

The impact of COVID-19 on long-term care in the Netherlands

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Last updated 26 May 2020

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This document is available through the website Itccovid.org, which was set up in March 2020 as a rapidly shared collection of resources for community and institution-based long-term care responses to Covid-19. The website is hosted by CPEC at the London School of Economics and Political Science and draws on the resources of the International Long Term Care Policy Network.

Corrections and comments are welcome at info@ltccovid.org. This document was last updated on 26 May 2020 and may be subject to revision.

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Suggested citation

Kruse, F. Abma, I. & P. Jeurissen (2020) *The impact of COVID-19 on long-term care in the Netherlands*. LTCcovid, International Long-Term Care Policy Network, CPEC-LSE, 26 May 2020.

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Acknowledgements

With thanks to Alan Glanz for editorial support

1. Key points

- After a significant peak in the number of deaths in week 15 (6 April 12 April), the number of COVID-19 cases and deaths in nursing homes has been declining.
- The Dutch government is taking a phased approach to relaxing the nursing home visitor ban while monitoring infections and deaths.
- Nurses and carers in nursing homes and homecare organisations can apply for personal protective equipment (PPE) and can gain access to testing. However, care professionals still experience barriers in accessing (adequate) PPE.
- Informal caregivers are also eligible to access PPE and testing.
- Although some action has been taken to improve the collection of information in longterm care facilities (e.g. data on people with intellectual disabilities), significant information gaps remain about long-term care and COVID-19, especially how COVID-19 affects long-term care staff.

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

2.1. Number of positive cases in population and deaths

The number of COVID-19 cases (Figure 1) and COVID-19 related deaths (Figure 2) have been steadily declining. The number of patients admitted to hospital was declining ahead of this curve and was already starting to go down by the end of March (Figure 3).

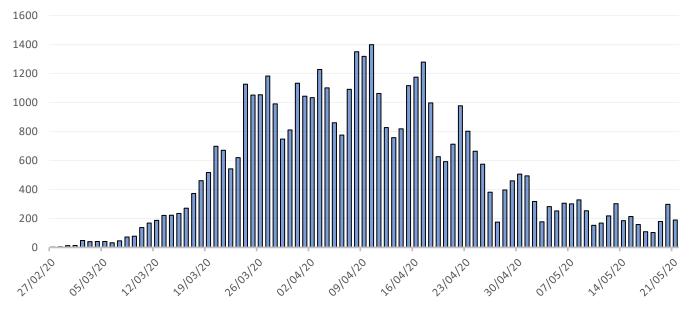


Figure 1. Number of COVID-19 cases reported by the local health authorities [GGD]

Source: Derived from the National Institute for Public Health and the Environment (RIVM). Accessed on May 25, 2020 from: https://www.rivm.nl/coronavirus-covid-19/grafieken

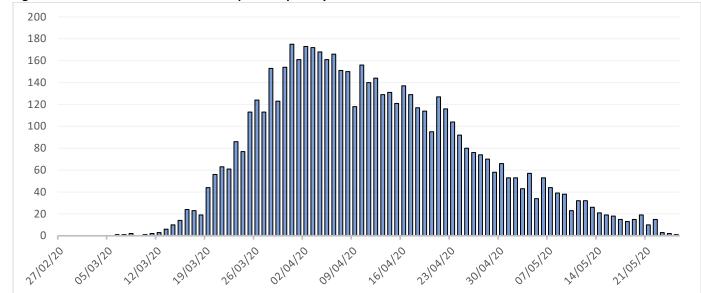


Figure 2. Number of deaths of COVID-19 patients per day

Source: Derived from the National Institute for Public Health and the Environment (RIVM). Accessed on May 25, 2020 from: https://www.rivm.nl/coronavirus-covid-19/grafieken

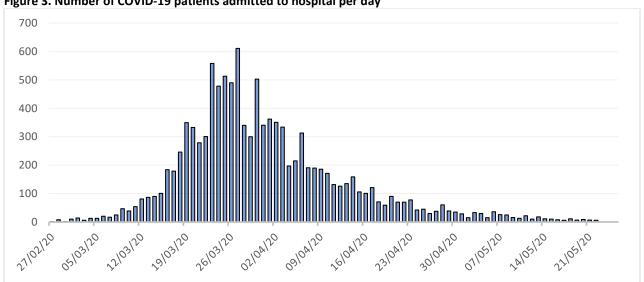


Figure 3. Number of COVID-19 patients admitted to hospital per day

Source: Derived from the National Institute for Public Health and the Environment (RIVM). Accessed on May 25, 2020 from: https://www.rivm.nl/coronavirus-covid-19/grafieken

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

Since mid-March, the Netherlands has been in an 'intelligent' lockdown. Some measures have been scaled down since. Currently (23 May) the following measures are in place in The Netherlands (a selection of the most important):

i) People should keep 1.5 metres distance from each other if they do not live in the same household.

- ii) People showing potentially COVID-19-related symptoms (i.e. symptoms of a cold, cough, fever) should stay at home (self-quarantine).
- iii) People are strongly urged to work from home if possible.
- iv) Key workers can go to work (e.g. healthcare staff).
- v) All schools and day-care facilities were closed; as of 11 May day-care facilities for children have reopened and primary schools children go to school part-time. Public events are still prohibited.
- vi) Cafes, bars and restaurants can provide take-away drinks and meals only.
- vii) Visitors are not allowed in nursing homes, with the exception of some facilities where one fixed visitor per resident is now allowed.
- viii) Some facilities in which risk of infection is deemed relatively high (e.g. indoor sports facilities) are closed, while other facilities have been allowed to open as of 11 May (e.g. hairdressers).

From 1 June, restaurants, cafes and (movie) theatres will be allowed to open again with a maximum of 30 visitors and staff. The visitors have to be able to keep a distance of 1.5 meters from each other [4].

