The COVID-19 Long-Term Care situation in Denmark

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Last updated 29 May 2020

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Ltccovid.org
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Corrections and comments are welcome at info@ltccovid.org. This document was last updated on 25 May 2020 and may be subject to revision.

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Suggested citation

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1. **Key points**

- COVID-19 has been contained in Denmark, with low mortality rates and relatively few persons hospitalised. 563 persons, or the equivalent of 97 persons per 1 million inhabitants have died from the disease (May 25th).
- The pandemic has caused concern for frail older people and in particular nursing home residents, yet there has been little debate about how home care users or staff are affected.
- Nursing home residents make up 1/3 of COVID-19 related deaths (April 24th).

*Factors that may have contributed to the relative success of Denmark in preventing and containing the spread of COVID-19 in nursing homes include:*  

- A quick lock-down of the country.
- A de-centralised and integrative approach to LTC.
- Relatively few and large municipalities (98 in total) which ensures a more effective and coordinated approach.
- Political attentiveness to and broad public support for LTC.
- Due to de-institutionalisation, care for frail older people is more often provided in the home.
- Care is provided by formally employed and well-trained staff.
- The majority of nursing homes are public and modern in providing an individual abode.

*Factors that may have exacerbated the situation:*  

- The testing strategy has changed a number of times and did not initially consider the need to test nursing home residents and staff.
- Initially, Personal Protective Equipment (PPE) was prioritised for the health care sector, so municipal care providers had to find alternative ways to secure protection.
- The guidelines regarding the use of PPE in the nursing home sector have been inconsistent.

2. **Impact of COVID19 on long-term care users and staff**

2.1. **Number of positive cases in population, persons hospitalised and deaths**

Overall, and in comparison to other countries, Denmark has succeeded in keeping the number of persons infected with COVID-19, as well as mortality related to the disease, low. 563 persons, or the equivalent of 97 persons per 1 million inhabitants have died from the disease (May 25th). Around 1/3 of COVID-19 related deaths have taken place among nursing home residents (among persons tested positive).
2.1.1. Test strategies

The general strategies for testing have changed a number of times in Denmark, leading to some criticism for lack of transparency or evidence-based practice. The initial test strategy, introduced in early March, was aimed at preventing the disease from spreading, a so-called confinement strategy. This took place by testing persons who might have been exposed to the disease, even if they did not have symptoms. These were typically persons who were exposed during travelling.

As of March, 15th, the strategy changed to a mitigation strategy, targeting test measures to alleviate the consequences of the disease. Now only persons with symptoms were tested and following a referral from the GP. This led to concerns being raised such as from the WHO, which generally advised a more aggressive testing strategy. Nationally it sparked a debate that the new test strategy was a pragmatic and not a health-based decision, mainly due to a lack of testing equipment. In the period of May 1st-May 12th, the number of daily tests was fluctuating between 4-15,000.

On May 12th, a new and more aggressive testing strategy was introduced, where persons without symptoms are also to be tested. The capacity was set to 20,000 persons on a daily basis and the ambition was to increase this number over time. This would make Denmark a country with one of the highest number of tests per inhabitants.

There are two tracks in the new strategy:

- A health track, which includes testing of persons with symptoms, as well as employees of hospitals and nursing homes and patients admitted to hospital, even if they do not have symptoms. The test will take place at regional hospitals. The capacity is 10,000 daily tests.
- A societal track, which includes testing of persons without symptoms. Testing takes place in 16 specially set-up tents around the country, some of them with a drive-in facility. The capacity is for an additional 10,000 daily tests. Initially, only those aged 18-25 years old could asked to be tested. This included around 600,000 persons and 4,500 persons were tested during the first day. During the first week, other age groups were included and, as of 25th May, there are no age limitations.

In combination with the new testing strategy, the health authorities have also introduced new and trust-based measures to confine the disease. This includes a policy of encouraging those with COVID-19 to self-quarantine. The municipality must offer a place at a hospital, hotel or similar, if the person is unable to be at home. Finally, persons who have tested positive must inform other persons with whom they have been in contact with, who are then supposed to take two tests. Call centres operated by the health authorities can assist the person. Concerns have been voiced that this voluntary system will not be efficient.
2.2. Positive cases

As of 25 May 2020, 458,305 persons have tested positive for the COVID-19 virus in Denmark. This constitutes 7.9% of the total population (5,822,763 persons). In all, 546,621 tests have been conducted (i.e. some have been tested more than once). Persons aged 70+ constitute 13.7% of those tested.

Among those tested, 11,387 persons had a positive result, or 2.5% of all those tested. There has been no considerable increase since restrictions were partly lifted from mid-April and onwards. In late April, the so-called reproduction rate was at 0.9, dropping to a present level of 0.7 (11 May).

Of those infected, men constitute 42.4% and women 57.6%. Overall, people aged 70 or more constitute 17.4% of those who tested positive. Among those tested in the age group 70-79 years, 2.5% were tested positive, in the age group 80-80 years 3.9% and among the 90+, 4.6% tested positive.

