DECEMBER 2024

PROMISING HOUSING AND LONG-TERM CARE INNOVATIONS FOR PERSON-CENTERED AGING AMID FINANCING AND WORKFORCE CHALLENGES

Lessons from the Netherlands

Written by
Benjamin W. Veghte, MPA, Ph.D.

Published by
MIT CoLab
COMMUNITY INNOVATORS LAB

TABLE OF CONTENTS

This paper includes:

EXECUTIVE SUMMARY

The Netherlands has one of the most innovative long-term care systems in the world. Since introducing the world's first long-term care social insurance program in 1968, the country has also pioneered internationally renowned person-centered approaches to the delivery of both home- and facility-based care. Since coverage is universal, access to quality care is not rationed by income.

In the first decade of the 21st century, it became apparent that demographic shifts with financing and workforce implications would threaten the sustainability of the Dutch long-term care system. A government analysis conducted in 2010 projected that without reforms, by 2040 long-term care expenditure would reach between 7% and 9% of GDP, depending on the degree of efficiency gains in the system. And to meet the projected increase in the volume of formal care needs at current staffing levels, by 2060 more than one in three (36.5%) Dutch workers would need to work in the health and long-term care sectors.

Rather than simply retrenching, the Netherlands has responded by reimagining the means by which it supports dignity and independence in old age. Dutch providers and civil-society organizations, reinforced by government policies, have developed new models of person-centered aging that focus on holistic upstream intervention, empowerment, housing with supports, and reciprocal care rather than waiting until older adults need intensive long-term care and then treating them like passive patients. These new strategies tend to focus more on housing than care, leveraging the country's vibrant social housing sector, and over the long term should result in less institutional care and less formal care overall.

The United States approaches the age wave from the opposite starting point: inadequate and unequal access to quality, person-centered care, rather than universal access to an unsustainable degree of paid formal care. Despite these opposing starting points, as the age wave materializes, both countries find themselves having to navigate financing and workforce challenges. There is much that U.S. policymakers, providers, and advocates can learn from the delivery-system innovations the Dutch have pursued. These range from grassroots initiatives like resident care cooperatives, to reciprocal-care clustered housing communities where residents look after one another (supported by formal care as needed), to home care that integrates health and long-term care, to reablement therapies that empower older adults to live independently, to dementia care settings that give residents considerable autonomy in an environment that feels like home. Taken together, these innovations support person-centered aging in a more cost- and labor-efficient way than hitherto, helping the country maintain its universal, comprehensive long-term care system despite severe fiscal and workforce challenges.

This paper identifies ***nine lessons*** from the Dutch experience for providers, advocates, and policymakers interested in advancing person-centered aging in the United States:

1. Universal coverage with robust financing spurs provider innovation.
2. To incentivize investments in person-centered care, savings must be captured by the payers that make such investments.
3. Improving job quality will mitigate the care worker shortage and increase the likelihood of quality, person-centered care.
4. Innovative home care agencies can attract workers to this sector and serve as hubs of person-centered care.
5. Timely access to formal home care in the community may yield greater quality of life, happiness, and social connection than medicalized institutional care.
6. Tort and regulatory reform embracing the dignity of risk could make person-centered nursing-home care more broadly available.
7. Civic engagement and cross-sector collaboration are critical to sustainably supporting person-centered aging.
8. Policy and provider innovation are required to develop less costly ways of providing housing with care supports.
9. Universal access to person-centered care is possible.

PROMISING HOUSING AND LONG-TERM CARE INNOVATIONS FOR PERSON-CENTERED AGING AMID FINANCING AND WORKFORCE CHALLENGES

Lessons from the Netherlands

By Benjamin W. Veghte*

Access to quality, person-centered services and supports can be critical to whether an individual is able to age with dignity and independence. The Strategic Framework for a National Plan on Aging, developed by 16 federal agencies led by the Administration for Community Living, considers person-centeredness to be a foundational value and defines it as follows: "The preferences, needs, and voices of older adults drive the services and supports that enable them to live the lives they want."[1] The Alzheimer's Association provides a definition specific to aging-related long-term care: "Person centered care is a focus on elders' (residents' and clients') emotional needs and care preferences, consistent with their lifestyle. The emphasis is on relationships in the care (Social Model), rather than task-centered approaches that focus on physical health of elders (Medical Model)."[2]

In the U.S., access to quality, person-centered long-term care is limited, due in large part to affordability (financing) challenges and increasingly also to workforce constraints, both of which will worsen with the aging of the population. Even for those who can afford to pay out of pocket, access to person-centered care is constrained by prevailing paradigms in the provision of care. Critics of home and community based long-term care in the U.S. have noted that it is often insufficiently preventative, in part due to insufficient training and licensure standards in many states, particularly for private-pay clients.[3] Others have noted that the health care system as a whole leaves home-based long-term care insufficiently coordinated with other health care, leading to avoidable rehospitalizations and/or declines in functional or health status, both of which can increase health care costs over time.[4] Most U.S. nursing home facilities, meanwhile, have long resembled an acute-care design (the aforementioned Medical Model) in terms of how those under their care are treated; nursing homes tend to view residents as "patients," restricting their freedom of movement, daily schedule, and broader autonomy.[5]

New approaches to person-centered aging are needed—approaches that are broadly affordable and accessible, despite the reality of growing financing and workforce challenges.

* Benjamin W. Veghte, MPA, Ph.D., is Director of the WA Cares Fund at the Department of Social and Health Services in Washington State and an MIT Co-Lab Mel King Community Fellow.

