT. It requires the application of universal design to ensure those with disabilities achieve full participation and equality.

However, implementation has been uneven. As of 2014, only 45 percent of municipal authorities had a plan for universal design. While Oslo has updated its bus and subway systems to be universally accessible,<sup>51</sup> bus stops in rural areas are generally subpar—very often only a sign or a shed. In addition, although new transport vehicles and building facilities comply with universal design, existing facilities have not been retrofitted.

Residential housing is one of the areas with the most acute accessibility challenge. Most of the existing residential housing stock, particularly those spaces inhabited by older residents, tend to be older and are not adapted to their needs. While older adults can downsize and move into smaller housing units—such as apartments—that have already been made accessible, the majority stay at their current dwellings and few have undertaken renovation. Over the period from 2009 to 2015, only 20 percent of people ages 50 to 71 had moved,<sup>52</sup> either

because they lacked the means to buy a new home or because they were unwilling to take on the financial risk.

To encourage older adults to adapt their dwellings to their changing needs and support aging at home, the “Husbanken,” or Norwegian State Housing Bank, provides means-tested grants, low-rate loans, or a combination of both to those in need of home renovations, prioritizing households with older adults.<sup>53</sup> Unfortunately, the loans are underutilized, and knowledge of their existence is low. One study found that less than half of the funds available were utilized in 2012, and only 61 percent of municipalities advertised the subsidies to their residents. Furthermore, awareness of the service is very low among professional, home-based caregivers who are in the best position to inform eligible older adults of the opportunity.<sup>54</sup>

Financial support alone is also insufficient. Technical knowledge on how to renovate a house is necessary, and so is knowledge of tailored solutions and technologies suited to the needs of older adults. Relevant information is available but is provided by different offices, such as the municipal agency for planning and building services and local offices of the National Labor and Welfare Administration (NAV).<sup>55</sup>

One innovative project that aims to address these barriers emerged out of the municipality of Lindås. In 2013, the local government began building an interdepartmental housing team made up of civil servants with complementary



competencies—including a physiotherapist, a construction expert, and an economist. The project aims to ensure users will not have to navigate a complex bureaucracy themselves, but will have one point of contact to address their full spectrum of housing needs. Per an individual's request, the team will perform a free home visit to assess needs and then work with the resident to come up with solutions for improving the accessibility of the home, including available financial instruments such as the aforementioned renovation grants and loans from the State Housing Bank.

“A key underlying principle of the team's work is to promote user participation and avoid intrusiveness. Spending the modest sum of NOK 40,000 (USD 4,800) on renovations that allow older adults to live at home longer will have paid for itself within one and a half months, considering the high cost of institutionalized care,” said Svein H. Gjerstad, Housing Councilor, Lindås Municipality.<sup>56</sup>

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### **Age-Friendly Cities and Communities**

Prior to the central government's More Years–More Opportunities strategy for an age-friendly society in 2016, some municipalities had already started to promote active aging. The city of Oslo, which is projected to have twice as many residents age 67 and older by 2040, is the leader in this area.<sup>57</sup> Oslo became the first Norwegian city to join the World Health

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Organization's (WHO's) Global Network for Age-Friendly Cities and Communities in 2014. Since then, it has undertaken projects in Oslo, including assigning Nordre Aker District as the project's pilot location. Based on this experience, it released the first Action Plan for an Age-friendly City in 2017. The Plan outlines a comprehensive package of measures, ranging from improving the accessibility of walking paths to offering dementia training to people working in the transport industry, to ensuring the Senior Council's involvement early in relevant policy processes.<sup>58</sup> The municipality earmarked NOK 10 million (USD 1.2 million) in both 2017 and 2018 for the Plan and is currently working on its 2019 budget.<sup>59</sup>



**“The project demonstrated how older adults can be a great resource. The participants were very good informants, able to produce valuable, actionable data. It reveals simple and cost-effective interventions can nonetheless have significant impact on the older group, such as decreasing distances between benches on certain paths and improving lighting on dark sidewalks.”**

– GURI METTE VESTSBY, researcher at Oslo Metropolitan University

Oslo’s effort is built on the philosophy that older adults are a valuable resource, and older adults have been empowered and engaged in the process of identifying issues and developing solutions. One innovative project is “Seniortrakk” (“Senior Steps”), conducted in Sagene District by the Norwegian Institute for Urban and Regional Research in the spring of 2017 as part of a broader research project commissioned by the Directorate of Health. The project created user-generated geospatial data by outfitting older participants with an app-

based platform that allowed them to plot geotagged data on both the negative and positive experiences they encountered when traversing their urban environment. The findings—further bolstered by dialogue workshops and surveys—underscored the importance of the link between spatial mobility and social well-being, and created data for urban planners.<sup>60</sup>

“The project demonstrated how older adults can be a great resource. The participants were very good informants, able to produce valuable, actionable data. It reveals simple and cost-effective interventions can nonetheless have significant impact on the older group, such as decreasing distances between benches on certain paths and improving lighting on dark sidewalks,” said Guri Mette Vestsby, the researcher at Oslo Metropolitan University who conducted the study.<sup>61</sup> Following the study, Sagene District received funding from Oslo’s age-friendly city budget to address those uncovered needs, such as increasing rest places. It also plans to repeat the mapping project using the valuable knowledge obtained from the first one.<sup>62</sup> Other districts in Oslo, such as Ullern, are also considering conducting a similar project.

# Productive Opportunity

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Norway stands out globally with a highly educated, relatively affluent, older population that chooses to remain productively engaged at among the highest rates in the world.

Since the 2000s, the government has taken a series of substantial actions, including removing financial disincentives in the pension system, introducing a flexible retirement scheme, and promoting inclusive working environments. Taken together, these efforts have contributed to the steady increase in older adults' labor force participation to levels found only in countries grappling with late-life poverty. The country is working to continuously improve, with the focus now turning to strengthening the employability of older workers and eliminating age discrimination.

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## Labor Force Participation

In general, older adults in Norway are more active in the workforce than their peers in other countries. As of 2017, the labor force participation (LFP) rate of Norwegians age 65 or older was 18.6 percent, well above the OECD average of 14.8 percent and exceeding all Nordic countries except Iceland.<sup>63</sup> The country has one of the lowest older-age poverty rates within OECD countries partly thanks to its wide-ranging social safety net.<sup>64</sup> This sets Norway apart from other countries with high labor participation rates, where extending working life is associated with high levels of poverty.