Even when considering the different number of inhabitants across municipalities, the majority of positive cases are found in the more densely populated region of Copenhagen. Other regions have very few positive cases and consequently have closed down their newly set-up Corona hospital units. In the municipal map of positive cases in Figure 1, the Copenhagen region again stands out, but also some of the 98 other municipalities have a relatively high number of positive cases per 100,000 inhabitants.

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1 Unless otherwise indicated, the following figures are updated 25 May 2020 from https://www.ssi.dk/sygdomme-beredskab-og-forskning/sygdomsovervaagning/c/covid19-overvaagning
There is also variation across municipalities where the new confirmed cases within the last 7 days are found, Figure 2. The initial epicentre for the break out in North of Zealand appears to have a relatively high number of new confirmed cases. Again, this may be due to a higher test intensity.
2.2.1. Hospitalisation

At present, 116 persons across all ages are hospitalised (-91 persons since May 7). Since the peak in hospitalisations in late March, the number of persons who are admitted to hospital on a daily basis has steadily declined. However, some patients have had very long periods of hospitalisation, a few up to 2 months.

In total, 2,242 persons infected with COVID-19 have been hospitalised, or the equivalent of 19.7% of those tested positive. This percentage seems to be stable over time.

The risk of being hospitalised increases with age, although there is a tendency for this to decline among the oldest-old: among the 20-29-year-olds, 3% of those tested positive and have been hospitalised, while the figure is 60% for the 70-79-year-olds, 61% for the 80-89-year-olds and 52% for the 90+.

62% of those who were hospitalised had other diseases. There is a pattern of the incidence of co-morbidity increasing among the older patients: e.g. 23% of the hospitalised patients aged 20-29 years had comorbidity, while this was the case for 75% for the 70-79-year-olds, 80% of the 80-89-year-olds and 88% for the age group 90+.

The need for intensive care is less than first anticipated and continues to drop. Of those who have been hospitalised, 3% have been admitted to an intensive care unit. At present, 20
patients are in an intensive care unit (-1 person since the day before) and of these 16 patients are treated with a ventilator (-1 person since the day before).

2.2.2. Mortality

Among those infected, in total 9,964 persons (87.52%) are reported to have recovered and 563 (5.0 %) have died (Case Fatality Rate), see Figure 3, which provides numbers up to late May.1,2 The majority of deaths are within the capital area of Copenhagen (324 persons).

Due to the initial testing strategy, the actual mortality rate (Infection Fatality Rate) is estimated to be under 1%, since persons with none or milder symptoms were previously not tested. For healthy persons under 70 years of age, the IFR in Denmark is estimated to be 0.082% (1st May).3

Figure 3. Cumulative no. of COVID-19 related deaths, according to date of dying (May 27th)


The daily number of deaths due to COVID-19 has dropped since end-March, see Figure 4, following the introductions of national restrictions in mid-March.

Figure 4. Number of deaths due to COVID-19, according to date of death

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2 This includes persons dying within 30 days of having been tested positive for COVID-19. However, there may be another cause of death. Persons who die without having been in contact with the health care system and therefore have not been tested, are not included in this number.

Among those COVID-19 patients who have died, 84% had comorbidities. Again, this was more common among those 70+.

A special analysis of the mortality rate from 30 April reported that there has been only a slightly higher excess mortality in Denmark due to COVID-19: relative to the same period of approximately 4 months the year before, a more or less similar number of persons died in 2020. The number of deaths was slightly higher only in weeks 14 and 15 (17 and 7 persons respectively).3

### 2.3. Rates of infection and deaths in the LTC sector

In Denmark, the concern about the spread of COVID-19 in the long-term care sector has mainly focussed on the residents in the nursing care sector and less so on protecting staff employed there – or indeed on how the disease affects home care users. There are 932 nursing homes in Denmark, with approx. 41,000 residents, or the equivalent to 3.6% of the population aged 65 and over. Despite being dependent on frequent visits to their home, home care users have not been singled out as a particular group at risk, nor have the staff working there. There is a relatively high proportion of older persons in Denmark who receive home care, 11% among the 65+. General reports are that the provision of home care has gone down, due to users themselves cancelling and also because domestic services have been cancelled.

#### 2.3.1. Test strategies and results among nursing home residents and staff

In the early days of the outbreak of COVID-19, persons aged 65 years and over could be referred to a test, even with only mild respiratory symptoms but there was no particular testing strategy for nursing home residents and staff. Since 27 April, residents and staff without symptoms could also be tested if there was an outbreak in the nursing home. Testing must take place at the nursing home and not in the regional test centres, which are set up in tents.
Some municipalities encouraged nursing home staff to be tested. In one case, the voluntary test led to the identification of a positive case among a member of staff who had otherwise no symptoms. Subsequently, the nursing home was closed down for visitors and all residents and staff underwent the test.4

If a resident is hospitalised due to COVID-19 and recovers, no new test will be performed before the person again enters the nursing home. According to the guidelines from the health authorities, a person is considered to be disease-free after a period of 48 hours without symptoms. This policy of not re-testing has been criticised by medical experts for increasing the risk of spreading the disease among other residents, especially because residents may behave in a way which further increases the risk of infecting others. For instance, if the resident has dementia and becomes agitated or distressed. The experts point to the accumulation of evidence that a symptom-free person may continue infecting other persons over longer periods of time.5

Data on testing results and mortality among nursing home residents was published 24 April and has not been repeated since.6 This shows that, since the outbreak of the epidemic, 3,414 (8%) residents at 739 (79%) nursing homes had been tested in 97 out of 98 municipalities by that date.