For most Americans to be able to grow old with dignity and independence, new approaches to person-centered aging will be needed—approaches that are broadly affordable and accessible, despite the reality of growing financing and workforce challenges. Promising innovations are taking place across the country, including the new universal public insurance program in Washington State (the WA Cares Fund), which will provide near-universal access to a limited amount of paid care, primarily at home.[6] That said, advancing person-centered care in the context of financing and workforce constraints will be enormously challenging. New ideas are needed, and the U.S. can learn from promising models from abroad.

One of the most innovative long-term care systems in the world can be found in the Netherlands. The country is internationally regarded as a leader in providing universal access to comprehensive, quality long-term care.[7] The Dutch have pioneered person-centered models of healthy aging in home care, clustered senior housing, and dementia care. Many of the recent Dutch innovations to be discussed in this paper are still in the early stages of adoption, and quality enforcement and supervision remain regulatory challenges. The innovations are promising, however, and the government has developed structural strategies to support their dissemination.

This paper explores what U.S. policymakers, providers, and advocates can learn from these housing and long-term care innovations in the Netherlands. It is part of a broader study that also explores lessons from the structure, financing, and administration of the Dutch housing and long-term care systems.[8] To identify and explore these delivery-system innovations, I reviewed relevant primary and secondary sources, conducted site visits, and interviewed four different stakeholder groups in the Dutch long-term care system: government officials, academic and think tank experts, workers and providers, and residents of age-friendly housing communities and nursing homes. The paper begins by exploring Dutch fiscal and workforce challenges, then explores promising innovations to support person-centered aging in the context of these sustainability challenges. It concludes with a discussion of potential insights from the Dutch experience for the United States.

This paper explores what U.S. policymakers, providers, and advocates can learn from these delivery-system innovations in the Netherlands.

OVERVIEW OF THE DUTCH LONG-TERM CARE SYSTEM

The Netherlands introduced the world's first universal (mandatory) public long-term care insurance program in 1968, the Exceptional Medical Expenses Act (Algemene Wet Bijzondere Ziektekosten, henceforth: EMEA). At first, it covered only nursing home care, hospital admissions lasting longer than a year, inpatient mental health care (for people with intellectual and developmental disabilities), and intensive home health care. Over time, it came to cover home health care (1980), ambulatory mental health care (1982), ancillary long-term services and supports (household help) (1989), and residential care for the elderly (assisted living) (1997).[9] By the early 2000s, forecasts of the age wave made it clear to Dutch policymakers that without significant reforms, the system would become fiscally unsustainable.[10]

In 2015, the government undertook a radical reform of the long-term care system with the interrelated goals of shifting the bulk of care from an institutional to a home and community setting, leveraging informal support networks, and finding other efficiencies to improve fiscal sustainability.[11] While the government retained universal comprehensive coverage, it eliminated the EMEA program and assigned its three core functions—care, cure, and support—to three different programs:[12]

- **Institutional long-term care and highly intensive home health care** are now financed and administered through a new long-term care social insurance program (a truncated version of the EMEA) governed by the Long-Term Care Act (Wet langdurige zorg, henceforth: LTCA).
- **Nursing and personal care at home** are now provided through the existing social health insurance system governed by the Health Insurance Act (Zorgverzekeringswet, henceforth: HIA).
- **Ancillary long-term services and supports** for people living in the community—such as home modifications, cooking, cleaning, transportation, and assistance with social participation—are now provided through the nationally funded, municipally administered social assistance system governed by the Social Support Act (Wet maatschappelijke ondersteuning, henceforth: SSA).

In addition to care for older adults, these three pillars of the Dutch long-term care system also cover care for individuals with severe physical or sensory disabilities and/or long-term mental illness.[13]

The system as a whole covers both home- and facility-based long-term care for all its residents. For home health care, there are no copayments. Ancillary support (e.g., transportation, meal delivery, family caregiver supports) provided by municipalities has a nominal copayment of €20.60/month ($22.57/month).[14] For institutional care, there are income- and wealth-related copayments; copayments are lower (between €200 and €1,052 per month) for the first four months, after which they increase up to a maximum of €2,887 per month for the most affluent. If a spouse still lives at home or if one is raising children, the beneficiary remains on the lower copayment schedule.[15] Despite being contributory, the Dutch system achieves universal coverage by having no vesting requirement, making it possible to cover people with disabilities of all ages, regardless of work history.[16] The Netherlands has no private long-term care insurance.

ACCESS CHALLENGES

Widespread access to person-centered long-term care requires both a funding source to pay for such care and an adequate supply of providers who offer it. In recent years, projections have emerged that financing and workforce challenges will constrain access to paid long-term care in the coming decades. This section will explore the access challenges the Netherlands is projected to face, and the remainder of the paper will focus on how the country is mitigating these risks while advancing innovations in person-centered care.

Financing

In 2005, the Dutch spent 3.4% of GDP on long-term care—more than nearly all countries in the world outside of Scandinavia.[17] With demand for long-term care increasing annually due to the age wave, these costs have continued to grow, reaching 4.4% of GDP in 2021—more than twice the OECD average (1.8 percent) and more than three times what the United States spends (1.3 percent).[18] It's important to keep in mind that the Dutch figures are comparatively inflated for two reasons: in the Netherlands, medical care in nursing homes is financed by the LTCA, whereas in most other countries it is billed as a health care expense; and the Dutch figures include the country's generous social care benefits (which amounted to 1.3% of GDP in 2021), which many other countries' long-term care spending figures do not.[19] While actual Dutch spending on long-term care may thus not be quite as much of an outlier as the OECD data make it appear, it remains true that the Netherlands provides long-term care at a level of universality and comprehensiveness close to that in the Nordic countries. And with the share of the Dutch population aged 80 and older projected to grow from 3.9% in 2010 to 10.2% in 2050,[20] the need for care will continue to increase significantly. A government analysis conducted in 2010 projected that without reforms, by 2040 long-term care spending would equal between 7% and 9% of GDP, depending on the degree of efficiency gains in the system.[21] This is putting tremendous pressure on policymakers and stakeholders to innovate in the realms of administration and service delivery. Innovation and efficiency will be essential to the system's ability to continue to provide the high quality, comprehensive benefits Dutch residents have come to expect.