2.3. Rates of infection and deaths among long-term care users and staff

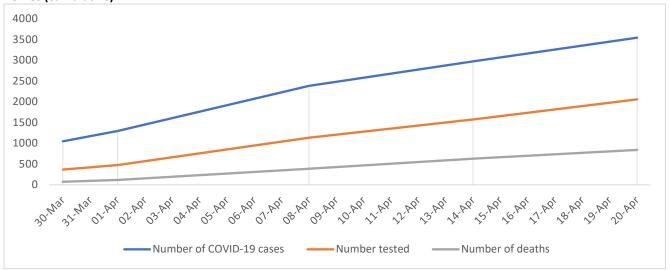
The number of deaths in nursing homes has been lagging behind the national trend (refer to our last report [1, p.242]). After an increase of deaths around the beginning of April, the rate of COVID-19 cases and the number of COVID-19 related deaths have been declining among long-term care users.

In our last report published on the 24 April [1], we observed an increase in the number of infections and the total number of deaths. Within three weeks the number of deaths increased from 74 on 30 March to 841 on 20 April (Figure 4) (approximately 63 000 clients are in this electronic patient record). This represents a daily increase of 12.3% in the total number of deaths $(-1 + \frac{21}{3})(841/74)$; authors' own calculations). It is important to note that these figures were based on the information in one type of electronic patient record, which accounts for approximately 50% of the nursing homes in The Netherlands. Hence, the number of deaths have been underreported in nursing homes. From 24 April, two additional electronic patient records started recording the number of cases and the number of deaths, covering more nursing homes in the Netherlands (the exact numbers of nursing home residents covered by these databases is unknown). The figures from the three types of electronic patient record illustrate that the number of cases and deaths are declining in nursing homes (Figure 5). Within three weeks (24 April to 15 May), there was a daily increase of 1.8% in the total number of deaths (-1 + $\sqrt[21]{(1738/1185)}$; authors' own calculations). This slowdown can also be observed in the excess mortality (i.e. total number of deaths in excess of the average number of deaths before the COVID-19 outbreak) among long-term care users (Figure 6). Excess mortality in nursing homes was mostly present among people aged 85 and over (Figure 7). The large number of deaths due to COVID-19 in nursing homes and the lower number of people moving to nursing homes (due to the fear of being infected in long-term care facilities) means that nursing homes are facing much higher vacancy rates [2].

Currently, the National Institute for Public Health and the Environment (RIVM), Netherlands Institute for Health Services Research (NIVEL) and the Dutch Association of Elderly Care Physicians (Verenso) have started a collaboration to gain better insight into the number of nursing home residents who have shown COVID-19 symptoms but did not received a laboratory test [3].

Unfortunately, very little data is available on the number of long-term care professionals who have been tested for COVID-19, tested postive for COVID-19, or died due to COVID-19. The National Institute for Public Health and the Environments (RIVM) informed us that, as far as they know, these data are not collected.

Figure 4. Total number of reported COVID-19 cases (tested and with COVID-19-like symptoms) in long-term care homes (cumulative)

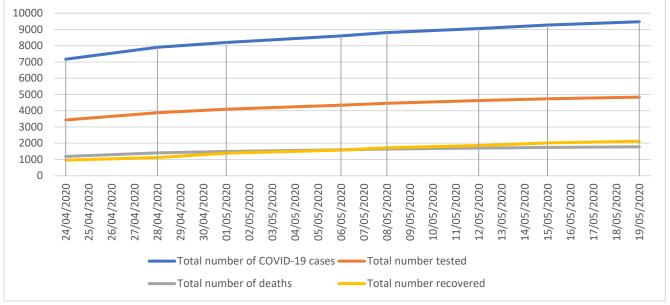


Author's own compilation of data.

Source: Data derived from Verenso. Accessed on May 23, 2020 from:

https://www.verenso.nl/themas-en-projecten/infectieziekten/covid-19-coronavirus/registreren-van-data

Figure 5. Total number of reported COVID-19 cases (tested and with COVID-19 like symptoms) in long-term care homes, three electronic patient records (cumulative)



Author's own compilation of data.

Source: Data derived from Verenso. Accessed on May 23, 2020 from: https://www.verenso.nl/themas-en-projecten/infectieziekten/covid-19-coronavirus/registreren-van-data

3500 2792 2868 3000 2563 2406 2211 2274 2220 2174 2500 1934 1759 2066 1973 2015 1715 2000 1656 1162 1200 ¹³³⁵ 1425 1500 1176 1000 500 0 Long-term care users Others ■ Week 11 (9 March -15 March) ■ Week 12 (16 March - 22 March) ■ Average of week 1 until 11 ■ Week 13 (23 March - 29 March) ■ Week 14 (30 March - 5 April) ■ Week 15 (6 April - 12 April) ■ Week 16 (13 April - 19 April) ■ Week 18 (27 April - 3 May) ■ Week 17 (20 April -26 April)

Figure 6. Total number of deaths among long-term care users and others

Source: Data derived from Statistics Netherlands. Accessed on May 23, 2020 from: https://www.cbs.nl/nl-nl/nieuws/2020/21/sterfte-ook-bij-wlz-zorggebruikers-bijna-op-normaal-niveau

■ Week 19 (4 May - 10 May)

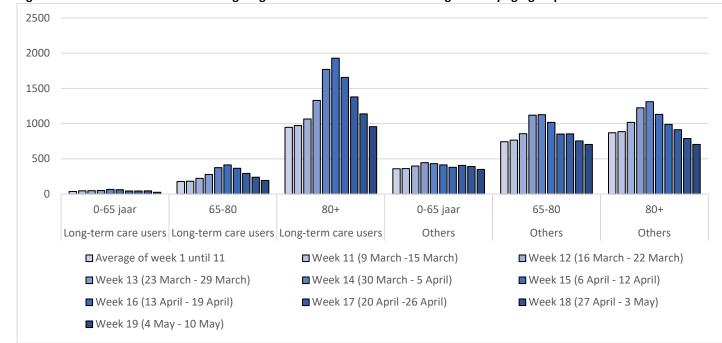


Figure 7. Total number of deaths among long-term care users and others categorised by age-group