According to the 2017 Senior Policy Barometer, when asked “Are you looking forward to going to work?” 79 percent of workers age 60 or older responded “Yes, always,” compared with 66 percent of the total population.<sup>65</sup> Good working environments, friendly colleagues and supervisors, quality of life benefits, and a feeling of purpose are among the most important factors motivating older workers, outweighing financial necessity (Figure 4).<sup>66</sup> “Some have to work for economic reasons, but on the whole, older adults in Norway seem to work because they want to and have the opportunity to work,” said Tove Midtsundstad, Research Professor at Fafo Institute for Labour and Social Research.<sup>67</sup>

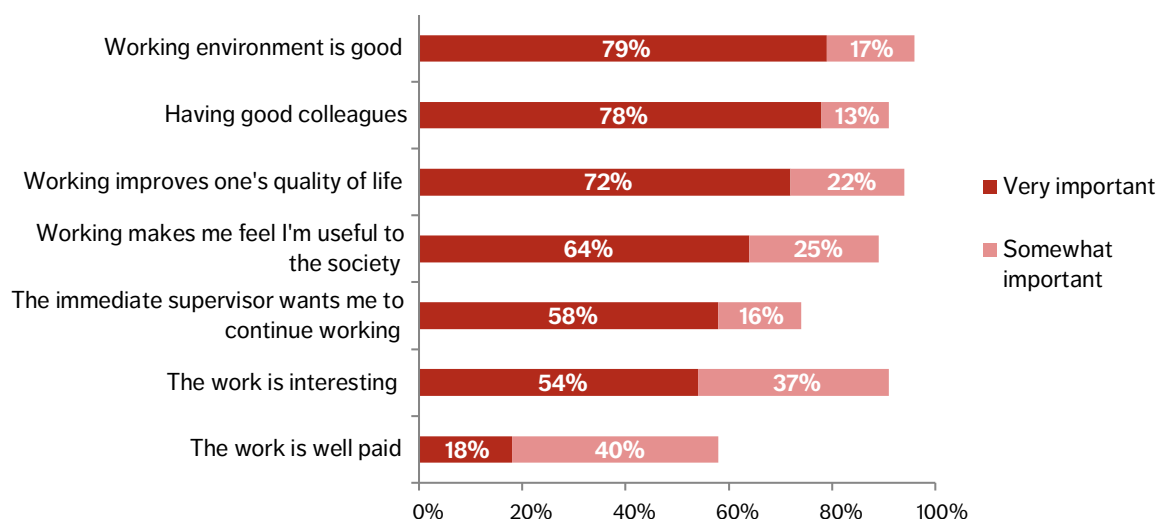
Consistently above the OECD average, Norway’s LFP rate has also steadily

increased over time, growing by two-thirds since the year 2000.<sup>68</sup> “Better health and higher education of the older population are important underlying drivers for the LFP increase,”<sup>69</sup> said Midtsundstad. As of 2016, Norwegians ages 60 to 64 were expected to live another 19 years in good health, an extension of two years since 2000,<sup>70</sup> and 31 percent of those ages 55 to 74 had tertiary education, compared with 20 percent in 2004.<sup>71</sup> This growth has been facilitated by government policies seeking to achieve a sustainable pension system holistically, removing disincentives in the pension system, and building a supportive workplace. As such, the median desired retirement age climbed to 66 years in 2017 after hitting an all-time low of 61 years in 2003.<sup>72</sup>

Despite the desire among the older population to work, ageism remains an obstacle. According to the 2017 Senior Policy Barometer survey released by the Center for Senior Policy, while 97 percent of managers prefer to recruit experienced workers, only 60 to 70 percent expressed a preference for hiring older workers. The age at which employers would be hesitant to invite an otherwise qualified applicant to a job interview is 58.5 years. Age discrimination does not only exist in hiring but also in promotion and training. More than half of the respondents to the 2017 survey reported having observed older colleagues being bypassed when new technology was introduced in the workplace.<sup>73</sup>



**Figure 4. Responses from individuals above age 62 to the question “How important are the following reasons for you to continue working even after you have gained the right to a pension?” (In percentage)**



Source: Senior Policy Barometer 2017

In addition, although there is no mandatory retirement age in Norway,<sup>74</sup> the Working Environment Act sets the age limit for employment protection at 72 years old and allows for a lower limit at 70 years old if company guidelines are clear and consistent. Employers can terminate their employment contract with an employee beyond age 72 without cause.<sup>75</sup> While studies are being conducted to determine the impact on employment, some experts believe the removal of the age limit alone would send a positive message.<sup>76</sup>

### Overhauling the Pension System

Norway offers a model for countries seeking to reform their pension system. The process, which started in the early 2000s, involved careful study of possible solutions as well as negotiations among political parties, trade unions, and employer associations. The eventual 2011 reform was built upon an open and consensual legislative process and included two major changes to boost incentives for older employees—introducing a flexible retirement scheme for those ages

62 to 75 and tightening the link between earnings and pension benefits.

The most important component of the Norwegian pension system is the National Insurance Scheme (NIS), which consists of a universal basic pension and a supplementary earnings-related pension. Prior to the pension reform, the normal pensionable age for NIS was 67, but most employees were covered by a contractual early retirement scheme called “Avtalefestet pensjon” (AFP).<sup>77</sup> These workers could retire at age 62 while receiving the AFP pension until age 67, when they were eligible for the NIS pension. The AFP pension encouraged voluntary early retirement, as pension benefits from age 62 were the same as they would have been had the worker continued working until age 67. Meanwhile, a strict earnings-tested system penalized those who wanted to work while earning retirement benefits.<sup>78</sup>

In response, a flexible retirement scheme between ages 62 and 75 was introduced to pensioners in 2011, abolishing the earnings test and allowing older people to combine the NIS pension, the AFP pension, and working. Under the new scheme, all individuals can claim their NIS pension at age 62, in full or partial amounts, and are not penalized for continuing to work. In addition, the benefit level rises each year a worker postpones receiving a pension until age 75.<sup>79</sup> As such, the reform in effect eliminates the original NIS pensionable age of 67 by giving older workers flexibility in choosing when

to claim their pensions—and disentangles their decision to claim pension benefits from the decision to withdraw from the labor market.<sup>80</sup>

The reform also established a closer link between earnings and pension benefits, offering a further incentive to continue working. Under the old NIS scheme, the earnings-related pension was calculated based only on the pension points earned in the 20 years with the highest income. However, under the new NIS scheme, benefits are calculated based on all income earned from ages 13 to 75 and are adjusted according to wages and life expectancy.<sup>81,82</sup>

The 2011 pension reform has been effective in boosting labor force participation of older adults in the private sector. The percentage of people who continue to work after claiming pension benefits between the ages of 62 to 66 has climbed from just 9 percent in 2010 to almost 50 percent in 2016.<sup>83</sup> Additionally, empirical study shows that the reform led to an increase of working hours by 30 percent to 40 percent among people ages 63 to 64.<sup>84</sup>

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### **Building an Inclusive Working Environment**

In parallel with the pension reform, the government has engaged in complementary efforts to promote inclusive working environments that attract and enable older adults' participation. The primary vehicle for this policy push is an initiative built on

the tripartite agreement “Letter of Intent regarding a More Inclusive More Working Life” (IA Agreement), first signed in October 2001.