Both in response to the financing challenge and in order to support person-centered aging, the government has undertaken a number of measures to reduce unnecessary utilization of institutional and residential long-term care settings. (In the Dutch context from a financing perspective, assisted living is similar to an institutional setting, because the EMEA paid for housing costs in this setting, which in the U.S., Medicaid generally does not.) First, in 2013, LTCA benefit eligibility was tightened such that assisted living and nursing home providers now no longer received compensation for capital costs for beneficiaries who qualified through the lowest three levels of the eight-level severity index. This meant that henceforth, individuals with low levels of acuity could no longer get their housing costs paid in an institutional or residential setting. This was the first major domino in a policy shift away from institutional and residential care. The stricter admission criteria led to overcapacity and closure of a significant number of assisted living facilities and conversion of many of these to nursing homes. A survey of providers found that 150-200 institutional care facilities, with

a total capacity of roughly 10,000 beds, closed between 2013 and 2016.[22] Then, in 2022, the government halted all public funding of new nursing home capacity; future nursing home funding will be limited to replacement demand and maintaining prior investments.[23] Without this shift away from institutional and residential care, the long-term care system would have become unsustainable in terms of both fiscal and labor-force demands.

Workforce

A major constraint on the ability of the Dutch long-term care system to continue to provide quality, person-centered care in a timely fashion is the care worker shortage. The main driver of this dynamic is that the population most likely to need care is expected to grow rapidly, while the labor force is stagnating. The population 85 and older is projected to more than double between 2013 and 2043, whereas the population 20-64 is projected to modestly decrease during this period.[24] A second driver is that many young people do not see long-term care as an attractive career.[25] Finally, the Dutch care workforce is characterized by the second highest degree of part-time work in the OECD, with 77% working part-time.[26] Hence, the system is underutilizing the workers engaged in the sector; the average full-time equivalent (FTE) per care worker today is 0.63 in nursing homes and 0.56 in home care.[27] As a result of these trends, institutional and home care providers are already experiencing a worker shortage today. While there were 11.1 long-term care workers per 100 people aged 65 and older in 2011, that ratio declined to 8.2 by 2021.[28]

Policymakers are now beginning to see growing care needs combined with the shortage of care workers as a threat to not only the country's long-term care entitlements, but also the national economy. In most countries in the world, care work is poorly compensated compared to work requiring similar qualifications, and thus raising wages could mitigate the shortage of care workers. In the Netherlands, however, personal care workers in both institutional/residential and home care are more equitably compensated (relative to the economy-wide average wage) than in any other country in the OECD.[29] In 2019, roughly one in six (16%) Dutch workers was employed in the health and long-term care sectors. To meet the projected increase in the volume of formal care needs at today's staffing levels, the Scientific Council for Government Policy projects that this ratio would have to increase to roughly one in five (19.8%) by 2030, one in four (25.3%) by 2040, nearly one in three (30.5%) by 2050, and more than one in three (36.5%) by 2060. In other words, by 2060, more than one third of workers in the entire national economy would need to be employed in the care sector.[30] The Long-Term Care Minister has called this dynamic unsustainable.[31]

Due to the same demographic dynamics, a shortage of informal caregivers is manifesting as well. The ratio of potential informal caregivers to those likely to need care has been steadily declining for decades and is projected to continue to drop. In 1975, there were 30 people aged 50-75 for every person 85 or older. By 2021, that ratio had declined to 14:1, and by 2040 it is expected to drop to 6:1.[32] With a growing shortage of both care workers and informal caregivers, new solutions will be required to ensure that those who need care continue to receive the quality of support to which the Dutch have become accustomed.

In 1975, there were 30 people aged 50-75 for every person 85 or older. By 2021, that ratio had declined to 14:1, and by 2040 it is expected to drop to 6:1.

Without policy intervention, the care sector's demands on the Dutch workforce will be unsustainable.

In 2019

1 *in* 6

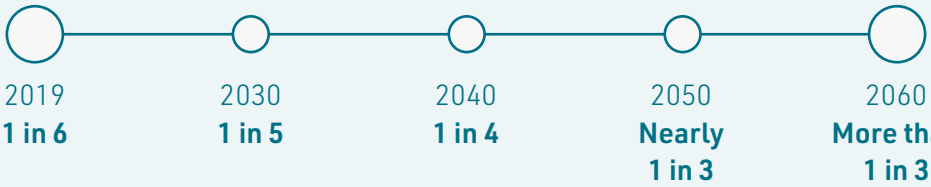
Dutch workers was employed in the health and long-term care sector

To meet the needs of an aging society

In 2060, more than

1 *in* 3

Dutch workers would need to be employed in the care sector



CARING COMMUNITIES

Person-centered aging is a goal expressed by most of the experts, advocates, providers, and residents interviewed for this project. They acknowledged that in the future, the Dutch housing and long-term care systems will need to become more creative in finding cost-effective ways to support aging in place. Solutions will need to involve changes in housing, care, and social engagement. The following section describes four innovative Dutch models for supporting home-based, person-centered care: resident care cooperatives, provider-insurer collaboration to build the capacity of initiatives that support aging in place, reciprocal-care clustered senior housing, and intergenerational cohabitation.