Source: Data derived from Statistics Netherlands. Accessed on May 23, 2020 from: https://www.cbs.nl/nl-nl/nieuws/2020/21/sterfte-ook-bij-wlz-zorggebruikers-bijna-op-normaal-niveau

3. Brief background to the long-term care system

The Netherlands is one of the highest spenders on long-term care: Dutch long-term care costs are more than double the EU average. 27% of total healthcare spending goes to long-term care [5]. In order to control rising long-term care costs, the Dutch long-term care system was reformed in 2015. The aim of the reform, besides cost saving, was to promote and support independent living. This reform initiated a shift from a residential to a non-residential care settings and a normative reorientation towards, where possible, individual and social responsibility [6].

The long-term care system is now divided between three Acts: the Long-term Care Act (Wet Langdurige Zorg: Wlz), The Social Support Act (Wet maatschappelijke ondersteuning: Wmo) and Health Insurance Act.

The Long-term Care Act (WIz) covers the most vulnerable people. These are people who require permanent supervision or 24-hour care nearby. This type of care provides a wide set of services including residential care. Care is both needs and means tested. Clients are identified by the Care Assessment Centre [Centrum indicatiestelling zorg: CIZ], which is a public independent governmental body that decides if a client needs WIz-care. The regional care offices ['zorgkantoren'] purchase long-term care for the clients in their region from nursing homes and other long term care organisations. The Long-term care act is financed through a compulsory health insurance policy in combination with co-payments. The level of co-payments is based on income and wealth.

The Social Support Act underscores individual and social responsibility. The Social Support Act is designed for those that need additional help and assistance but do not require care that falls under the Long-term Care Act. The Social Support Act provides assistance programs – for example meal services, funding to adapt houses or transport services. The act also arranges community programs, such as day care. This act has been decentralised. Municipalities have the discretionary power to carry out the needs assessment procedure, also known as the kitchen-table-conversations ['keukentafelgesprek']. During this assessment the needs and the social position of the care-seeker are taken into account, for example whether they already have informal caregivers. The Social Support Act is funded by taxes and co-payments: municipalities receive state budgets and co-payments are income and wealth dependent.

Under the Health Insurance Act, the role of health care insurers in long-term care has expanded since the long-term care reform in 2015. Health insurers cover a part of the long-term care related to direct health or limitations that people have in their activities of daily living. These activities are home and community nursing [wijkverpleegkundige] and personal care. The Health Insurance Act is financed based upon solidarity through a compulsory health insurance policy. No co-payments apply for these LTC activities in the Health Insurance Act.

People who fall under the Long-term Care Act, Health Insurance Act or the Social Support Act can, instead of care in-kind, also opt for a personal budget [persoonsgebonden budget: pgb]. Persons with a personal budget can then arrange their own care or support that they deem fit their needs. The decision whether the personal budget is granted rests with the regional care offices (Long-term Care Act: WLz), with the municipalities (The Social Support Act: Wmo) or the insurers (Health Insurance Act: Zvw).

In 2019, one of the main concerns for the long-term care sector was the sharp increase in the number of people seeking long-term care and the growing waiting list to access nursing homes. The number of people seeking care in long-term care facilities has grown by 7% in 2019 compared to the previous year [7].

In order to get a better understanding of the Dutch long-term care system, Table 1 outlines several key statistics.

Table 1. Key statistics on the long-term care system in the Netherlands

3 million [8]
18.5 [5]
33% [8]
30% [8]
11 billion [8]
27% [5]
20 years [5]
87.8% non-profit and 12.2% for-profit [9]

4. Long-term care policy and practice measures

4.1. Whole sector measures

The Dutch response has primarily focused on slowing the spread of the virus [10]. The main aim was to avoid a demand peak that would significantly strain the resources of the healthcare system. Another aim spelled out by the government was to protect older people and those with poor health. The governmental response that follows from this can be described as, on the one hand, imposing strict regulatory measures and, on the other hand, relaxing traditional rules and standards to give long-term care professionals discretionary power to make certain decisions [1].

4.2. Care coordination issues

4.2.1. Hospital discharges to the community

The Dutch Federation of Medical Specialists issued a guideline on 10 April for hospital discharge of patients who have been on the Intensive Care Unit [11]. The guidelines states the following:

- Patients with mild complaints: can go home, and should be supported by their General Practitioner (GP) and receive home care if necessary.
- Patients who cannot go home, but that do not need intensive care: will be discharged to an institution where patients stay for a limited time and can receive 24-hour nursing care.
- Frail patients/patients with multi-morbidity involving limitations in physical or cognitive functioning: should receive geriatric rehabilitation care (institution where this could/should take place not mentioned).
- Patients who were high-functioning before their COVID-19 infection: should get specialised rehabilitation care, either inpatient (hospital rehabilitation department or a rehabilitation centre) or outpatient.

4.2.2. Hospital discharges to residential and nursing homes

It is unusual for nursing home residents to be transferred to the hospital due to suspected or confirmed COVID-19. The standard is to treat frail (older) people in their existing home setting.

4.3. Care homes (including supported living, residential and nursing homes, skilled nursing facilities)

4.3.1. Prevention of COVID19 infections

Visiting rules for nursing homes

On 19 March, strict visiting rules were imposed nationally: visitors were not allowed at nursing homes [10]. This decision was supported by stakeholders in the long-term care sector. However, in contrast to some other countries, the Dutch government did allow nursing home staff to make rare exceptions for close friends and relatives to visit clients when they receive end-of-life care.