The initiative was a response to the high sickness, absence, and disability benefit claims—along with the declining real retirement age—over the prior decade,<sup>85</sup> which had fueled concerns about the financial sustainability of the system.<sup>86</sup> Led by the government, a negotiation was carried out with nine major employer and employee organizations. All the parties acknowledged that remaining active promotes good health and that early implementation of active measures could prevent withdrawal from work, reaching a consensus on a framework of objectives and actions to improve the working environment.<sup>87</sup>

Since the first trial period from 2001 to 2005, the agreement has been extended several times, most recently for the period from 2014 to 2018. From the very beginning, prolonging working life has been one of the three objectives of the IA Agreement, in addition to reducing sick leave and securing employment of people with disabilities. In particular, the latest agreement aims to extend time in active employment after the age of 50 by 12 months, using 2009 as a baseline.<sup>88</sup>

The IA enterprise certification is voluntary. Once in the program, companies must comply with the requirements specified in the IA Agreement. Participating companies sign a cooperation agreement

with a local working life center of the NAV and employee representatives in the enterprise. The enterprise agrees to identify problematic issues in the workplace and set explicit goals and strategies with clear metrics to measure their effectiveness. The strategies, measures, and tools chosen by the enterprise must be made known and put into use by the company’s managers and employees.<sup>89</sup> From 2006, it also became mandatory to formulate an explicit senior policy for the company.

Special benefits are provided to participant enterprises to incentivize their participation. An official status as an “IA enterprise” is awarded, which serves to bolster the enterprise’s corporate social responsibility standing and to attract job seekers who are conscious about work-life balance and the general working environment. Additional benefits include:

- Assigned contact person at NAV’s working life center, who will offer customized support and advice;
- Subsidies from NAV for additional expenses associated with the effort; and
- Extended use of self-certification, which facilitates sick leave.<sup>90</sup>

The initiative is well-received among enterprises. As of 2013, nearly all public sector employers had signed the IA Agreement, and 76 percent of these had ongoing senior-related measures. In the private sector, 37 percent reported to have pro-retention programs for employees older than 62.<sup>91</sup> The most common measures

include extra days off, reduced working hours (with or without wage reductions), bonuses, less strenuous work tasks, and general workplace adaptations.<sup>92</sup>

The IA initiative is on track to meet its goals. As of 2016, expected years of active employment after the age of 50 was 11.8 years, a 0.9-year increase from the 2009 level (only 0.1 year short of the target) and a 22 percent increase since the introduction of the IA Agreement in 2001.<sup>93</sup> It's estimated that one year's extended workforce participation for all Norwegians age 50 and above will lead to annual economic growth of NOK 28 to 30 billion (USD 3.3 to 3.6 billion).<sup>94</sup>

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## Employability and Job Placement

Rapid technological development, coupled with Norway's economic diversification away from oil-related businesses, has led to a shift of in-demand skills, disadvantaging older workers and making skills training increasingly important to their employability. "Some industries and professions will decline significantly while new types of jobs emerge. People will likely need to change jobs more often and to update their skills or take on new education. To enable older workers to remain in the workforce longer, it's important to ensure people's access to skill training throughout the lifespan, even for those having passed 70 years old," said Ole Christian Lien, Head of Section at NAV.<sup>95</sup>


The government has realized the urgency of this issue, in 2017 releasing the Strategy for Skills Policy 2017-2021, aimed at enhancing the country's economic competitiveness. It developed the Strategy by working with employer's associations, trade unions, volunteer and adult learning organizations. This resulted in agreement on three priority areas:

- Contributing to making informed choices for individuals and for society;
- Promoting learning in the workplace and effective use of skills; and
- Enhancing skills among adults who are left outside the workforce.<sup>96</sup>

To achieve these broad goals and general guidelines, concrete proposals are now being developed by Skills Norway, the Norwegian agency for lifelong learning. These proposals warrant watching to assess how they will allow for skills training for older adults.

Job placement represents another area that needs a more robust policy response. In Norway, every job seeker, regardless of age, is entitled to assistance from NAV's local offices. However, NAV has few programs or services tailored specifically to older job seekers. As of 2017, people age 60 and older accounted for only 2 percent of those who have received career services from NAV.<sup>97</sup> Today there is no effort to address this issue. Aud Kvalbein, former councilwoman of Oslo, suggested expanding the function of Senior Centers beyond being simply a





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– OLE CHRISTIAN LIEN, Head of Section, NAV

socialization venue to providing training and employment assistance, although she notes, “how to attract younger older adults to visit senior centers could be a challenge, as they often see senior centers for those in their 80s.”<sup>98</sup>

# Technological Engagement

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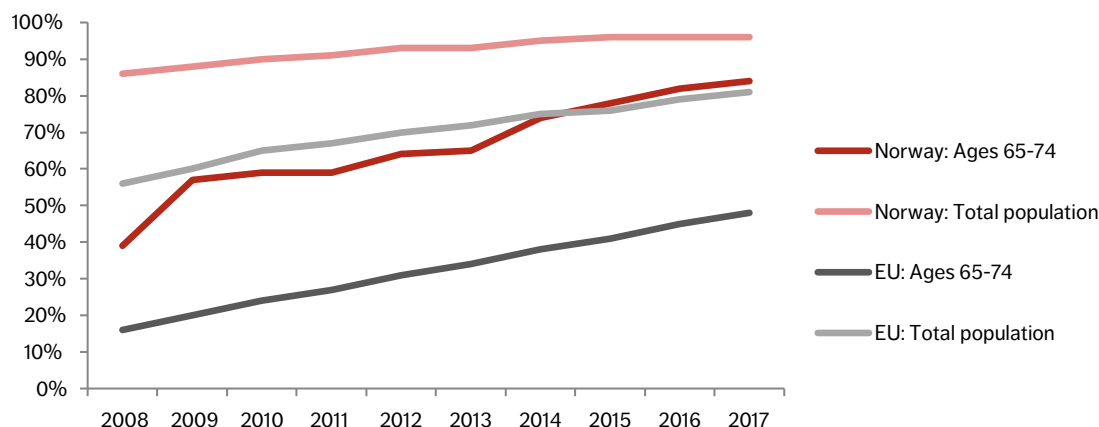
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Health Care  
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Norway has an unmatched competitive advantage in harnessing the power of digital technology to build a prosperous aging society.

It holds fourth place on the World Economic Forum’s Networked Readiness Index (after Singapore, Finland, and Sweden),<sup>99</sup> and Norwegians are among the most technologically savvy people in the world. As such, the government has been keen to incorporate the development of welfare technology—including ICT-based solutions for aging—into its attempts to identify new growth engines, seeing a tremendous business opportunity in the global “silver economy.” Numerous innovative technology solutions have emerged and are being tested, but achieving scale remains a challenge. A world leader in e-Governance,<sup>100</sup> the Norwegian government is conscious of the growing risk of digital exclusion and has made strides in recent years to strengthen

**Figure 5. Percentage of Internet Users (At Least Once a Week)**



Source: Eurostat 2018

Norwegian society's capacity to support digital competence and to improve online accessibility.