Resident Care Cooperatives

A major grassroots movement of the past two decades has been the emergence of volunteer "care cooperatives" (zorgcoöperaties) and related "citizen initiatives" (burgerinitiatieven) or "resident initiatives" (bewonersinitiatieven) that offer informal social care to support aging in place. These resemble the Village Movement in the U.S.[33] Such initiatives are particularly important in rural areas, where a decline in the supply of institutional care facilities is already being felt.[34]

In neighborhood or village care cooperatives, residents form an association that individuals (and in some cases, stakeholders) can join by paying a low annual membership fee (typically around €20/year). Members commit to offering neighborly assistance to those needing support by going shopping, doing odd jobs around the house, providing transportation, supporting social engagement, or offering companionship. When members themselves need support, they can rely on other members of the cooperative. In 2019, 16% of people aged 50 and over were engaged in informal caregiving in the Netherlands (compared to 7% in the U.S.).[35] Some of these did so through care cooperatives; others were members of different volunteer organizations, often under the auspices of a professional organization such as a nursing home. Through the SSA, municipalities also have a significant responsibility to organize volunteering to support the care sector.

"The Netherlands Cares for Each Other" (Nederland Zorgt Voor Elkaar) is the umbrella association of residents' initiatives working toward "living together and caring together." Their website states: "'Local citizen initiatives are springing up like mushrooms. Care cooperatives, care collectives, or urban villages, whatever they call themselves, are taking matters into their own hands and organizing care and support for the elderly and other vulnerable residents of their neighborhood or village." The association seeks to nurture and sustain this grassroots movement independent of—but in partnership with—initiatives from non-profit care, housing, and welfare organizations, such as the one described below.[36]

From Care to Normal Life Coalition

A new movement of one non-profit health insurer and five care providers is the "From Care to Normal Life" (Van Zorg naar Gewoon Leven) coalition. It operates in the Northeast of the country. The health insurer, Silver Cross (Zilveren Kruis), is the largest in the region and hence serves as the regional care office for the LTCA. Such care offices exist in all 31 LTCA regions; they contract with long-term care providers and help beneficiaries arrange their care. The "From Care to Normal Life" coalition was formed in 2023 and endeavors to build the capacity of initiatives that help people "live at home in good conditions for as long as possible." They provide information, best practices, implementation guides, leadership development, and other tools to nurture the formation and scaling of initiatives that support home care, community care, reablement and self-reliance, and use of technology that supports aging in place (age tech).

The coalition's raison d'être is the fiscal unsustainability of relying on formal care as the age wave materializes: "We need to change. We see that the accessibility of care is under pressure. In the future, people must continue to be able to count on appropriate care. This will require a transition in the coming years to make care future-proof: we can do things differently and we must do things differently." It is striking that a coalition primarily of care providers adopts a big-picture perspective that, while it may not run counter to their business interests, at the very least represents enlightened self-interest. They acknowledge and embrace the need to focus "more on people's lives than their care needs. Not every request for help is a request for care, and it is also much better for people's quality of life if we look more broadly at an appropriate answer to those requests for help than just from a care perspective."[37]

Reciprocal-Care Clustered Housing Communities

Dutch reciprocal-care senior housing can be understood as U.S.-style independent living, but with architectural and social innovations designed to foster community engagement and mutual support. It builds on the model of cohousing, with roots in Denmark since the late 1960s, which combats social isolation by creating shared spaces for community engagement. Clustered senior housing is also typically strategically located near public transportation and desired amenities, making social participation much more feasible. Nursing care is available if needed, but many social care needs are met by neighbors looking after one another. One interview partner noted: "I think you want housing where people who are more or less fit, and people who are more or less not fit, live together where there is a big kitchen where you can cook and eat together. Because if you are used to cooking and eating one, two, three times a week together, and you get sick and you can't come out of your apartment, then it's easy for me to say, 'Oh, I'm going to bring you something.'"

Dutch reciprocal-care senior housing can be understood as U.S.-style independent living, but with architectural and social innovations designed to foster community engagement and mutual support.

Based on my expert and resident interviews, early indications are that the reciprocal care model holds considerable promise to support person-centered aging while also reducing long-term care costs. Most residents move into a clustered housing community while they are still relatively healthy and gain a social anchor in their new community before they need significant nursing care. It makes it possible for neighbors to look after one another and also promotes more active, healthier aging compared to being alone at home in front of the TV, which many residents saw as their fate if they had not moved to reciprocal clustered housing. Some residents in these communities will still end up needing intensive home health care, and they can receive such care from nurses from the HIA—or, if the needs are more severe, LTCA—at home, without having to move to a traditional nursing home. Only if they become a danger to themselves or others would they need to move to a traditional nursing home. For this research, I conducted site visits at two reciprocal care communities: Liv inn Hilversum and Knarrenhof Gouda.

LIV INN HILVERSUM

Liv inn Hilversum is a 170-unit senior housing community near Utrecht, completed in 2021. This experiment in person-centered aging is run by Habion, a social housing association that builds subsidized and mixed-income senior housing throughout the country. In 2023, rents averaged €622/month including utilities, which makes them affordable (with housing subsidies as needed) even for people with minimal income.[38] If residents need home health care, they receive it from a nursing care provider, just as they would if they were living in their own house. This type of community is an example of the separation of housing and (formal) care that the government, insurers, care organizations, and residents have been consciously moving toward over the past decade.