As the number of new COVID infections falls, the Dutch government wants to give nursing home residents, and those close to them, a sense of when restrictions on visits might be relaxed [4].

On 11 May, a "controlled and phased" approach started to alleviate the existing measures for nursing homes. The first phase was a test phase in 26 nursing homes, which involved allowing one fixed visitor per nursing home resident. This visitor should be asked about symptoms by the nursing home staff and keep a distance of 1.5 meters from the nursing home resident, as per the general distance rules in the Netherlands. On 18 May the general conclusion was that it is possible for nursing homes to receive visitors while adhering to the rules currently in place, with visitors generally keeping sufficient distance [12, 13].

On 19 May, the Dutch government presented "roadmaps" for the gradual alleviation of the current measures in place for vulnerable population groups, including for people in nursing homes [14]. The following regulation changes will take place according to the nursing home roadmap:

- As of 25 May, nursing homes that wish to allow their residents one fixed visitor, and that
 can adhere to the regulations, can apply for this to the regional public health authorities
 [GGD];
- As of 15 June, all nursing homes will be allowed one fixed visitor per nursing home resident;
- As of 15 July, multiple visitors per resident will be allowed.

However, the number of infections will be monitored and if necessary, the roadmap will be adapted.

Testing policies

Before 6 April, testing was only available for nursing home residents if 1 or 2 cases in one institution had already tested positive [15]. Since 6 April, all nursing home residents who are suspected of being infected with COVID-19 can be tested [15].

Regarding staff, on 6 April, the Dutch government decided to expand eligibility for COVID-19 testing [15]. Previously, only hospital staff and suspected cases of COVID-19 who reported themselves to their GP or nearby hospitals were tested. The new testing policy now allows all healthcare staff to get tested when they develop symptoms of COVID-19; this includes LTC workers. However, only 49% of the care professionals working in nursing homes (based on a 2,902 sample) who requested a COVID-19 test indicated that this was easy to obtain [16].

As of 1 June, everyone in The Netherlands will be able to get tested for COVID-19 if they believe they have relevant symptoms, without referral from a healthcare professional [17].

Allocation of PPE based on risk of infection

The COVID-19 pandemic has been accompanied by a worldwide shortage in PPE (personal protective equipment). While the Netherlands still imports PPE from other countries, the Dutch government has also encouraged national production of PPE to limit the dependency on international supplies.

The Ministry of Health, Welfare and Sport partnered with hospitals, suppliers and producers in late March to manage the distribution of medical materials to combat the epidemic. The consortium acts like a centralised (non-profit) purchaser [18]. However, establishing a fair and

efficient allocation system for PPE has proven to be difficult. The nursing home sector in particular had raised the alarm about supply shortages as early as mid-March [19]. On 13 April, the Dutch government launched a new centralised allocation mechanism for PPE in order to improve its distribution [15]. At first, the focus was very much on acute care, but now the allocation mechanism also applies to LTC facilities. The allocation mechanism initially only applied to face masks but is being expanded gradually to include other PPE [20]. The aim is to make the distribution of PPE more responsive to the levels of risk that health professionals are exposed to rather than solely giving consideration to which sector the professional is working. This means that only those LTC personnel that are at risk will receive PPE.

A large survey of the members of the Dutch Nurses Association (V&VN) found that 43% of care professionals experienced shortages in face masks [16]. Not only is there a shortage in face masks, a recent study carried out by a Dutch newspaper found that many of the face masks used in the COVID sections of nursing homes do not meet health and safety standards [21]. (The newspaper had 25 different face masks tested by a centre that normally tests these masks for the hospitals, and found 12 did not meet the standards).

4.3.2. Controlling spread once infection is suspected or has entered a facility

Since 6 April, all nursing home residents who are suspected of being infected with COVID-19 can be tested. Verenso and the association of physicians for people with intellectual disabilities (NVAVG) issued a guideline that all residents with (suspected) COVID-19 or residents that possibly have been exposed to the virus should be put in quarantine and cared for in isolation [15, 22].

4.3.3. Managing staff availability and wellbeing

Long-term care organisations are trying to solve the even more pressing shortages in care workers by attracting flex workers and reorganising personnel within their long-term care organisation. Initially when shortages were very pressing, personnel were moved between organisations. This is currently discouraged to control spreading the virus [23].

LTC professionals experience a high level of work-related stress. Their work can be both physically as well as mentally challenging. Of the 2,902 respondents from a survey issued by the V&VN, 74% of the nurses in nursing homes indicated they experienced greater pressure on their mental health due to COVID-19 [16]. 26% indicated that their employee did not provide psychological support [16]. Almost half of the nursing home staff in nursing homes indicated that they experienced pressure to work without having adequate PPE [16].

On the one hand, the rate of absence could indicate a low level of well-being and job satisfaction among employees. On the other hand, absences could indicate that healthcare professionals who are concerned that they may be infected are able to stay at home to prevent the spread of the virus. Before the outbreak of COVID-19, the rate of absence had increased significantly from 6.67% in 2017 to 7.12% in 2018 [24]. Due to COVID-19, the rate of absence has increased further. The association of long-term care organisations, ActiZ, has reported that since the beginning of the outbreak (March), when there was no PPE or testing available to care professionals, the rate of absence was around 20% [23]. Although absences then decreased somewhat, the rate increased again once care professionals had access to COVID-19 tests. One of the possible

explanations is that care professionals stay at home to prevent further infections. The rate of absence was most recently reported as 8% across 46 long-term care facilities [23].