Among those tested, 445 residents (12%) from 88 nursing homes in a total of 45 municipalities were infected. The average age of those tested positive was 81 years, ranging from 41-97 years.

In 9% of the nursing homes, there was at least one resident with the disease. Nursing homes in larger municipalities such as Copenhagen and Frederiksberg have been hit the most. Most nursing homes had under 5 confirmed cases. However, 13 nursing homes had 10 or more cases.

There is ongoing work to try to collect statistics on the number of nursing home staff infected with COVID-19. In the meanwhile, the number of care staff reporting the disease as a work-related injury gives an indication of the situation. On April 24th, a new guideline underlined that COVID-19 would be regarded as a work-related injury if the person had been exposed to the disease and was tested positive.7 This gives the person an entitlement to claim for workers' compensation. As of May 21st, in total 242 persons had reported COVID-19 as a work-related injury, of these 42 persons were employed in a nursing home. The majority of all cases relate to specifically to the disease, while 9% relate to skin diseases caused by wearing Personal Protection Equipment (PPE).8

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6 https://files.ssi.dk/COVID19-epi-trendogfokus-24042020-3-bj69
7 https://bm.dk/media/13601/vejledning-covid19-retsinformation.pdf
2.3.2. Mortality among nursing home residents

The report from late April also documented that, among the 445 nursing home residents with COVID-19 infection, 133 (31%) have died, making up 1/3 of COVID-19 caused deaths in Denmark (at the time 394 persons). This only includes those tested which is why the number of COVID-19 deaths in nursing homes may be higher. If a person is suspected of having the disease, a test is performed post-mortem. The Danish College of General Practitioners has critizised this practise and suggested that the test should be conducted every time a resident dies in order to prevent an outbreak.\textsuperscript{9}

There is no analysis on excess mortality at nursing homes.

Some nursing homes have been hit harder than others, but there is no evidence on factors which may have affected the entry and spread of the disease. In one nursing home, 9 of 36 residents died.

Among those residents tested negative (2,989 residents), 361 (12%) have died within 30 days of the test (presumably due to other causes).

So far there are no reports of COVID-19 related deaths among nursing home staff.

2.4. Population level measures to contain spread of COVID-19

The first confirmed case of COVID-19 in Denmark was diagnosed February 27\textsuperscript{th}. Early on, general recommendations have been to apply spatial distancing, self-quarantine and to maintain good hygiene, especially by frequent hand washing or disinfection. It was also recommended to sneeze in the arm pit and not in one’s hands, to avoid shaking hands, clean the home more often and pay attention in situations with close contact with many people. However, it was (and still is) not recommended to wear a mask in public places or in situations with many people, as there was no evidence for the positive effect.\textsuperscript{10}

As the number of positive cases continued to grow, the authorities recommended to cancel or postpone large gatherings, initially with more than 1,000 persons, but as of March 11, just 100 persons. This meant that concerts, football matches and the like were cancelled. On March 10\textsuperscript{th}, citizens were encouraged only to use public transport outside peak hours.

Denmark was one of the first countries to introduce a lock-down. This started on March 13\textsuperscript{th}. All persons working in non-essential functions in the public sector were ordered to stay at home for two weeks. Private employers were encouraged to ensure that their employees could work from home. All public institutions, including secondary education and universities, libraries and museums closed down. Exams were cancelled.

Also, all non-essential travel was advised against and Danes who were abroad were recommended to return home. On March 14\textsuperscript{th}, the Danish borders closed apart from the transportation of goods and people with a so-called legitimate reason for entering the country.

\textsuperscript{9} https://ugeskriftet.dk/nyhed/derfor-tester-danmark-ikke-flere-afdode-corona
\textsuperscript{10} https://www.dr.dk/nyheder/politik/sundhedsstyrelsen-undgaa-haandtryk-kys-og-kram
Self-quarantine for 2 weeks was recommended if a person had visited a high-risk country and for health and social care staff this was a requirement since March 3rd.

A few days later, March 16th, primary and secondary schools as well as child care centres were closed. On March 18th it became illegal to for more than ten persons to gather at a time in public places. All shopping malls, night clubs, fitness centres, hairdressers and other services involving close physical contact were to close down. Restaurants could stay open only if they provided take-away meals.

On April 15th the lock down was partly lifted as day care centres and primary schools for pupils in 0-6. grade opened up again but with more space per child and strict instructions on washing and disinfecting hands regularly. Graduating students in the upper secondary schools and at social and health care educational institutions were allowed back in school.

April 20th introduced the re-opening of hair dressers, beauty and massage parlours, spas, dental clinics, opticians, physiotherapists and similar services. On May 10th restaurants and cafés could re-open, while night clubs remained closed. The day after shopping malls opened.

Until May 10th the recommendations were to maintain 2 meters physical distance but this now changed to 1 meter.