Liv inn Hilversum is the result of a decade of planning and experimentation by Habion in response to the government's shift in 2013 away from funding facilities that offer nursing care and housing conjointly (e.g., nursing homes and assisted living facilities).[39] Each time it began planning a new community, Habion asked prospective residents the same three questions: How do you want to grow old? What do you need to age the way you would like? And what can you bring to—or do for—the community? With each project they learned new lessons. The result of this experimentation and learning by doing is the Liv inn concept. Prospective residents consistently expressed that they did not want to feel like they were being warehoused until they passed away. Rather, they wanted to move into a community to start an interesting new chapter of their lives—a place primarily to live, not receive care. They also did not want to have to move again in the future. Another prominent theme was that residents wanted "to matter" and to have "ownership" of life in the building, rather than to feel like patients in a care facility. They wanted nurses from the HIA and LTCA to come to the facility to provide professional home health care when needed, but wanted this to occur sparingly and unobtrusively in street clothes.

Habion asked prospective residents three questions: How do you want to grow old? What do you need to age the way you would like? And what can you bring to—or do for—the community?

The community is not for everyone; it is for people who want not only to maintain their independence, but also to be engaged with their community and support one another. Each resident has the opportunity to leverage their talents to contribute to the social fabric of the community and to age meaningfully and actively. The Liv inn concept is one of social reciprocity—residents largely look after one another. Examples include going grocery shopping, cooking, computer help, going for walks, checking in on someone who hasn't been seen recently, or standing vigil with someone receiving hospice care. This social reciprocity is backstopped by the availability of formal home health care or personal care from a professional provider, financed through the HIA or LTCA.

One of the biggest challenges in getting from the Liv inn concept to implementation was the selection of residents. Because this is social housing and most residents' rents are (directly and/or indirectly) subsidized, the municipality could have insisted that any open apartment be assigned first come first served, or to the next person on the waiting list. But one of the key ingredients to the success of the Liv inn concept is achieving a balanced composition of residents. To this end, Liv inn invites prospective residents to write a motivation letter answering the three questions above, based on which a committee selects promising candidates and then invites them to "click" conversations to see if they are a good fit. The selection committee consists of residents as well an employee of Habion and an employee of the nursing provider, Amaris. Suitable candidates are considered for acceptance, within the following constraints. Roughly one half of residents are "reciprocal," meaning they are healthy (i.e., have not been determined eligible for care from the HIA or LTCA and have committed to actively participating in the Liv inn community). The other half have care needs making them eligible for long-term care benefits, of which roughly one third require light care, one third medium care, and one third heavy care.[40] As residents age and some move into a category requiring more care, the admissions process is used to maintain the desired mix.

The balanced composition of residents facilitates reciprocal, informal social care. It aims also to reduce the amount of paid, formal care needed by residents. Liv Inn Hilversum is already seeing preliminary indications of reduced use of medications and other home health care. A key takeaway from the Liv inn experiment is that at least to some extent, reciprocal care can work; residents can take care of one another and thereby reduce the need for formal care. If Liv inn Hilversum is able to demonstrate concrete savings in expenditure on home health care, medications, emergency room visits, and hospital stays, then nursing provider organizations will be less wary of the new concept and more willing to partner on these types of projects. Indeed, they might even be willing to invest in the construction of such communities in other locations. Furthermore, these types of reciprocal care communities will surely also reduce spending on social care (e.g., support with things like cooking, transportation, and social participation), saving money for the SSA and thereby lowering tax rates on workers as the costs of the age wave materialize.

A key takeaway from the Liv inn experiment is that at least to some extent, reciprocal care can work; residents can take care of one another and thereby reduce the need for formal care.

One interview partner noted that other social housing associations have tried to operationalize the same vision as Liv inn, but have not yet succeeded, for two reasons. First, the medical dimension of those other housing associations' approaches was too prominent; nurses were visible throughout the building/community and the nursing provider decided on the program of social activities. This can turn away prospective residents seeking more ownership and autonomy in their living experience. Second, other housing associations in this space have struggled to find the right mix of residents: "I went in there and people are only sitting and hanging in their chair. I didn't see their fit residents, there were only very old people who needed a lot of care. There were no fit elderly to be seen." In such cases, the reciprocal care essential to the Liv inn model is lacking. The interview partner continued: "If you give someone 100% health care, they do not get activated to do things they can still do and the need for care grows fast. At Liv inn there is a focus on what you can do, not what you cannot do. We see that people get out of their rooms again, go and look outside and participate again. They use less health care, less medication because they're active again."

At Liv inn, "people get out of their rooms again, go and look outside and participate again. They use less health care, less medication because they're active again."

One of the challenges in getting from the concept to delivery of Liv inn was finding the right relationship with a care provider organization. Traditionally, nursing providers often own or rent the entire building and provide housing and care jointly in nursing homes. Nursing providers have struggled to grow comfortable with concepts like Liv inn, where there is no guarantee that demand will be sufficient to provide a business case for partnering. As one interview partner noted: "Sometimes they do not understand yet, or they feel scared to participate in this. Because they say, 'Oh, it's not 100% health care. How do we do it?' No, here it's about living, not providing care." For the nursing provider with whom Liv inn partners, Amaris, a sufficiently large share of people needing formal care was a precondition for collaboration. If too few residents needed care and too few hours of care were needed overall, the care provider would not have engaged, and the concept would have failed. Habion has been experimenting across its various properties for nearly a decade trying to find the right mix of residents to make the math work for nursing organizations (each property partners with a specific provider). For some of Habion's other properties, a mix of one third of residents with heavy care needs, one third with light care needs, and one third with no care needs has worked well for both social reciprocity and the nursing provider's business case.