4.3.4. Provision of health care and palliative care in care homes during COVID-19

There is a strict protocol for both the GP and the geriatric specialist on how to provide palliative care in nursing homes. One of the main rules is that close friends and relatives are allowed to visit nursing home residents when they receive end-of-life care. However, because PPE is scarce, it may not always be possible to provide PPE to those visitors. Visitors have to be informed that they need to keep 1.5 meter distance. If no PPE can be provided to the visitors, the geriatric medical specialists have to advise them to self-isolate for two weeks after visiting [22].

4.4. Community-based care [if relevant, add sub-sections for day care, home-based care, etc.]

4.4.1. Measures to prevent spread of COVID-19 infection

In the early phase of the COVID-19 outbreak, there was no centralised guidance for individuals who depend on domiciliary care, day care or informal care. On 16 April this changed (9). The Dutch government published guidelines to ensure the continuation of care for individuals who are dependent on domiciliary care or day care (i.e. adult day care centres). Home-care and community care are often organised by setting up special 'corona teams'. These teams will only provide care to COVID-19 patients. Another team would then only provide care to clients without COVID-19 [25].

For those individuals who can fall back on their own social network, non-essential homecare activities are currently postponed [26]. One or two regular informal caregivers are allowed to visit those that require care from 29 April. On 20 May, the government announced that they want to get all community-based care back on track. However the benefits must still outweigh the risks, and this should be decided on an individual case-by-case level [13].

As of 19 May, free PPE is available for formal and informal caregivers of vulnerable people (70+ years of age and/or chronic conditions), if this vulnerable person has (symptoms of) COVID-19 and if the caregiver cannot keep a distance of 1.5 meters due to essential care activities [13, 28].

Testing

All vulnerable populations (i.e. 70+ years of age and/or relevant underlying conditions) can get tested when this is relevant for their care or treatment [29]. All people with (suspected) COVID-19, including vulnerable groups, should self-quarantine. All formal and informal caregivers with symptoms of COVID-19 can get tested as of May 18 [30]. While waiting for test results, or if the caregiver has confirmed COVID-19, the caregiver should be replaced.

As of 1 June, everyone in The Netherlands will be able to get tested for COVID-19 if they believe they have relevant symptoms, without referral from a healthcare professional [17].

4.4.2. Managing staff availability and wellbeing

To the best of our knowledge, no specific guidelines have been developed for managing staff availability and wellbeing in home-care organisations. However, a survey from the V&VN reveals

that 69% of community carers (1,172 respondents) reported experiencing greater pressure on their mental health due to COVID-19. 28% of respondents reported that they did not receive mental health support from their employer [16].

4.5. Impact on unpaid carers and measures to support them

On 16 April, the Dutch government issued guidelines for informal caregivers. These guidelines include advice on hygiene standards and guidelines on how a care-giver should act if their care-recipient develops symptoms of COVID-19 [27].

As of 19 May, free PPE is available for informal caregivers of vulnerable people (70+ years of age and/or chronic conditions), if this vulnerable person shows (symptoms of) COVID-19 and if the caregiver cannot keep a distance of 1.5 meters due to essential care activities [13, 28]. Furthermore, all informal caregivers with symptoms of COVID-19 can get tested as of 18 May [30].

The guidelines also advise that general practitioners (GPs) play an important role in supporting the informal caregiver. GPs should closely monitor those who are homebound and frail, and should act like a case-manager when they develop COVID-19 symptoms [27].

4.6. Impact on people with intellectual disabilities and measures to support them

The Dutch ministry of Health, Welfare and Sport has commissioned an online registration system to gain more insight into the impact of the coronavirus on people with intellectual disabilities. As of 15 May (the latest update), 64 organizations had joined the registration system. On this same date, the registry showed [31]:

- 1,188 registered patients with a suspected COVID-19 infection;
- 819 of these patients were tested for COVID-19, 45% of this group tested positive for COVID-19;
- 81 registered patients have died, a COVID-19 infection was confirmed for 49 of them;
- The mortality rate of the patients with a confirmed COVID-19 infection is 13%.

With regard to the intellectual disability of patients with confirmed COVID-19 infections:

- 23% of patients has mild to borderline intellectual disability, 37% moderate disability; and 40% severe disability.
- 14% has Down syndrome

Since 23 March, the possibilities of visiting persons with disabilities residing in institutions has been very limited. As of 25 May, institutions are instructed to explore the possibility of expanding visits together with professionals, clients, and their families. By 15 June, a visitation plan should be in place for all residents in institutions [13].

Furthermore, for all persons with disabilities (in institutions or living at home/elsewhere), organised day care activities should be offered again as of 1 June [13].

4.7. Impact on people living with dementia and measures to support them

Organised day care activities should be offered again to people with dementia living at home as of 1 June [13]. However, most of the people that live in long-term care facilities have dementia. To the best of our knowledge, no targeted measures have been taken for people living with dementia.

5. Lessons learnt so far

5.1. Short-term calls for action

There are three calls for short-term action based on the findings of this report.

- 1) Many long-term care professionals experience difficulties accessing PPE [16]. Additionally, some of the PPE allocated to long-term care facilities has been found to fall short of health and safety standards [21]. (Although this was not a scientific study and requires further inquiry, it does give an indication of the status of the PPE in long-term care facilities.) Adequate PPE for long-term care professionals is essential to protect vulnerable groups in our society and professionals working in long-term care.
- 2) We should invest in mental health support for long-term care workers. They are exposed to high-stress environments during health crises such as the COVID-19 pandemic and this could cause serious mental health issues. Pro-active measures should be considered to address these mental health concerns.
- 3) Significant knowledge gaps persists on how COVID-19 has spread, and is spreading, in the long-term care sector. However, three positive initiatives have begun. First, the government has announced that it will closely monitor the situation in nursing homes [13]. Second, a new project was launched to gain more insight into the impact of the coronavirus on people with intellectual disabilities [31]. Third, the National Institute for Public Health and the Environment (RIVM), Netherlands Institute for Health Services Research (NIVEL) and Verenso has begun a new collaboration to improve the knowledge base on the number of COVID-19 cases and the number of deaths [3]. Notwithstanding these initiatives, several issues remain. One issue is that the databases that registers the number of people with COVID-19 and the number of COVID-19 related deaths still do not fully cover all long-term care facilities. Another issue is that there seems to be no record of the infection rate and mortality rate due to COVID-19 among long-term care personnel. It is essential to obtain adequate data in order to get a better understanding of how COVID-19 is spreading within long-term care facilities. This is especially important now that the nursing home visitor ban is gradually being lifted.