On May 27th museums, theatres and the like re-opened, along with high schools and upper secondary schools. Universities remain closed as do night clubs and indoor sports facilities. Public employees in regions outside the capital and Seeland (Jutland, Fiona, Lolland and Falster) with fewer positive cases of COVID-19 could also return to work.

Currently, there is a discussion about the reasoning behind the lock-down and whether this was taken on grounds of epidemiological evidence or rather of political concerns.11

3. Brief background to the long-term care system

3.1. General features

The foundation for long-term care services for older people in Denmark is the Nordic public service model, with the municipality being responsible for the organisation, financing and provision of health and social care services in nursing homes and at home. There is strong electoral support for long-term care for older people, stronger than for all other traditional welfare areas. In comparison to other countries, services are relatively affordable (or as is the case for home care, entirely free), attractive, available for all citizens, of high quality and flexible in the sense that they should be person-centered.

Nevertheless, important policy changes have taken place in Denmark in recent decades and with implications for the user in terms of accessibility to and quality of care, as well as for the informal and formal care provider in terms of quality of care work. Fewer older people over time receive home care services, which are now also mainly concentrated on the provision of

11 https://politiken.dk/indland/art7804674/Departementschef-bad-Brostr%C3%B8m-om-at-skrotte-sin-faglighed
personal care, such as bathing and getting dressed, and less on assistance with domestic tasks such as cleaning. The family seems also to a larger extent to have to step in and provide care for older people. With declining home care services, more and more older people with functional limitations need to rely on the family. Reforms have included the introduction of for-profit providers of care and the possibility to choose between providers. Today, around 1/3 of home care users use (free) for-profit home care. Working conditions for staff in nursing homes and home care is a concern, with 4 in 10 care workers seriously considering quitting their job.

Also, the structural reform of 2007 changed the landscape for the organisation of long-term care services in Denmark, reducing the number of municipalities from 275 to 98. This reform not only created bigger administrative units and population groups for the provision of social services, it also resulted in a change of division of responsibility, so that the municipalities today are in charge of the rehabilitation and training of older people who are being discharged from hospital. Previously, the administrative unit of the regions were responsible for this task. This ensured that the municipalities changed their priorities to more preventive measures and health-oriented interventions. At the same time, the central responsibility for LTC was transferred from the Ministry of Social Affairs to the Ministry of Health, again underlining the health approach. One example of this is the launching of the national action plan of the older medical patient in 2016, which ensures that regions and local municipalities have the same focus. It includes a series of initiatives grouped into eight focus areas: earlier detection and more timely measures; stronger trauma functions in municipalities; better qualification of staff in municipal home nursing; additional funds to avoid over-booking of hospitals; more outreach functions and counselling, from hospitals to municipalities and GPs, more integrated measures; medicine reviews; and better digital collaboration about complex cases.

Overall, the structural reform has presumably led to a higher degree of efficiency and professionalism in the delivery of local services (according to top administrators in the municipalities)12. It has also led to some degree of centralization and re-scaling of the service delivery in that smaller nursing homes in local communities closed down.

Part of the story of LTC in Denmark is also that this sector and its user group receive large public support. In surveys among the electorate, LTC is repeatedly mentioned as the most important public service, in competition with schools, day care centers, libraries etc. Also, older people and their needs as well as the needs of informal carers are strongly advocated for by Dan Age (Ældre Sagen), a non-profit organisation. Around 900,000 persons, or 16% of the population, are members of this organization.

12 https://www.altinget.dk/artikel/reformen-der-forandrede-danmark
3.2. Long-term care policies and objectives

Long term care for older people in Denmark is framed, not least, by the policy of de-institutionalization which was introduced in the early 1970s (længst muligt i eget hjem). This policy favoured care in the home, or so-called community care, over care in an institution.

Compared to other Nordic countries, Denmark is more generous in its home care policy, measured in terms of the proportion of people receiving home help vis-à-vis institutional care in a nursing home (Table 1). Fewer older people in Denmark live in either nursing homes or serviced housing and a higher proportion receive home help than is the case in the other Nordic countries.

The number of persons 80+ receiving home care services in Denmark has decreased to 33.9% in 2018. This is not necessarily due to improvements in health and functional ability but seems to be a consequence of policy changes such as targeting home care to the frailest among the older population (Rostgaard and Matthiessen, 2019). Also, slightly fewer persons 80+ today live in a nursing home among the 80+, 11.8% (2017), a drop from 13.2 in 2012 (not including serviced housing).

Table 1. Long term care, home help and nursing home/serviced housing, % of population 80+, Nordic countries, 2014/2015

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<tr>
<th></th>
<th>Home help</th>
<th>Nursing home care/Service housing</th>
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<tbody>
<tr>
<td>Denmark</td>
<td>37.7</td>
<td>12.1</td>
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<tr>
<td>Finland</td>
<td>16.4</td>
<td>14.2</td>
</tr>
<tr>
<td>Norway</td>
<td>21.5</td>
<td>20.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>24.0</td>
<td>14.1</td>
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Note: 2014 for nursing home data and 2015 for home care data.

Source: for home care in Denmark www.statistikbanken.dk/AED06, RESI01 og FOLK1A, and for other countries as well as nursing home NOSOSCO (2017) Health and health care of the elderly in the Nordic Countries - From a statistical perspective. Copenhagen: Nordic Medico-Statistical Committee.