### Digital Diffusion and Inclusion

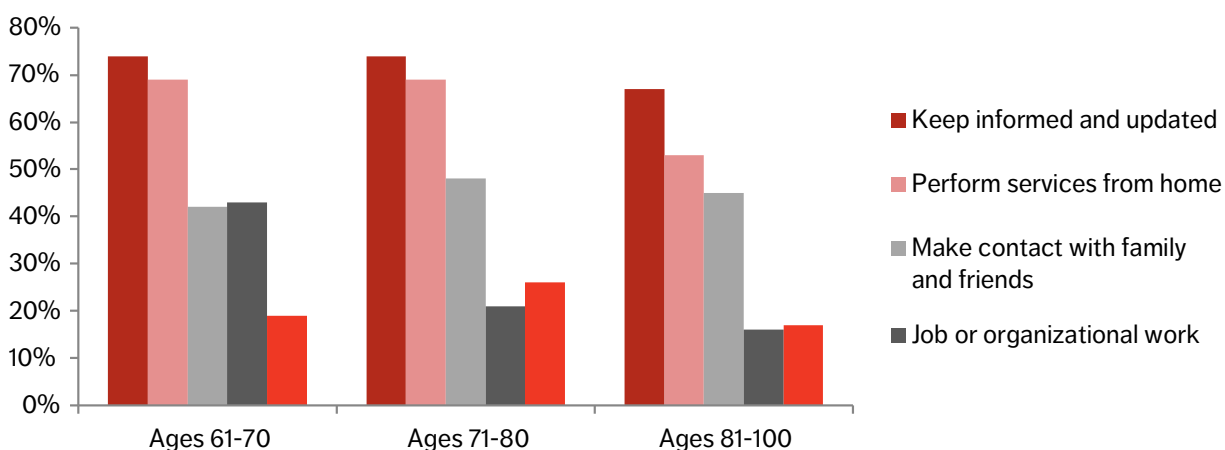
Norway has one of the most technologically savvy older populations in Europe. As of 2017, 82 percent of Norwegians ages 65 to 74 used the internet at least once a week. They are also catching up with the younger population in adopting digital technology. The gap in internet usage between those ages 65 to 74 and the total population has shrunk by 75 percent since 2008 (Figure 5).<sup>101</sup>

As in other countries, the aging of tech-savvy generations is driving increased digital penetration among older adults,

but the Norwegian government's focus on digital inclusiveness has also played an important role, beginning with data collection. Although Statistics Norway covers the topic of internet usage in its annual Omnibus survey, it fails to capture the entire older population (excluding those 80 and older). Realizing the older population is among the most vulnerable to digital exclusion, particularly the oldest segment, in 2014 the Norwegian Directorate for Children, Youth and Family Affairs commissioned the National Institute for Consumer Research (SIFO) to conduct a survey targeting people ages 61 to 100.

The survey revealed critical insights that should enable a better understanding of older adults' motivations and obstacles to increasing their digital skills and of areas in which these individuals need support. For example, while the percentage of internet

**Figure 6. Reasons for Internet Usage**



Source: Sletteameås, D. (2014)

users drops by age, accessing information is consistently the most important reason to use the internet; contacting family and friends is of a similar level of importance across age groups (Figure 6).<sup>102</sup>

### Improving Digital Competence

As society becomes increasingly digitized, the Norwegian government is aware of the rising risk of digital exclusion and has moved in recent years to enhance digital competence of all citizens. Once it adopted a digital-by-default principle<sup>103</sup> in 2012 to improve the provision of public services and to cut administrative costs by shifting public services online, extending digital access became imperative.<sup>104</sup> To

this end, the government has focused on leveraging existing resources and initiatives, strengthening their capacity, and encouraging the establishment of permanent systems or structures at the municipal level to incorporate digital competence enhancement into regular public services.

Led by the KMD, the 2015-2017 National Program for Digital Participation (Digidel 2017) was aimed at facilitating knowledge sharing and cooperation between public enterprises, NGOs, and ICT businesses engaged in digital training.<sup>105</sup> The program document particularly cited findings from the 2014 SIFO survey on older adults' ICT usage, highlighting older adults as a target group.

The Digidel 2017 program sought to strengthen and scale up existing training programs through two primary measures:

- Subsidize digital competence programs to enhance their capacity. During the two-year period, it granted a total of NOK 4 million (USD 477,000) to nearly 70 municipalities, libraries, and organizations that provide digital training, to help build their capacity to provide services for digital competence improvement.<sup>106</sup>
- Develop and gather learning modules that are made available to the public for free, helping lower the threshold for organizations or individuals to start training programs.<sup>107</sup>

Under the Digidel program, the KMD and the KS joined forces to find a way to give citizens who had little or no digital skills easy access to free digital competence services in their municipalities. The effort led to a follow-up project called Digihelper in 2017. The project collected and systematized existing practices along with experiences and made general recommendations to municipalities that are in the process of establishing or further developing their services for improving citizens' basic digital skills. The KMD also allocated an annual fund of NOK 3 million (USD 358,000) in 2017 and 2018 to provide financial aid to applicant municipalities.<sup>108</sup> One prominent example is the Bergen Citizen Service Center (Box 1).<sup>109</sup>

**“There is a myth that a digital literacy gap is a temporary issue that will disappear once ‘digital natives’ grow in age. The reality is that every generation has a certain number of people who lack basic digital skills for a variety of reasons. Therefore, short-term political effort is not enough. What is needed is a sustained system that provides guidance service to accommodate various needs.”**

– GJERTRUD STRAND SANDERØD, Advisor, KS

“There is a myth that a digital literacy gap is a temporary issue that will disappear once ‘digital natives’ grow in age. The reality is that every generation has a certain number of people who lack basic digital skills for a variety of reasons. Moreover, just because someone is proficient in certain social media platforms doesn’t mean they necessarily know how to fill in their tax forms online. Therefore, short-term political effort is not enough. What is needed is a sustained system that provides guidance service to accommodate various needs,” said Gjertrud Strand Sanderød, an advisor at KS.<sup>110</sup>



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### **Box 1. The Bergen Citizen Service Center**

The Bergen Citizen Service Center provides an interesting model to promote digital inclusiveness in an era of growing e-governance. Launched in early 2017, the Center provides digital training and collects feedback to improve the municipality's online digital services. The Center's primary service is to offer a 45-minute, free, one-on-one tutorial on how to use online public services to anyone who requests it. While the Center also partners with local libraries to hold traditional group-based training sessions, one-on-one sessions have proven to suit older adults better given the great variance in their skill levels and needs. The tutoring staff is also well-positioned to observe flaws in user experience and web design that may deter older adults and others. Regular meetings are held between Center staff and IT developers to discuss issues and solutions to improve web accessibility. Moving forward, Bergen will partner with volunteer organizations and home care service providers to reach out to vulnerable groups who need the service but may be unaware of it. from member organizations.