For couples where one person is in an early stage of dementia and their partner is not, Liv inn can be a very attractive option. Hitherto, such a couple's options would be to remain in their home, which could be exhausting and isolating for the healthy partner and potentially unsafe for the partner with dementia; to move together into a nursing home, which could be limiting and socially isolating for the healthy partner; or to move the partner with dementia into a nursing home while the healthy partner remained at home, forcing the couple to live separately. At Liv inn, the couple can move in together; the person needing care can receive visits from a nurse or home care aide as needed, while the healthy partner can maintain a full social life without being separated from their loved one.

Residents manage the day-to-day affairs of the community largely on their own, with the support of a staff member who is there roughly one day per week. There is no reception office or social worker on staff; the residents themselves give tours to prospective tenants, plan almost all of their shared social activities, and manage the financing and catering for these events. The sense of community engagement and reciprocity is so strong that two residents referred to it as similar to a commune or kibbutz, noting: "We're growing old together."

The sense of community engagement and reciprocity is so strong that two residents referred to it as similar to a commune or kibbutz, noting: "We're growing old together."

Residents have self-contained age-friendly two-room apartments with a kitchen, bathroom, and washer and dryer. If they so choose, they can also take advantage of very attractive shared social spaces, such as a well-appointed communal kitchen and party room, both of which are periodically rented out to neighborhood groups to generate revenue and strengthen residents' bonds with neighbors in the community. There is also a courtyard garden, woodworking workshop, and theater/music room. During my visit, these shared spaces seemed to be far more successful than similar spaces in apartment buildings in the U.S.

Liv inn's website presents information not only about the community, but also about the broader rationale for the concept: "You rent a home and arrange the care you need. In the future, the working population will decline, and with it the number of people working in health care. There is therefore a great need to form a good community of neighbors together. That is why we have reinvented the retirement home in the country together with residents and neighborhood since 2013."[41]

KNARRENHOF GOUDA

Another age-friendly clustered housing model has been developed by Knarrenhof, a foundation that supports small groups of older adults who express an interest in establishing a socially engaged senior housing community. The foundation facilitates largely grassroots, resident-led initiatives to envision, co-finance, and build retirement communities. Two things are particularly innovative about this model. First, the prospective residents co-manage the entire development process from concept to delivery together with the foundation, which serves as project developer and manager. It thus resembles a franchise model where the franchisee is a group of engaged residents. Second, beyond the existence of some social housing units within each community, the overall concept has a co-op dimension in that Knarrenhof sells the land to the residents at cost, not at market price, and in turn stipulates that when one of the owners sells their Knarrenhof home in the future, the profit returns to the foundation so that future buyers can also access affordable housing. The first Knarrenhof development started its planning process in 2011 and was completed in 2018. By the spring of 2024, a total of eight Knarrenhof communities had been completed, and 43 other initiatives are in various stages of development. Throughout the Netherlands, more than 31,500 older adults are either engaged in Knarrenhof resident initiatives or have indicated their interest to become engaged if suitable land were to become available for Knarrenhof development in their community.[42]

The foundation has developed a seven-stage model for community formation. The first stage is identifying an enthusiastic local initiative group. This is typically composed of prospective residents, but a local government or health care organization could also express an interest in driving community formation. Alternatively, a private citizen, landowner, or developer could initiate by identifying a promising piece of land that would be well-suited to a Knarrenhof development. Anyone interested in living in—and contributing to the formation of—a Knarrenhof community can sign up in up to three municipalities for a fee of €15 per municipality. The second stage is the search for a suitable property for development, ideally within walking distance of a supermarket or other relevant amenities. The third stage is meetings among interested parties to map out the preferences, capabilities, and resources of the prospective residents that result in a set of rules by which the community pledges to live together. The prospective residents develop their own concept for the community and receive support from a professional supervisor from the Knarrenhof foundation to realize their vision.[43] The fourth stage is the formation of a contract with the landowner or municipality. The fifth stage is the formation of the local resident association. The sixth stage is securing financing, hiring a contractor, and developing a final architectural plan. Each project is financed through Collective Private Commissioning, whereby a group of future residents jointly finance and shape the development of the built community.[44] The final stage includes construction of the building, further detailing the social rules of the residents' association, and building social ties to the neighborhood.[45]

In key ways, the Knarrenhof concept is similar to that of Liv inn. Both models seek to facilitate aging in place and forestall the need to move to a nursing home. All residents pledge to engage in reciprocal social care with their neighbors. Shared spaces exist to foster community. Residents self-manage their day-to-day individual and community activities. Both models seek locations near the city center, in close proximity to stores and with access to public transportation. Further, both models consciously choose a broad age distribution of older adults so that the younger members of a community can do the more physically demanding community work. In other words, these are not simply retirement communities; they are innovative architectural and social models of community aging. They are designed to support healthy, vital aging; social inclusion and cohesion; and cost-saving efficiencies not only for the residents but also for the long-term care system and society as a whole (e.g., by freeing up single-family homes for younger families) compared to an aging model where people either stay in their previous home or move to an assisted living facility or nursing home.

These are not simply retirement communities; they are innovative architectural and social models of community aging.