3.3. Qualifications

Care in the home and in institutions is provided by formally trained care workers. In 2010 (latest available figures from Statistics Denmark), most municipal care workers were employed as Social Care and Health Helpers (Social- og sundhedshjælpere) (51%). The Social Care and Health Helper education has a duration of 19 months and focuses mainly on the provision of practical assistance. It includes a 20-week introductory basic course. The remainder of the program is a mix of practical training periods and school study, for example: Three school study periods, a total of 24 weeks, and two practical training periods, a total of 31 weeks.

Another 32% were employed as Social Care Assistants (Social- og sundhedsassistenter). The Social and Health Care Assistant education takes an additional 20 months and is also focused on the provision of personal care. This is to be taken on top of the Social Care and Health Helper training. The Social and Health Care Assistant training is a mix of practical training periods and
school study, for example: Four school study periods lasting a total of about 32 weeks, and three practical training periods lasting a total of about 48 weeks. The aim is that all persons working with care should have taken at least the basic qualification program of a Social and Health Care Helper. In recent years especially, work tasks have become more medicalized which has favoured the position of the social and health care assistants.

The remaining care workers were either nurses (9%), physio and occupational therapists (4%) or social pedagogues (3%).

### 3.4. The home care sector

The most common help with personal care and domestic tasks in the home is provided through the home care service. It is publicly organized and until 2003 also entirely publicly provided. Services are delivered mainly by formally trained care workers, with one year or more of training. Services are also free of charge, regardless of number of hours. In all other Nordic countries, the user is charged for home care services according to income level.

Home care in Denmark is provided on the basis of individual need, ideally not considering possible assistance from family members outside the household, and in the case of personal care, not considering the spouse either. As such, it is an individualized and universal care service.

Home help includes help with housekeeping and personal care, i.e. instrumental activities of daily living (IADL) task such as cleaning, laundering, bed making, and in some cases shopping also, and various activities of daily living (ADL) tasks such as assistance with toileting, dressing, bathing and hair combing. Psychological support may also be part of the provision of home help, e.g. time may be set for the home helper to comfort a person who has lost a spouse or otherwise is in a life crisis.

Despite home care services having constituted the core social care provision in Denmark, not least due to the above-mentioned policy paradigm of de-institutionalisation which has dominated since late 1980s, considerably fewer older people in Denmark over time receive home care services. Since 2008, there has been a reduction of 20 per cent in the number of recipients aged 65+ and also a reduction in the number of 80+ of 18 % who receive home care services. This is despite a general increase in the older population of more than 115.000 persons 65+ since 2008 (Statistics Denmark, 2013).

Looking at the proportions of older people receiving home care, 11,4 % among the 65+ and 33.9 % among the 80+ receive such services today, where the proportion was 19.1 % and 49.8 % respectively in 2008 (Table 2), and far from the level in mid-1990s where one in four of the 65+ received home care (Rostgaard and Fridberg, 1998). There is also a considerable decline in the average number of hours delivered.

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<td>19,1</td>
<td>14,3</td>
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<td>37,7</td>
<td>36,9</td>
<td>35,1</td>
<td>33,9</td>
</tr>
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</table>

Source: Danmarks statistik, nd, ’Modtagere visiteret til hjemmehjælp, frit valg, efter område, ydelsetype, alder og tid’.
This change could be due to better health and functional ability among both age groups, as described previously. However, self-reported health surveys do not report a similar improvement in the health situation, neither among the 65+, nor the 80+ (Lauritzen, 2012) to suggest that the drop in provision may also be partly due to the new reablement policy of offering ‘active’ training instead of traditional ‘passive’ care. The change quite likely reflects changes in service standards as most municipalities have cut down their offer, especially in terms help with cleaning (Rostgaard and Matthiessen, 2019).

One of the changes in the take-up of home help has also been the polarisation of resources, whereby more users get only a little help and more get more help, i.e. a practise of combined intensification and spreading of resources. This is not a nationally formulated strategy, but has been the practice of local governments to keep up with demand. As a result, many older people receive help with domestic tasks only fortnightly or only every third week and often for a duration of only ½ hour, compared to the early 1990s where it was not unusual to receive cleaning several times a week (Hansen et al, 2002). For many users this help has become symbolic as it is not possible to provide much help within this short amount of time. One indication of this is the proportion of home help hours dedicated to practical assistance tasks which has gone down from 23 % to 17% of total hours from 2008 to 2015.13

Around one in three users of home care today chose a private, for-profit provider and a mixed market of care has thus been realised since the introduction of free choice of home care providers in 2003. Over time, those with practical care only make most use of for-profit providers (46% in 2015). However, over time also the frailest users, and thus those using personal care, have increasingly favoured for-profit providers. Among these users, the proportion using a private, for-profit provider is 33% of all home care recipients and 8% among those receiving personal care only (2015). Some levelling out has taken place in recent years, presumably due to a number of bankruptcies in the for-profit home care sector.