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### **ICT Accessibility**

In addition to enhancing individuals' digital competence, the government is also focused on ensuring that digital content and services are accessible to everyone, including those with disabilities. According to the SIFO's 2014 survey on ICT usage among older adults, 22 percent of respondents had at least one type of disability, and 14 percent of that number reported the disability prevents their full use of the internet and digital equipment. The percentages were even higher among those ages 81 to 100, at 32 percent and 25 percent, respectively.<sup>111</sup>

Various digital barriers also exist in websites and devices. According to a 2015 government report that evaluated approximately 300 public and private websites,<sup>112</sup> lack of text alternatives for images and diagrams represents the biggest gap, and poor website design also prevents easy navigation. The worst performers are banking, finance, and media websites, which are also the most used sites by older adults. Fifty-eight percent of older adults read news daily, and 56 percent use internet banking weekly.<sup>113</sup> A 2015 study examining nearly 40 self-service machines in Oslo found major user experience design flaws. The majority did not have correct screen and numeric keyboard angles for ease of use.<sup>114</sup>

Norway introduced the Regulation for Universal Design of ICT Solutions in 2013, pursuant to the 2008 Discrimination and Accessibility Act (replaced by The Equality and Anti-Discrimination Act in 2018).<sup>115</sup> The Regulation covers internet-based solutions and devices<sup>116</sup> and requires compliance by new ICT solutions starting from July 2014 and by existing ICT solutions from January 2021. Norway is more stringent than other countries, requiring that both public and private sector websites follow the latest international standard of Web Content Accessibility Guidelines (WCAG 2.0), one of the few countries to require this from private companies.<sup>117</sup>

The Regulation also establishes an enforcement mechanism. It authorizes the Agency for Public Management and e-Government (Difi) to order an entity to introduce measures to fulfill accessibility requirements and set deadlines for compliance with the order, as well as to impose penalties should they not be met.<sup>118</sup> To enforce the regulation, Difi conducts audits on websites of great impact to people's life—such as those of airlines, news media, and municipal governments—and releases the assessment to the public, outlining areas for improvement if applicable. This approach motivates entities to improve ICT accessibility proactively, as a negative assessment can damage their reputation.<sup>119</sup> Since 2015, Difi has conducted close to 30 audits,<sup>120</sup> and in 2017, it released guidelines explaining the indicators and rules it uses for assessment, to enable self-testing.<sup>121</sup>

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**“In the Norwegian welfare technology market, the public sector plays the roles of buyers, rule-makers, and [often] innovators.”**

– ARILD KRISTENSEN, CEO,  
Norwegian Smart Care Cluster

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## Welfare Technology Development

The Norwegian government is looking to digital technology to generate improved outcomes for its society in three key areas:

- To harness the power of ICT to support active aging and improve quality of life;
- To reduce financial strains on the public health system; and
- To enhance the economy's industrial competitiveness.

ICT solutions for aging are generally embedded in the concept of welfare technology in Norway, which has a broad scope covering both digital and non-digital technologies. A 2015 study indicated that by deploying appropriate welfare technology, each municipality—which is responsible for long-term care provision—can save an average of NOK 55 million (USD 6.6 million) annually through the year 2040.<sup>122</sup> Because much of welfare technology is

health related, the government's push also aligns with its attempt to cultivate the health industry<sup>123</sup> as a new source of economic growth, with particular interest in the international market for health tech. As of 2017, the export of health tech and life science products (including ICT-based health tech) accounted for 18 percent of the health industry's total revenue of NOK 142 billion (USD 17 billion).<sup>124</sup>

Although still in its infancy, the welfare technology market has drawn growing interest from the private sector. "Just five years ago, when we attended a health technology network event in Bergen, one of Norway's largest cities, we were one of the only two tech companies there, and the others were either design or consultancy companies or the like. Today, you see more tech players," said Jon Ingar Kjenes, CEO of Motitech.<sup>125</sup> However, Arild Kristensen, CEO of Norwegian Smart Care Cluster, cautions, "the market is still immature, and it's underdeveloped on both [supply and demand] sides."<sup>126</sup>

The public sector is a driving force in the country's welfare technology market through the publicly funded health care system. There is a centralized procurement strategy in which each county has a "Hjelpemiddelsentralen," or Assistive Technology Center, that decides which products to buy and distribute to residents—free of charge—through a needs-based application system. In addition, municipalities are responsible for providing long-term care, and they own the majority of nursing homes and home care

providers—which play an important role in either directly adopting the technology or promoting its use among older adults.<sup>127</sup> As a result, the largest share of demand for technology solutions comes not directly from older adults themselves but from the public sector. "In the Norwegian welfare technology market, the public sector plays the roles of buyer, rule-maker, and [often] innovator," said Arild Kristensen, CEO of Norwegian Smart Care Cluster.<sup>128</sup>

While most municipalities are keen to explore the potential of technology for the public interest, the effort has, to a large extent, been limited to pilot projects within municipalities and has so far seen only a handful of examples of large-scale implementation.<sup>129</sup> A lack of open technical standards creates the challenge of interoperability, preventing solutions that are proven to be effective in one region from being replicated in others.<sup>130</sup>

Like in many countries, financial incentives are being offered to promote research and development and private investment in welfare technology. The private sector has access to multiple public funding schemes, mainly managed by Innovation Norway and the Research Council of Norway. However, what is notable is Norway's use of holistic approaches that address barriers in both the supply (i.e., businesses and innovators) and demand (i.e., the public sector) sides, with consistent emphasis on needs-driven innovation, cross-sectoral cooperation, and knowledge sharing.

The government believes that meaningful innovation should be based on identification and understanding of users' needs and associated market potential. This philosophy is demonstrated in the InnoMed initiative, established in the 1990s. Led by the Directorate of Health, InnoMed is aimed at promoting needs-driven innovation<sup>131</sup> in the health care sector, focusing its support on the pre-project phase.

"Our main operation mode is to stay in continuous contact with the health care sector, through which we can learn and observe various needs. We'll then establish a 'pre-project' and through that project conduct interviews with users and map existing solutions. In collaboration with users, we will later develop ideas and concepts for novel solutions," said Espen Aspnes, Senior Advisor at InnoMed.<sup>132</sup>

Using this model, InnoMed helps entrepreneurs on a case-by-case basis to identify potential market opportunities. It also conducts its own thematic research and disseminates the knowledge to encourage innovation by all stakeholders. The approach has been successful. From 2006 to 2016, InnoMed completed 104 pre-projects. Sixty percent of them came to fruition, resulting in the implementation of significant ideas, and 40 percent were ICT-based solutions.<sup>133</sup>

While InnoMed is focused on supporting the private sector, there is a growing effort to promote the implementation of welfare technology solutions in municipalities. First introduced in 2013, the National

Welfare Technology Program was built on collaboration between central government agencies, including the Directorate of Health and the Directorate of e-Health, and the KS. Since the Program's inception, a budget of NOK 20 to 30 million (USD 2.4 to 3.6 million) has been allocated each year to support municipalities' efforts in implementing welfare technology solutions. Funding criteria are based on three principles intended to ensure optimal outcomes:

- Sustained political commitment to adopting welfare technology that is cemented in municipal governing documents;
- Adherence to national technical standards and infrastructure, and ensuring user participation throughout the project phases; and
- Prioritizing projects that embody cooperation between municipalities while accounting for geographical equity to ensure grant recipients are not concentrated regionally.<sup>134</sup>

Under the Program, the Directorate of Health also works to identify effective solutions and disseminate best practices. It has released two reports since 2016 that showcase the benefits of welfare technology and offer recommendations. The Program has been successful. One case study focuses on the use of GPS trackers, small devices carried by people with dementia to help locate their whereabouts. As of 2016, at least 38 projects were undertaken by municipalities to implement



**“There is tremendous potential for increased Nordic cooperation on innovation in the health and welfare technology sectors. The cooperation could help strengthen the competitive position of Nordic countries as a whole, facilitating our companies’ expansion in the global market.”**

– ESPEN ASPNES, Senior Advisor of InnoMed

the technology through their care service systems.<sup>135</sup>

Conscious of the small size of its domestic market, Norway aspires to expand into overseas markets by seeking international cooperation, particularly in the Nordic region. Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden) are facing the same demographic trends and share similarities in their social safety nets, their languages, and their cultures. As such,

technology and solutions developed for one country can be easily adapted to others in the region.