The Knarrenhof concept differs from Liv inn in certain respects. Knarrenhof communities are mixed income (and hence more affluent on average) with a blend of owner-occupied (ranging from affordable to more expensive) and social-housing rental units, whereas Liv inn consists exclusively of social housing, with rents that are modest and legally capped. This yields a limited revenue stream for Liv inn that in turn puts a heavy strain on the financial viability and scalability of the concept. Knarrenhof communities are thus spreading much faster in the Netherlands than Liv inn communities, of which only a small handful exist or are underway. Knarrenhof communities are typically smaller and have a higher percentage of healthier and, based on my observation, younger seniors. This can make

them more attractive for healthier adults, but it could also mean that some residents who end up needing more intensive care as they age may have to eventually move to a nursing home because nursing organizations may not see a business case for offering intensive home health care to such a small number of individuals in a community. Finally, whereas Liv inns are being built in a modern aesthetic, Knarrenhof communities are based on the traditional architectural style of a low-rise U-shaped building with a courtyard (Hof) and interior garden.

A challenge with both Liv inn and Knarrenhof initiatives is the financial and administrative hurdles that must be cleared in order to acquire and develop a new community. The upfront costs are considerable, particularly because these projects endeavor to be located in city centers for the purpose of facilitating social participation. Privately owned land close to the city center may be well suited for development of a Liv inn or Knarrenhof community, but such properties are in high demand and expensive, as there are many other groups besides the elderly who urgently need housing. The land must often be purchased from the municipality, but the municipality's real estate department could lose money on the transaction (compared to selling to a higher bidder) in the short term, particularly for the best-suited plots of land close to relevant amenities. This can lead to a municipality not selling to a reciprocal housing community, even though the municipality's social care department (SSA) would potentially stand to save money in the long term if a Liv inn or Knarrenhof community were built in its jurisdiction. Both Liv inn and many Knarrenhof resident initiatives have experienced frustration finding affordable land and navigating municipal administrative hurdles.[46] There are 342 municipalities in the Netherlands, and each one may have a different set of rules and political dynamics.

NEW GOVERNMENT INVESTMENTS IN RECIPROCAL CARE HOUSING

The Dutch government realizes that reciprocal care is much more likely to materialize on a broad scale if the senior housing stock is affordable and conducive to it. An abundant affordable housing stock is readily available due to the historical legacy and ongoing vitality of social housing associations, discussed in depth in a tandem publication.[47] Social housing associations are able to charge lower rents than most private landlords because they have access to capital investment on below-market terms.[48] In addition, residents with low income and assets who struggle to afford rent can receive a rental allowance (subsidy). Over one third (35%) of Dutch seniors live in social housing, including a small but rapidly increasing number in clustered senior housing.[49] Rents paid by adults aged 75 and older living in social housing average €608 ($652) in 2024, including utilities,[50] and one-quarter of Dutch households aged 75-85 receive a rent subsidy.[51]

For reciprocal-care senior housing to become more widespread, and thereby markedly reduce demand for formal care, it must not only be affordable, but also desirable and available in adequate supply. Hence the government is actively facilitating and supporting the construction of such housing through the Long-Term Care Ministry's Housing, Support, and Care for the Elderly (*Wonen Ondersteuning en Zorg voor Ouderen*, or WOZO) initiative launched in 2022.[52] This is a multi-sector effort that includes €312 million in incentives for social housing associations and care providers to build or renovate "care-suitable" homes, i.e. clustered affordable housing that is suitable for someone with a wheelchair and has a communal area for social activities and cooking.[53] The Long-Term Care Ministry is working with municipalities, developers, investors, and other stakeholders to foster the development of 290,000 new residential units for the elderly in clustered senior housing by 2030.[54]

Much more work needs to be done to pave the way for the Ministry's envisioned scaling of the reciprocal care model. The WOZO initiative is driving stakeholders toward this objective, aided by two institutional factors: First, roughly one third of all housing in the Netherlands is owned by social housing associations. As one interview partner noted, "They make it a habit to build for problems, not profit." They tend to be eager and willing partners, as long as the math pencils out; even though they are non-profit, they cannot afford to lose money long term. Second, the established social practice in the Netherlands known as the "polder model" (poldermodel) brings actors from different sectors together to compromise and develop concrete plans to make progress toward a higher-level societal objective.[55] Social housing associations are not only invited to the table, but also required by law to meet with municipal governments biennially to reach agreements on what to build where. In their capacity as investors in social housing, pension funds are also at the table. The national government provides a carrot for municipal collaboration through grants, while also retaining a stick of potentially instructing provincial governments to rezone suitable land parcels when necessary.

Roughly one third of all housing in the Netherlands is owned by social housing associations. As one interview partner noted, "They make it a habit to build for problems, not profit."

Intergenerational Cohabitation

Another caring community model gaining traction in recent years in the Netherlands is intergenerational cohabitation. One driver of this trend is the aforementioned tightening of eligibility for institutional/residential care in 2013, which led to vacancies at assisted living facilities and nursing homes, which could be filled in part by students.[56] Second, facility managers committed to more person-centered care began to seek new strategies for not only keeping residents alive, but also combatting social isolation and providing residents with an environment more conducive to joy, vitality, and healthy aging. Third, there is a shortage of affordable student housing in the Netherlands. As such, offering students free or subsidized housing in senior communities addresses two problems at once.[57]

The best-known example of intergenerational housing in the Netherlands is the Humanitas Residential Care Center in Deventer.[58] It began offering free housing to university students in 2012 in exchange for them spending 30 hours per month with senior residents, engaging in activities ranging from providing companionship, to preparing meals together, to picking up something for them in town, to teaching them skills such as how to use smart phones, email, or social media. Six students live together with 160 older adults. Intergenerational cohabitation at Humanitas prioritizes person-centered aging in an engaged, lively, organic community over the traditional nursing home model of managing patients in a sanitized, safe, segregated setting. The goal is to recreate a social environment that better resembles "normal life." Having students in the retirement community leads to more conversations about what is going on outside of it and combats the tendency towards rumination about aches and pains that often stems from only interacting with other elders with high care needs.