5.2. Longer term policy implications

A few lessons can be learned from the developments related to COVID-19 and its impact on the long-term care sector. Based on the findings of our own report and views from experts in the long-term care field, we distil three important lessons:

- 1) The long-term care sector has been overshadowed by the acute care sector during the COVID-19 outbreak. As one of the representatives of the association of long-term care organisations (ActiZ) in the Netherland put it in an article published on 22 May: "care for elderly people has continuously received too little attention from National Institute for Public Health and Environment" [Ouderenzorg had steeds onvoldoende aandacht bij het RIVM] [32]. During epidemic crises, it is important to pay specific attention to the long-term care sector in the earliest stages. This crisis has demonstrated in particular that there is room for improvement in the way PPE is distributed.
- 2) This epidemic crisis amplifies the already existing shortages of care professionals. This crisis provides a window of opportunity to improve the way we value care professionals, both in monetary terms as well as in their working conditions.
- 3) Long-term care facilities face significant financial losses due to high vacancy rates and higher expenditures associated with hiring additional personnel and installing extra health and safety measures. If the nursing home sector does not receive adequate financial compensation for these losses, a large number of nursing homes may suffer financial distress.
- 4) Last but not least, the pressure on informal caregivers has increased due to the COVID-19 crisis. The Netherlands Institute for Social Research argues that this crisis and the lock-down shows the cracks in our healthcare system [33], leaving vulnerable people without social support and informal caregivers overburdened. This sparks the question whether we should re-evaluate the LTC reform. The aim of this reform was to promote and support independent living. The Netherlands Institute for Social Research proposes to look into an intermediate form between living at home and living in a nursing home [33].

6. References

- 1. Kruse, F., T. Remers, and P. Jeurissen, *The impact of COVID-19 on long-term care in the Netherlands*. 2020, Country report available at LTCcovid.org, International Long-Term Care Policy Network, CPEC-LSE.
- 2. van Mersbergen, S. and M. Nieuwenhuis, 1 mei. Verpleeghuizen stromen leeg: 'Kinderen vragen zich af of het wel verstandig is', in Algemeen Dagblad. 2020; Available from: https://www.google.com/.
- 3. Rijksinstituut voor Volksgezondheid en Milieu. *23 april. COVID-19 in verpleeghuizen*. 2020 Retrieved on; Available from: https://www.rivm.nl/nieuws/covid-19-verpleeghuizen.
- 4. de Jonge, H., 6 mei. Kamerbrief COVID-19 update stand van zaken, Ministerie van Volksgezondheid Welzijn en Sport, Editor. 2020: Den Haag; Available from: https://www.rijksoverheid.nl/documenten/kamerstukken/2020/05/06/kamerbrief-covid-19-update-stand-van-zaken.
- 5. OECD/European Observatory on Health Systems and Policies, *State of Health in the EU. The Netherlands. Country Health Profile 2019*. 2019, OECD Publishing, Paris/European Observatory on Health Systems and Policies: Brussels.

- 6. Maarse, J.A.M. and P.P.T. Jeurissen, *The policy and politics of the 2015 long-term care reform in the Netherlands*. Health Policy, 2016. **120**(3): p. 241-245. DOI: https://doi.org/10.1016/j.healthpol.2016.01.014.
- 7. Nederlandse Zorgautoriteit (NZa). *NZa: uitgaven langdurige zorg groeien sneller dan verwacht*. 2019 Retrieved on: 26-05-2020; Available from: https://www.nza.nl/actueel/nieuws/2019/06/13/nza-uitgaven-langdurige-zorg-groeien-sneller-dan-verwacht.
- 8. Nederlandse Zorgautoriteit (NZa), Monitor. Zorg voor ouderen 2018. 2018, NZa: Utrecht.
- 9. Bos, A., F.M. Kruse, and P.P.T. Jeurissen, *For-Profit Nursing Homes in the Netherlands:* What Factors Explain Their Rise? Int J Health Serv, 2020. DOI: https://doi.org/10.1177/0020731420915658.
- 10. de Jonge, H., 19 maart. Aanscherping bezoek verpleeghuizen ivm COVID-19, Ministerie van Volksgezondheid Welzijn en Sport, Editor. 2020: Den Haag; Available from: https://www.rijksoverheid.nl/documenten/kamerstukken/2020/03/19/kamerbrief-over-aanscherping-bezoek-verpleeghuizen-in-verband-met-covid-19.
- 11. Federatie Medische Specialisten, *LEIDRAAD. Nazorg voor IC- patiënten met COVID-19. Versie 10 april 2020.* 2020; Available from: https://www.demedischspecialist.nl/nieuws/leidraad-nazorg-voor-ic-pati%C3%ABnten.
- 12. Maatricht University & Radboudumc, 18 mei. Gefaseerde en gecontroleerde aanpassing van de bezoekregeling in verpleeghuizen: indrukken week 1. 2020; Available from: https://www.rijksoverheid.nl/documenten/publicaties/2020/05/20/gefaseerde-en-gecontroleerde-aanpassing-van-de-bezoekregeling-in-verpleeghuizen.
- 13. de Jonge, H., 20 mei. COVID-19 Update stand van zaken, Ministerie van Volksgezondheid Welzijn en Sport, Editor. 2020: Den Haag; Available from:

 https://www.rijksoverheid.nl/documenten/kamerstukken/2020/05/20/kamerbrief-stand-van-zaken-covid-19.
- 14. Rijksoverheid, 19 mei. Routekaart voor mensen met een kwetsbare gezondheid. 2020; Available from:

 https://www.rijksoverheid.nl/documenten/publicaties/2020/05/20/routekaart-voor-mensen-met-een-kwetsbare-gezondheid.
- 15. de Jonge, H., *16 april. Kamerbrief COVID-19 update stand van zaken*, Ministerie van Volksgezondheid Welzijn en Sport, Editor. 2020: Den Haag; Available from: https://www.rijksoverheid.nl/documenten/kamerstukken/2020/04/15/covid-19-update-stand-van-zaken.
- 16. V&VN. 1 mei. Peiling V&VN: tekorten maskers houden aan, psychische druk hoog. 2020 Retrieved on; Available from: https://www.venvn.nl/nieuws/peiling-v-vn-tekorten-maskers-houden-aan-psychische-druk-hoog/.
- 17. van der Klundert, M. and J. Kompeer. *Vanaf 1 juni kan iedereen in Nederland op het coronavirus getest worden*. 2020; Available from: https://nos.nl/artikel/2334835-vanaf-1-juni-kan-iedereen-in-nederland-op-het-coronavirus-getest-worden.html.
- 18. Rijksoverheid, *Opstart initiatief Landelijk Consortium Hulpmiddelen* 2020; Available from: https://www.rijksoverheid.nl/actueel/nieuws/2020/03/24/opstart-initiatief-landelijk-consortium-hulpmiddelen.

- 19. van der Klundert, M., *Minister kreeg al weken signalen over dreigende tekorten in verpleeghuizen*. 2020; Available from: https://nos.nl/artikel/2330830-minister-kreeg-al-weken-signalen-over-dreigende-tekorten-in-verpleeghuizen.html.
- 20. Rijksoverheid, *Factsheets verdeling persoonlijke beschermingsmiddelen* 2020; Available from: https://www.rijksoverheid.nl/onderwerpen/coronavirus-covid-19/documenten/publicaties/2020/04/11/factsheet-verdeling-pbm.
- 21. Friedrichs, S. and C. Timmermans, 25 mei. Veel falende mondkapjes in verpleeghuizen: 'Schandalig, we zijn besodemieterd', in Algemeen Dagblad. 2020; Available from: https://www.ad.nl/binnenland/veel-falende-mondkapjes-in-verpleeghuizen-schandalig-we-zijn-besodemieterd~a91dfea5/?referrer=https://www.google.com/.
- 22. NVAVG & Verenso, Behandeladvies COVID-19 Acute fase en nazorg. Voor SO en AVG in verpleeghuizen, instellingen voor verstandelijk gehandicapten, woonzorgcentra en kleinschalige woonvoorzieningen (mits hoofdbehandelaar). Update 12 mei 2020. 2020; Available from: https://www.verenso.nl/asset/public/Dossiers/200512-18-00-COVID-19-behandel-advies-update-herstructurering-DEFNITIEF.pdf.
- 23. Skipr. 22 mei. 'Ziekte-uitval onder verpleeghuispersoneel neemt toe'. 2020; Available from: <a href="https://www.skipr.nl/nieuws/ziekte-uitval-onder-verpleeghuispersoneel-neemt-toe/?daily=1&tid=TIDP524288XECECCC6C590F488B947541F9041BFC0AYI4&utm_medium=email&utm_source=20200525%20skipr%20daily%20nieuwsbrief%20-%20&utm_campaign=NB_SKIPR.
- 24. ActiZ, 19 februari. Verzuim in 2018 verder gestegen 2019; Available from: https://www.actiz.nl/nieuws/verzuim-in-2018-verder-gestegen.
- 25. ActiZ. 18 april. ActiZ: 'De zorg thuis gaat door, maar anders'. Vergeet de zorg thuis niet 2020 Retrieved on: 25-5-2020; Available from: https://www.actiz.nl/nieuws/actiz-de-zorg-thuis-gaat-door-maar-anders.
- 26. ActiZ. *18 april. De zorg thuis gaat door, maar anders'* 2020; Available from: https://www.actiz.nl/nieuws/actiz-de-zorg-thuis-gaat-door-maar-anders.
- 27. Ministerie van Volksgezondheid Welzijn en Sport, *16 april. Richtlijn mantelzorgondersteuning.* 2020.
- 28. Ministerie van Volksgezondheid Welzijn en Sport, 19 mei. Richtlijn Persoonlijke Beschermingsmiddelen (PBM) voor mantelzorgers, PGB-gefinancierde zorgverleners en vrijwilligers in palliatieve zorg. 2020; Available from:

 https://www.rijksoverheid.nl/documenten/richtlijnen/2020/05/19/richtlijn-persoonlijke-beschermingsmiddelen-voor-mantelzorgers-pgb-gefinancierde-zorgverleners-en-vrijwilligers-in-palliatieve-zorg.
- 29. Rijksinstituut voor Volksgezondheid en Milieu. *Risicogroepen en COVID-19*. 2020 Retrieved on: 24-05-2020; Available from: https://www.rivm.nl/coronavirus-covid-19/risicogroepen.
- 30. Ministerie van Volksgezondheid Welzijn en Sport, *12 mei. Richtlijn testbeleid van mantelzorgers, vrijwilligers in de palliatieve zorg en PGB-gefinancierde zorgverleners*. 2020; Available from:

 https://www.rijksoverheid.nl/documenten/richtlijnen/2020/05/12/richtlijn-testbeleid-mantelzorgers-vrijwilligers-palliatieve-zorg-en-pgb-gefinancierde-zorgverleners.