A long-standing mechanism for collaboration is the Nordic Welfare Center, part of the Nordic Council of Ministers, the intergovernmental cooperation body for the five Nordic countries. Established in 2008, the Center is tasked to disseminate knowledge on how member states can meet challenges to the sustainability of the Nordic welfare models. It has since conducted projects such as Connect-Collecting Nordic Best Practices within Welfare Technology, with special focus on later-stage implementation of technology solutions.<sup>136</sup> “There is tremendous potential for increased Nordic cooperation on innovation in the health and welfare technology sectors. The cooperation could help strengthen the competitive position of Nordic countries as a whole, facilitating our companies’ expansion in the global market,” said InnoMed’s Aspnes.<sup>137</sup>



# Health Care and Wellness

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Older Norwegian adults have among the highest life expectancies (LE) and healthy life expectancies (HALE) at the age of 60, in Europe,<sup>138</sup> thanks to a well-developed, universal health care system.

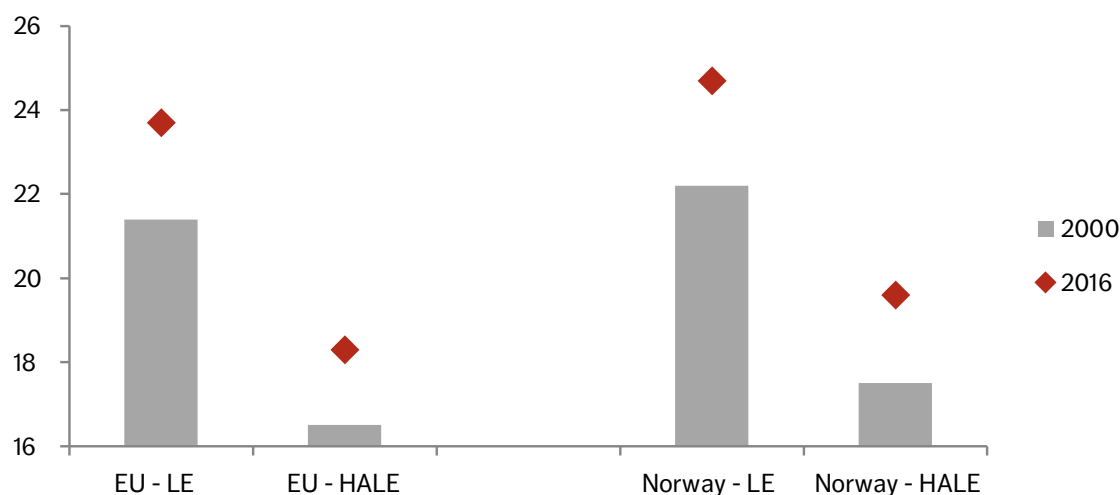
To adapt the system to demographic pressures and ensure its sustainability, the government has focused on coordinating care services provided by the state and municipalities, enhancing home-based services, and providing preventive care. Significant progress has been made, but informal care support and social awareness of dementia remain challenges.

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## Health Status and Health Care System

The lifespan and healthspan of Norwegians have seen greater gains than those in most European countries; although, as in most

**Figure 7. Life Expectancy and Healthy Life Expectancy at Age 60, 2000 vs. 2016, in Years**



**Source:** WHO Global Health Observatory data repository

countries, the gap is widening. Over the period from 2000 to 2016, LE of Norwegians age 60 increased by 2.5 years, and HALE by 2.1 years. As of 2016, an average person at age 60 was expected to live another 24.7 years, with 19.6 years in relatively good health (Figure 7).<sup>139</sup> However, the improvement in HALE falls behind that in LE. As in other countries, chronic diseases are the major health risks facing older adults. Heart disease, stroke, chronic obstructive pulmonary disease (COPD), Alzheimer's disease, and pneumonia are the top five causes of death among older Norwegians.<sup>140</sup> The number of older people with cancer has also more than doubled since 1975 and is expected to continue to grow.<sup>141</sup>

Norway's universal health care system provides easy access to affordable care services, and is largely funded by the government via a general tax. As of 2016, Norway had the fourth-highest health care expenditure per capita within the OECD.<sup>142</sup> Voluntary health care payment and out-of-pocket spending combined accounted for just 15 percent of the total, lower than any other OECD country.<sup>143</sup> Care services are also relatively accessible. Ninety percent of the population can reach a hospital with emergency rooms within one hour, although the share falls to 60 percent in the sparsely populated northern region.<sup>144</sup>

While the quality of care is high, long wait times are a persistent challenge. According to a study by the Commonwealth Fund, 28 percent of patients must wait at least two months for a specialist appointment and 15 percent had to wait four months or longer for elective surgery, both second highest only to Canada among the 11 select economies.<sup>145</sup> These long wait times for hospital treatment are associated with a high bed-occupancy rate of 80.4 percent in 2015, above the OECD average of 75.7 percent.<sup>146</sup>

Long wait times are partly a consequence of the fragmentation of the care system, as municipalities provide primary care and long-term care, while specialist care is administered directly by the Ministry of Health through state-owned hospitals<sup>147</sup> and four regional health care authorities.<sup>148</sup> To address this problem, the government introduced the Coordination Reform in 2012 to better coordinate services provided by hospitals and municipalities. Key measures include reducing unnecessary referrals by primary care doctors and hospital admissions, and prompting municipalities to take responsibility for providing follow-up care for patients once they are ready to be discharged from the hospitals.<sup>149,150</sup> A 2016 evaluation by the Research Council for Norway indicated that the Coordination Reform has helped improve public health and health care services.<sup>151</sup>

The government is also working to address the fragmentation of health care services and improve quality of care by promoting e-Health. In 2016, it introduced the National

e-Health Strategy and Action Plan 2017-2022 to promote a digitized, integrated health care system that empowers patients and allows for their easy access to health care services and improves the efficiency and quality of care delivery.<sup>152</sup> Following the principle of whatever can be solved nationally should be solved nationally, the government is aiming to build a common electronic health record (EHR), known as “one citizen—one health record”.