### 3.5. The nursing home sector

Since the 1987 Act on Housing for Older and Disabled People, no more traditional hospital-like nursing home institutions have been built. As of then, modern nursing homes (now termed ‘plejeboliger’) were to be built as centres which in addition to common facilities include separate and individual apartments with own facilities such as kitchen/kitchenette, own bathroom and normally also two separate rooms. Typically, the apartments also include a doorbell and a mailbox, signalling that this is an independent dwelling. In many cases, there is also access to a private terrace. In addition, there are common rooms and facilities so that residents can dine and socialize together. Since 2016, every nursing home has their own GP. This requires the residents to change GP when they enter the nursing home but ensures that the GP has expertise in geriatric medical conditions.

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13 [http://www.statistikbanken.dk/ AED06 og AED022]
Take up of care homes has changed less markedly over the years, with 5.2 % of the population living in care homes (including nursing homes and serviced housing) in 2007, and 4.3 % in 2013. Similarly, today slightly fewer of those 80+ live in a care home (13.3%), compared to 2007 (14.3 %) (Table 3).

Table 3. Proportion 80+ living in nursing home or sheltered housing, %, 2007 and 2013

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<thead>
<tr>
<th></th>
<th>65+</th>
<th>80+</th>
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<tbody>
<tr>
<td>2007</td>
<td>5.2</td>
<td>14.3</td>
</tr>
<tr>
<td>2013</td>
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The average age of residents is 84 years when they move into a nursing home and their average length of stay is 2 years and 8 months. Around one third live less than 1 year.14 According to the statistics on place of dying, in 2018, 21% of the 54,860 persons who passed away died in a care home (37% in a hospital, 24% in their home, and 5% in a hospice).15

The majority of residents are women (68%) and around half of the residents have a comorbid condition. Around two thirds have a dementia diagnosis.

The law on free choice of provider does not apply to nursing homes, so local authorities are not obliged to contract out these services or to offer a choice of provider, but can opt to do so. Marketisation of nursing home services via user choice is, instead, facilitated by the Law on Independent Nursing Homes (Lov om friplejeboliger) which was enacted in January 2007. The aim of the legislation was to increase choice for users of nursing home care, and to introduce more variation in service delivery through competition between various providers. This includes the possibility of buying additional services which nursing home providers are allowed to offer. The municipality is not responsible for the allocation of places in the private Fripleje nursing homes, but nevertheless have to subsidize these institutions, as long as they have achieved certification. The spectrum of nursing home providers within this model, in addition to for-profit providers, also includes municipal as well as non-profit private providers. Private for-profit providers include multinational corporations. As of 2016, 15 nursing homes were for-profit based and the proportions of residents living in such homes was less than 1%. There is a larger representation of non-profit organisations among the operators of private nursing homes.

The cost for a nursing home place is guided by the principle that it is a private dwelling, so it includes rent as well as payment for services delivered such as cleaning, food, and laundry. It is therefore possible to opt out of these services but few do. Care is included in the rent. A maximum limit for co-payment has been set at national level and the cost cannot exceed the average production costs. In general, the fee is affordable and there is the possibility to receive

a housing benefit. However, for couples where one of them moves into a nursing home, the fees can be a problem.

Quality of care according to ownership differs in the sense that public providers of nursing homes perform better in regards to structural factors, such as user:staff ratios, continuity of staff and level of education, while private providers perform better in procedural factors, such as involving the resident in choices about how to structure the day and when and what to eat for dinner.16

The number of staff per residents varies greatly across municipalities, and especially at night (no info on ownership). At those institutions with the highest number of staff, there is one member of staff at night per 12 residents, in others there is one for up to 34 residents. On average, there is one staff member per 20.4 residents on a night shift. Over the years, the staff-resident ratio has deteriorated.17

3.6. Support for informal carers

Unlike the other Nordic countries, Denmark does not have a home care allowance paid to informal carers of frail older people as a substitute for formal care provision. Only in the case of terminal illness, an informal carer can receive a cash benefit as well as the right to take leave. Persons caring for a close relative or friend who is terminally ill and wishes to remain at home, are therefore entitled to receive compensation for loss of earnings via the allowance for care in the home (Plejevederlag). Alternatively, the municipal board can, in very special cases, decide to employ a spouse or close relative as a home help (Ansættelse/Frit valg af hjemmehjælper). The carer is paid the same hourly rate as public home helper, and is covered by the same social rights and insurances. Also, the municipality must support informal carers, for instance by informing them about the possibilities of receiving supplementary help from a home help, home nurse or around-the-clock domiciliary care. Help can also be obtained if it becomes necessary to adapt the home. For the relief of the carer, the older person can stay for a short-term period in a nursing home or a day home.

4. Long-term care policy and practice measures to prevent and mitigate the impact of COVID-19

4.1. Nursing home measures

Following the outbreak of COVID-19, a number of measures have been introduced regarding nursing homes, initially allowing the individual municipalities to organize the interventions, but later on imposing formal restrictions for preventing visits. While acknowledging the special

17 https://www.aeldresagen.dk/presse/viden-om-aeldre/analyser-og-undersoegelser/2017-analyse-normering-paa-plejehjem
needs of many residents living with dementia etc., the measures in general do not address that the required re-organisation of the care provision requires extra staff resources and time.