- 31. Radboudumc, *COVID-19* in people with intellectual disabilities. Update 15 May 2020. Factsheet no.3. 2020; Available from: https://oda93f8e-6ee7-45d9-be21-eecb55ca3e69.filesusr.com/ugd/d45b6c f2fbc5e37c344706af1eafb74b7519bf.pdf.
- 32. Kiers, B., Conny Helder: 'Ouderenzorg had steeds onvoldoende aandacht bij het RIVM', in Zorgvisie. 2020; Available from: https://www.zorgvisie.nl/magazine-artikelen/conny-helder-ouderenzorg-had-steeds-onvoldoende-aandacht-bij-het-rivm/.
- 33. Kuyper, L. and K. Putters, 18 mei. Zicht op de samenleving in coronatijd. Eerste analyse van de mogelijke maatschappelijke gevolgen en implicaties voor beleid. 2020, Sociaal en Cultureel Planbureau,: Den Haag.
- 34. Verenso. *Update registratie verpleeghuizen 19 mei*. 2020 Retrieved on: 26-5-2020; Available from: https://www.verenso.nl/nieuws/update-registratie-verpleeghuizen-19-mei-2020.
- 35. Statistics Netherlands (CBS). *Aantal bewoners van verzorgings- en verpleeghuizen 2019*. 2020 Retrieved on: 26-5-2020; Available from: https://www.cbs.nl/nl-nl/maatwerk/2020/13/aantal-bewoners-van-verzorgings-en-verpleeghuizen-2019.
- 36. Statistics Netherlands (CBS). *Personen met gebruik Wlz-zorg in natura; leveringsvorm, zzp/zorgvorm, regio*. 2020 Retrieved on: 25-5-2020; Available from: https://mlzopendata.cbs.nl/#/MLZ/nl/dataset/40075NED/table?dl=1F1DD.
- 37. Statistics Netherlands (CBS). Werknemers met een baan in de zorg en welzijn; persoonskenmerken. 2020 Retrieved on: 25-5-2020; Available from: https://azwstatline.cbs.nl/?ts=1557394578331#/AZW/nl/dataset/24025NED/table.

ANNEX 1. Data on numbers of long-term care users and staff who have had COVID-19 and number of deaths in the Netherlands

	Residents	Staff
Numbers of tests carried out in care homes in your country	7160 (19 May) [34], which is 11% of the residents in this database. [This is based on one electronic patient record system, which accounts for approximately 50% of the nursing homes]	The National Institute for Public Health and the Environments (RIVM) informed us that, as far as they know, these type of statistics are not collected.
Number of care home residents transferred to hospital due to suspected or confirmed COVID	It is unusual for nursing home residents to be transferred to a hospital due to suspected or confirmed COVID-19. Most of these residents are treated in nursing homes.	N.a. (although data on care home staff admitted to hospital would be of interest too)
	The registration system of the Dutch Intensive Care Unit does not explicitely register nursing home residents, they fall under the 'Other' category. The only way to get this data is to make an inquiry to request access to the patients files.	
Number of care home residents who died in hospital, death linked to COVID-19	See comment above	N.A.
Number of care home residents and staff who tested positive for COVID-19	4836 (19 May) [34] [This is based on three electronic patient records. This includes a high share of the Dutch nursing homes.]	See comment above
Number of care home residents and staff who died and tested positive (before or after death) for COVID-19	890 (19 May) [34] [This is based on one electronic patient record system, which accounts for approximately 50% of the nursing homes]	See comment above
Number of people who died in the care home, and tested positive for COVID-19	Not available.	N.A.
Number of care home residents and staff who died from suspected/probable COVID-19 Number of people who died in the care home from suspected/problable COVID-19	1779 residents (19 May) [This includes tested and people with sympthoms of COVID-19]	See comment above
Number of excess deaths of care home residents, compared to same period in previous years	In week 15 (6 April - 12 April) excess deaths was the highest, more than double the average	N.A.

deaths accounted for pre-COVID-			
In week 19 (4 May – 10 May) the			
excess morality was just 1,2%			
higher, than the pre-COVID-19			
outbreak average.			
Not reported.			
[In theory it woul be possible to			
calculate this if access is granted			
to the national mortality statistics			
from the Dutch National Statistical			
Office (CBS)]			
Excess mortality shown in Figure 6 and Figure 7 are based on Wlz users.			
WIz is the regulatory framework which regulates residential care.			
Residential care is for care-seekers "who need permanent supervision			
to avoid escalation or serious damage and clients who need 24 h care because of physical problems or self-control problems" [6, p.242]. This			
			includes care in-kind but also includes in-kind extramural package called the total home-care package [Volledig Pakket Thuis] or the modular care package [Modulair Pakket Thuis].
115 394 people who live in care	431 200 people who work in		
homes in 2019 [35]	nursing homes, care homes and		
	home care organisations 2019 [37]		
242 820 persons receive Wlz care			
in 2017 [36]	[Please note that this defines		
- -	more than solely Wlz care.]		
	In week 19 (4 May – 10 May) the excess morality was just 1,2% higher, than the pre-COVID-19 outbreak average. Not reported. [In theory it woul be possible to calculate this if access is granted to the national mortality statistics from the Dutch National Statistical Office (CBS)] Excess mortality shown in Figure 6 a WIz is the regulatory framework which can be exceeded as a company of the state of the problems of the second escalation or serious damage because of physical problems or self includes care in-kind but also include the total home-care package [Volled care package [Modulair Pakket Thuis 115 394 people who live in care thomes in 2019 [35]		

	Service users	Staff
Number of users of community-based care (home care, day care, etc) and staff who have been tested	Not available.	Not available.
Number of users and staff who have tested positive	Not available.	Not available.
Number of users and staff who have died with confirmed COVID infection	Not available.	Not available.
Number of users and staff who have died from suspected/probable COVID infection	Not available.	Not available.