A well-developed e-Health system will particularly benefit patients with complicated health issues and care needs, including older adults. More than half of Norwegians ages 75 and older have four or more diseases that need treatment.<sup>153</sup> Polypharmacy is staggering among older adults, and it undermines their well-being. As of 2017, 58 percent of older adults on medication used more than five drugs, more than double the percentage for the population younger than age 65, and 23 percent of them were prescribed more than 10 different drugs during the year.<sup>154</sup> A centralized EHR could enable integrated care and ensure safer treatment. Moving forward, the Directorate of e-Health will evaluate the implementation process annually and adjust the goals and measures.

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## **Preventive Care and Health Promotion**

As the government endeavors to ensure the sustainability and quality of health care, it has placed greater emphasis on disease prevention and health promotion. In

January 2018, the new coalition government committed to “seek to ensure a high standard of public health through prevention wherever possible and through treatment when necessary.”<sup>155</sup> Particular success has been found in home-visit preventive care and nutrition improvement.

Preventive home visits have gained considerable popularity in Norway since 2000 and were available in one-quarter of all municipalities as of 2013, including the five most populous cities.<sup>156</sup> The city of Trondheim leads this effort with a team consisting of municipal care staff, a nurse, a physiotherapist, and a social worker, and this team pays a one-time home visit to residents when they turn 80. During a visit, health care professionals conduct a semistructured dialogue, covering a variety of subjects related to older adults’ health and wellness, including physical health, loneliness and depression, alcohol consumption, and fire hazards. The team also conducts preliminary health assessments, such as measuring walking speed and grip strength.<sup>157</sup>

According to Bodil Klungerbo, Section Head of Trondheim Senior Information Center, the service has three primary benefits:

- To gauge the health status of older adults and enable early intervention and avoid preventable deterioration in health;
- To inform older adults of available cultural, social, and health activities organized by the municipality and encourage their participation; and
- To collect valuable data of local older residents’ health status to inform policy development.

“During the busy daily life, it is easy to forget about the importance of prevention and taking care of one’s health. But in our experience, the chats we have with older adults tend to lead to a lot of self-reflection around the subject of health. This is one of the most beneficial and underrated aspects of the visitation,” said Klungerbo.<sup>158</sup>

Built on the experience in Trondheim and other municipalities, the Norwegian Directorate of Health published a set of guidelines and best practices in 2017 to further promote this effective model nationwide.<sup>159</sup>

Another area that has gained traction in recent years is improving older adults’ nutrition. The Norwegian Directorate of Health estimates that one-third of older patients in hospitals and recipients of municipal care services are malnourished or at risk of malnutrition.<sup>160</sup> Understanding malnutrition exposes older adults to greater health risks and creates greater demand for care services (and ultimately expense), so the government—municipalities in particular—has stepped up to improve nutrition for older adults.

Effective practices include creating communal dining places to promote healthy dietary habits, offering home-delivered meals to increase older adults’ access to good food, and developing menus together with older adults to accommodate their


preferences. One prominent example is the Gloppen Care Center in the Gloppen municipality. The Center's kitchen serves about 220 meals each day, including 90 delivered to older adults at home. The menu is developed with their clients and changes regularly. The service is well-received among older adults, and in 2017, the Center won the year's "Golden Meal Moments," awarded by the Ministry of Agriculture and Food.<sup>161</sup>

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### Home-Based Care

As of 2015, Norway's spending on LTC amounted to 2.5 percent of its GDP, fourth-highest among OECD countries (after the Netherlands, Sweden, and Denmark), with 66 percent of LTC recipients age 65 and older.<sup>162</sup> Municipalities are responsible for organizing and providing LTC based on a needs assessment, and every municipality has a high degree of freedom in deciding specific eligibility criteria and the level of care at home or in a care institution (e.g., nursing homes and residential care homes). As in the health care system, the public sector also dominates the LTC system. Only about 3 percent of nursing homes are private, and the percentage for home-based care is even lower.<sup>163</sup>

While specific LTC policy varies by municipalities, there is a consistent and increasing focus on improving home-based care to allow people to age in place. By doing so, municipalities intend to curtail the LTC expenditure, which grew at an annual



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– BODIL KLUNGERBO, Section Head of Trondheim Senior Information Center

rate of 4.2 percent over the 2005-2015 period.<sup>164</sup> The effort has helped drive up the share of older adults who receive LTC at home, which rose from 68 percent in 2001 to 71 percent in 2015.<sup>165</sup>

New models are also being developed to provide high-quality home-based care. One prominent example inspired by experiences in Denmark and Sweden is “everyday rehabilitation.” The care service targets older adults experiencing a decline in health and function and is tailored to their needs, empowering them to master their own lives and remain independent and self-reliant. “Everyday rehabilitation is perhaps the most important innovation in the care services by municipalities. At the core of the model lies the question, ‘What is the most important



thing for you in life right now?’ Based on patients’ answers, solutions and exercises are then developed, often combined with the use of assistive technology,” said Aspnes.<sup>166</sup>

“The model is based on changing the notion that older adults are to simply receive help. If they have suffered a loss of function, they should receive the kind of support that enables them to draw on their own resources [and experience]. Then they have a real chance at improving their functional ability,” agreed Kvalbein.<sup>167</sup>

Specific practices vary, but all are based on interdisciplinary collaboration. For example, in the District of St. Hanshaugen in Oslo, a multidisciplinary team of occupational therapists, physiotherapists, nurses, health professionals, and social workers provides everyday rehabilitation to people who are discharged from hospitals. The service demonstrated significant benefits for both users and care workers during the 2012-2013 pilot period. Among the 122 service recipients, 56 percent required no further care after the service ended and 36 percent needed less care than previously. Meanwhile, nursing homes in the district saw a decline in bed use, with 60 fewer being occupied, combined with a significant drop in sickness leave among care workers thanks to a reduced workload.<sup>168</sup> Given the tangible benefits, the model has gained traction in Norway. As of early 2015, more than 100 municipalities had introduced the everyday rehabilitation model and another 50 planned to launch it.<sup>169</sup>

**“The [everyday rehabilitation] model is based on changing the notion that older adults are to simply receive help. If they have suffered a loss of function ...they should receive the kind of support that enables them to draw on their own resources [and experience].”**

– AUD KVALBEIN, former councilwoman of the Municipality of Oslo

Informal caregiving represents an area where policy support falls short. Although Norway is one of the few European countries that does not legislatively require filial obligation, family members play an important role in supporting older adults, with one in six Norwegians caring for family members or friends. Of these informal caregivers, 25 percent provide care for more than 30 hours per week, and 27 percent have been caregiving for more than 15 years.<sup>170</sup> Municipalities are responsible for determining support for informal caregivers but vary greatly in degree of support. However, “it is not as well-developed as people want it to be,” said Svein Olav Daatland, Research Professor at Oslo Metropolitan University.<sup>171</sup> Because of this, as of October 2017, municipalities have been required to provide necessary support in the form of training, guidance, and respite

care for caregivers with particularly heavy care loads.