What is also apparent is that the shortage of PPE (and a decision to prioritize PPE for the hospitals) has influenced the recommendations for how to handle the disease in the nursing homes. Initially, physical distance was considered sufficient but later (when the supply of PPE seemed sufficient), wearing PPE was considered essential and regardless of whether there were symptoms of the disease. The reason for the shortage of PPE in the municipalities was that early in the outbreak (March 10th), the Danish Medicines Agency approached the providers of PPE and asked them to prioritize delivery to the regions and therefore for hospitals. The municipalities therefore needed to find other providers and this led to a shortage of PPE in the municipalities.

In chronological order, measures were first introduced by the March 17th guidelines issued by the Board of Health, ‘Håndtering af COVID-19: Besøg på institutioner hvor personer fra risikogrupper bor eller har langvarigt ophold’. These recommended that family members and friends should not visit nursing homes (or hospitals) unless strictly necessary, for instance if the person was terminally ill. The individual institution should ensure that the visit could be conducted in a safe manner, for instance by ensuring that it was only a brief visit, that visitors did not sit in common areas and that they did not have physical contact or use common facilities. The institution was required to inform visitors about the risk of spreading the disease and encouraging them to avoid visiting, through posters (see poster below with the message ‘You best protect your loved ones by not visiting them’) and personal instruction. If family members had symptoms, they were not allowed to visit. Instead, it was recommended to stay in contact over the telephone, video or mail. 18

A formal ban of visiting was introduced on April 6th ‘Besøgsrestriktioner på plejehjem m.v. og sygehuse’. The Board for Patient Safety enforced that the municipalities introduced restrictions preventing visitors in the nursing homes. This included visits inside the institution, and in common areas as well as the apartments or rooms. It could also include outdoor areas if necessary but this was a decision to be taken by the Municipal Board. In critical cases, visits could be allowed. This included terminal patients or persons with dementia who lack the ability to understand the special situation and the need for restrictions. Again, it was a decision of the Municipal Board to determine whether visits were allowed in these cases.19

A few days later, April 8th, an extensive guideline was issued by the Board of Health, outlined how nursing homes and other institutions could prevent the spreading of COVID-19, in the wake of the so-called controlled re-opening of the country which was planned to take place after Easter (April 14th). It was intended to supplement the procedures that the municipalities had already put in place, and provided guidelines on how to organize this. It specifically addressed the handling of the disease as a responsibility of the management.

The managers were encouraged to plan the daily activities so that residents gathered in smaller groups than normally, preferably no more than two. So-called pedagogical meals were

19 https://stps.dk/da/nyheder/2020/aendringer-i-bekendtgørelsen-om-besoegsrestriktioner-paa-sygehuse,-plejehjem-mv/~media/83D6C0A228D948A99923A16A9CA8EDCD.ashx
discouraged and the food should be served in portions. It was recommended to limit the number of residents that each member of staff had access to and to avoid staff involvement in activities spread across the institution. Staff should receive instruction in the use of PPE and there should be a strong focus on hygiene and behaviour in all common rooms. It was acknowledged that residents were entitled to leave the institution but the manager and staff were encouraged to inform them about the increased risk and they should be supported in how to disinfect their hands upon returning.

Staff were instructed in wearing work clothes and maintaining distance (1-2 m), regardless of whether the resident had any symptoms. Sometimes the recommendations seemed impractical and useless: if closer contact was needed, for instance in a situation of personal care, “one can try to maintain only the most necessary contact, and for instance ask the resident to turn his/her head. [sic] If face-to-face contact takes place over a longer time or often, a shield or mask is to be used”. Only if a resident was (suspected to be) infected, was it required to use PPE. A recent survey among health and social care workers initiated by FOA, the union representing care workers, showed that 56% had had face-to-face contact with users without wearing a mask or shield. One third had been in close contact with a user with confirmed COVID-19 diagnosis or symptoms, and of these 15% did not use PPE.

The guidelines also outlined that the manager should ensure that members of staff stayed at home if they showed signs of being infected, even with mild symptoms, and only returned after 48 hours of being symptom free. If a member of staff was suffering from respiratory diseases or the like they could be referred by the manager to take a COVID-19 test. Also, staff who had been in close contact with persons infected with COVID-19 were to be tested.

If a resident showed symptoms of COVID-19, he/she should be isolated immediately and be observed by staff wearing PPE. All other residents and staff were to be tested within 24 h. and re-tested after 7 days. The guidelines did not encourage or impose isolation of those staff members who had been in contact with infected residents, or who had partners or other family members with the disease. This later received some criticism.

The guidelines suggested setting up a temporary unit where persons in isolation could be placed. This would also mean that staff did not need to change PPE in-between visiting residents. If a member of staff was tested positive, all residents who had been in the same areas as the member of staff, were to be tested.