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## Institutionalized Care

Along with the increasing focus on home-based care, the government continues to improve service quality at residential care institutions, which accommodate one-third of total LTC recipients.<sup>172</sup> In particular, the government has been investing in building and renovating care facilities to ensure sufficient and quality services for users. According to the KS survey of municipalities, 60,000 housing units in nursing homes and residential care homes need to be replaced, renovated, or expanded to better accommodate their residents and growing demand.<sup>173</sup>

In response, since 2008, the central government has dedicated funding through the Norwegian State Housing Bank's grant scheme to support municipalities' investment in building and renovating 24-hour care spaces in nursing homes and residential care homes. Starting in 2014, it boosted support by raising state grants from 35 percent of facility investment costs to 50 percent. Since 2008, the Bank has invested almost NOK 24 billion (USD 2.86 billion) in 18,000 care spaces.<sup>174</sup>

Taking a proactive approach, the scheme emphasizes future-oriented design and incorporates it into the eligibility criteria:

- New care space should comply with universal design principles and, to ensure infrastructure investment is not rendered obsolete by rapid technological development, should be primed for deploying assistive technology.
- Given the rising prevalence of dementia, new care spaces should be adapted to accommodate people with dementia and cognitive decline; take the form of small-scale, shared flats incorporated into local communities; and have easy access to outdoor areas and public services.<sup>175</sup>

Interesting practices are also emerging to promote social engagement and psychological wellness of older adults living in residential care institutions. A leading player in this area is the non-profit foundation “Livsglede for Eldre” (LFE), which aims to create joy for older adults living in residential care institutions through its flagship program “Livsgledehem” (Joy-of-Life Home), a national certification scheme for residential care institutions.

The LFE certification program promotes the integration of care facilities and their residents into the local community. The idea originated in 2007 by nursing students in the city of Trondheim, who noticed a lack of focus on the cultural, social, and psychological well-being of older adults in nursing homes, and aspired to correct it. “There is an African proverb—‘It takes a village to raise a child.’ We believe it also takes an entire village [or community] for older adults to live a good life. A

nursing home and its residents should be incorporated into the community, not sealed off from it,” said Birgitte Brekke, General Secretary of LFE.<sup>176</sup> The students founded LFE and started a pilot project in 2008, in collaboration with the County Governor of Sør-Trøndelag and Trondheim. During the pilot project, a set of certification criteria was established and tested out in two local health and welfare centers in Trondheim. To receive the certification, a care institution must create a system to fulfill a set of criteria and incorporate it into its internal control. The criteria place emphasis on how well nursing homes facilitate older adults’ physical, cultural, and social activities.

LFE particularly promotes mutually beneficial arrangements between care institutions and the local community. One example is cooperation with local dog-trainer associations and nursing homes. In these cases, a nursing home will provide the association with an arena for training dogs and split the cost of training equipment. In turn, the dog-trainer association creates the opportunity for older adults to engage with the dogs and their trainers and spend more time outdoors.

Certified care institutions have reported positive changes after adopting the model, including decreases in older adults’ medication usage and higher motivation among the staff. To date, 126 residential care institutions have been certified. In addition, 170 high schools, 40 middle schools, more than 300 kindergartens, and

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**“There is an African proverb – ‘It takes a village to raise a child.’ We believe it also takes an entire village [or community] for older adults to live a good life. A nursing home and its residents should be incorporated into the community, not sealed from it.”**

– BIRGITTE BREKKE, General Secretary, LFE

numerous local associations participated as cooperating organizations. Its goal is for 50 percent of all municipalities to have certified residential care institutions by 2020.<sup>177,178,179</sup>

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## **Dementia Care**

As in other aged societies, the prevalence of dementia is growing in Norway. The percentage of people with dementia in the total population is expected to grow by 46 percent over the next two decades, and by 2037, 2 percent of all Norwegians will suffer from dementia.<sup>180</sup> The government estimates that the total number of people with dementia will likely double over the next 30 to 40 years.<sup>181</sup> Dementia care has long been an integral part of Norway’s health and care policies, and in recent years, the government has escalated its efforts

## Box 2. Green Care

Green Care offers an effective model for mobilizing stakeholders who are outside the health care sector to contribute to socially beneficial welfare services. Over 40 farms across Norway are currently providing daytime activity services for people with dementia. “What sets this model apart from the other daytime activities is the natural setting. A farm inherently allows for a certain versatility. For some people, it offers a return to a familiar environment, while for some others it can be a source of novel experiences. People can enjoy the peace in the nature here, while, if they want to, they can also participate in the bustling daily life of a farm—caring for animals, chopping wood, or working in the garden,” said Grete Grindal Patil, Associate Professor at Norwegian University of Life Sciences.

In practice, farmers are formally organized as a cooperative or non-profit community organization, and they enter a framework agreement with municipalities looking for daytime activity opportunities for people with dementia. “The participating farms are often led by individuals who demonstrate dual competencies—a combination of knowledge of agriculture and farming with some formal qualification in fields such as social work, health science, and education. These are social entrepreneurs who leverage the resources found both at the farms and in themselves,” said Patil.

to create a dementia-friendly environment where people with dementia are well cared for and integrated into the community.

In 2007, Norway introduced its first national strategy on dementia (known as Dementia Plan 2015), one of the first countries to do so. Because the first Plan successfully put dementia on the municipal agenda, in 2015 the government launched a second iteration: Dementia Plan 2020. Dementia Plan 2020 was built on evaluation of the previous plan’s implementation and inputs from various stakeholders, particularly people with dementia and their family

members. The Plan 2020 identifies six priority areas<sup>182</sup> and establishes a set of comprehensive long-term strategies and mid-term measures against them.<sup>183</sup>

The Plan 2020 places an emphasis on measures that can be taken before a person affected by dementia requires round-the-clock care. One such measure is the provision of daytime activity programs for people with dementia, which stimulate their physical activity and social participation and also provide some relief for family caregivers. Since 2012, the Norwegian Directorate of Health has been running

a grant scheme to fund municipal-level daytime activity services offered to people with dementia who live at home, with a budget of NOK 280.7 million (USD 33.4 million) in 2018.<sup>184</sup>

According to a 2014 national survey by the Directorate of Health, the number of persons with access to a day activity service had almost doubled since 2010-2011. During the same period, the percentage of municipalities that offer the services rose from 44 percent to 71 percent.<sup>185</sup> Interesting practices have also been developed, including a prominent model known as Green Care (Box 2).<sup>186</sup> The government is seeking to expand this effort and is currently drafting a proposal for an amendment to the Health and Care Services Act that would require municipalities to offer daytime activity services for those affected by dementia and living at home, starting in January 2020.

Nevertheless, stigma and taboo around dementia remain, and a significant effort has been made—mainly by NGOs—to raise social awareness. Two NGOs—the Norwegian Health Association and the Livsglede for Eldre—have partnered with public and private stakeholders to provide training to service professionals such as taxi drivers, bus drivers, and retail sales assistants. “The training courses are effective in improving service professionals’ knowledge about dementia and teaching skills to communicate in a friendly and helpful manner,” said Anne Marie Mork Rokstad, Associate Professor at Molde University College. However, Rokstad contends, “There is [still] lack of general understanding that one can live many good years with dementia. We need a push for a social attitude of inclusiveness and openness toward people with dementia.”<sup>187</sup>



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