According to the guidelines, if a resident is hospitalised due to COVID-19 and recovers, no new test will be performed, before the person again enters the nursing home. According to the guidelines from the health authorities, a person is considered to be disease free after a period of 48 hours without symptoms. This policy of not re-testing has been criticized by medical experts for increasing the risk of spreading the disease among other residents, especially because residents may behave in a way which further increases the risk of infecting others, for

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instance if the resident has dementia and becomes distressed or agitated. The experts point to the accumulation of evidence that a symptom-free person may continue infecting other persons over longer periods of time.\textsuperscript{22}

In the guidelines, the special needs of residents were considered but not necessarily taking into account the need for extra members of staff, if the recommendations were to be followed. If a resident was not able to understand the restrictions, for instance due to dementia, it was encouraged to try to motivate the person to stay in his/her own abode by means of pedagogics, and only as a last resort use force such as leading the resident back to his/her abode or only permitting access to larger, open spaces where the resident could be accompanied by a member of staff. It was not mentioned whether the normal rules regarding the reporting of the use of force were to be followed. Otherwise, the need for maintaining the mental health of the residents was underlined and it was encouraged to ensure continuity of staff and apply the same daily structure, encourage the residents to stay mentally and physically active and limit the news stream.\textsuperscript{23}

Most of the debate regarding the situation at nursing homes has concentrated on the restrictions regarding visits. While first criticizing the public response towards frail older people, Dan Age has now turned their attention to what they consider a too restrictive policy of preventing visits. The argument is that it is damaging to the mental health of the residents who in many cases have a short time to live. Some municipalities have allowed visits if they took place outdoor but there has been great variation.

As a response to the criticism, on April 24\textsuperscript{th} a revised version of the guideline was issued, emphasizing that the outdoor areas were not included in the ban for visitors. The guidelines also outlined who and how many could receive the test and who was in charge. Also, it now recommended that staff wore PPE, regardless of whether the user had symptoms or not.

On May 1\textsuperscript{st} a Parliamentary agreement across party lines resulted in additional funding of 100 million DKK to the municipalities for organizing initiatives aimed at nursing home residents and frail older people living in their own home. The aim is threefold: to create new solutions for maintaining social relations and quality of life, to increase the provision of social care to the level before COVID-19, and to set up partnerships in order to gather evidence and disseminate best practice in order to prevent loneliness.\textsuperscript{24}

By May 4\textsuperscript{th} a new version of the guidelines was issued, this time outlining that all residents and staff should be re-tested after 7 days if there was suspicion of an outbreak of COVID-19 in the institution and until no new cases were found.

On May 12\textsuperscript{th} an extensive publication providing new guidelines on how to organize visits in nursing homes was published by the Board of Health. From the introduction, it was made clear

\textsuperscript{22} https://www.dr.dk/nyheder/indland/corona-patienter-sendes-tilbage-paa-plejehjem-uden-blive-testet-igen-det-er
\textsuperscript{24} http://sum.dk/Aktuelt/Nyheder/Coronavirus/2020/Maj/Bred-aftale-om-hjaelp-til-aeldre-under-coronakrisen.aspx
that the Board of Health did not have the authority over who could visit, as this was the responsibility of the Board for Patient Safety, and thus underlining the general confusion over which authority was in charge. The new guidelines have been criticised by Dan Age for being unclear and too complex to implement and ensure the same practice across nursing homes.

This was followed, on May 20th by yet another revision of the guidelines on how to prevent the spread of COVID-19, with updated information on test procedures in cases where a member of staff had been in close contact with residents with the disease and emphasizing the employer’s responsibility for managing staff with infection.

As an interesting follow-up on the concern for the mental health of the nursing home residents, the latest reports from the nursing home sector indicate that the quality of life is increasing for the majority of residents. Nursing home managers report that residents sleep better, medication is reduced, there are fewer conflicts with residents suffering from dementia, more time for the individual resident and the sickness rates among staff is now lower. The factors which have contributed to this seems to be that there are no longer any common activities for all residents, instead members of staff make activities in smaller groups of residents or engage with them one by one. Staff report a more relaxed atmosphere, one reason being that they do not have to engage with family members who at times are considered overly critical.

5. Lessons learnt so far

In Denmark, COVID-19 has caused concern for frail older people and in particular nursing home residents (while home care recipients seem somewhat forgotten in the debate). Nursing home residents make up 1/3 of COVID-19 related deaths, which is lower than in many other countries.

The explanatory factors may be: the responsibility for LTC in Denmark is highly de-centralised but takes an integrative approach as the municipalities are responsible for health and social care outside the hospitals for frail older people. Following a structural reform in 2007, the number of municipalities was reduced, ensuring a more efficient and better coordinated approach. There is broad public support for LTC and LTC is often on the political agenda, not least due to a most influential user organization in Denmark. Due to de-institutionalisation, the majority of frail older people receive care in their own home. The coverage of LTC is generous, with a relatively high proportion of 65+ receiving affordable care services. Care is provided by formally employed and trained staff. The majority of nursing homes are public and modern in providing an individual abode.

On the other hand, there are a number of organizational and logistic factors which could have exacerbated the situation at nursing homes. Due to a shortage of testing equipment, nursing

27 Newspaper article in Kristeligt Dagblad, forthcoming
home residents and staff were not prioritized in the initial phase but can now be tested without referral. There was/is also a shortage of protective equipment. However, the concern has mainly concentrated on the negative effect for the mental health of the residents of closing down the institutions for visitors. There are indications that the changes to the daily structure in nursing homes has had a positive effect on quality of life for residents. There has also been confusion over which authority was in charge and which were the current guidelines, not least regarding the use of PPE.