Since Humanitas pioneered intergenerational cohabitation in Dutch senior care in 2012, several other facilities have followed suit, such as Het Ouden Huis in Bodegraven and De Posten in Enschede. Intergenerational cohabitation is also a small part of the concept at Liv inn, where ten students receive subsidized housing in exchange for contributing their skills and companionship to the life of the community. For example, a student learning to be a chef occasionally helps with cooking in the shared kitchen, and a student training for a career in security lives next to the entrance to provide greater safety. At least one elder care facility in the U.S. has been leveraging the concept of intergenerational cohabitation since 2010.[59]

In light of the twin challenges of an aging society and a care workforce shortage, the Dutch government has committed to scaling this model. In 2023, it announced a plan to invest €49 million annually in a program to offer rent subsidies to young people who are willing to cohabitate and engage with senior communities. Housing associations or nursing care organizations can provide a rental subsidy of €200/month to young people between the ages of 18 and 30 who commit to actively contributing to the quality of life of senior communities. Long-Term Care Minister Helder summarized the government's rationale for this investment: "The knife cuts both ways here. We see relatively more and more elderly people, fewer health care staff to care for them, and housing shortages and loneliness among young people. With this arrangement we can offer young people affordable housing, and they can always have a chat or visit someone in the complex. For the elderly, it provides more life and extra help and support."[60]

Insights from Caring Communities for the U.S.

As the age wave materializes, the U.S. finds itself coping with the opposite problem as the Netherlands: too little access to quality, person-centered long-term care (particularly home and community based care), rather than universal access to an unsustainable degree of paid formal care. Still, both countries face similar financing and workforce constraints as they navigate the age wave in the coming decades. Like the Netherlands, the U.S. will need to find cost-effective ways to support person-centered aging. In the Netherlands, in the context of a universal, comprehensive entitlement to long-term care, caring communities give older adults a way to age with more autonomy, belonging, and meaning. In the U.S., caring communities could do this as well, but in the absence of a universal entitlement, could also better support families currently unable to access paid formal care. The macro policy and financing dimensions of this issue are explored in a companion publication.[61]

The Netherlands is a much smaller country with a stronger tradition of multi-sector collaboration and compromise.[62] But the U.S. also has a strong civil society, a culture of volunteerism, and Multisector Plans for Aging underway in 24 states.[63] Hence for the U.S. as well, the caring communities model holds tremendous promise to support person-centered aging. If, like the Dutch resident care cooperative movement, the U.S. Village Movement were to become more widespread and socio-economically diverse, it could support a broad range of seniors. It could do so both directly by providing neighborly assistance and social engagement, and indirectly by raising community awareness of the need to transform communities to make them more age friendly. Intergenerational cohabitation is another model that readily translates to the U.S. context, with some existing precedents. Allowing students or other young adults to agree to engage with assisted living or nursing home residents in exchange for subsidized housing could help frail or cognitively impaired seniors

with things like using technology, going for walks, cooking, companionship, and connecting to the outside world. If scaled up with sufficient investment, it could also modestly mitigate staffing shortages in residential facilities.

Most promising of all, a significant expansion in the supply of affordable senior housing, where residents can find a sense of community before they are too old and frail to do so, could pave the way for more person-centered aging in the U.S. Some elements of the Dutch reciprocal-care model are evident in the co-housing (or congregate housing) movement in the U.S. As ever more seniors struggle to find affordable housing in retirement, such initiatives are likely to proliferate, as evidenced in the success of recent legislative efforts in Oregon and Washington State to reform local zoning laws that effectively prohibited co-living.[64] Such housing could stimulate healthy aging and reciprocal support, and thereby reduce the projected demand for formal long-term care, particularly nursing home care.

Indeed, in the wake of Dutch efforts to strengthen caring communities and reduce utilization of formal long-term care (which remains a universal entitlement), the share of Dutch adults 80 and older who receive long-term care in an institution declined by 36% from 2012 to 2020, and spending on community nursing has also decreased since 2019. Both the average costs per client and the number of clients have modestly declined, despite a significant increase in the population of older adults.[65]

The share of Dutch adults 80+ who receive care in an institution has declined by 36% and spending on community nursing has decreased, despite a rapidly aging population.

PERSON-CENTERED PROVIDER INNOVATIONS

Over the past three decades, the long-term care delivery system in the Netherlands has been revolutionized by a number of pivotal provider innovations geared toward more holistic, person-centered care. As a whole, these have sought to empower and activate older adults to age with more autonomy in a setting that resembles their previous adult life, whether at home or in shared housing arrangements that replace the assisted living facility or nursing home with more socially participatory and self-determined communal housing communities. Many of these innovations have inspired broader change in their respective sector (i.e., home health care or nursing home care) both within the Netherlands and around the world.

Integrated, Holistic Home-Health Care: Buurtzorg

In 2006, a visionary Dutch community nurse, Jos de Blok, pioneered a new approach to the provision of home health care. Together with colleagues, he founded the non-profit nursing agency Buurtzorg (a Dutch term which translates as Neighborhood [or Community or District] Nursing). At the time, the prevailing mode of home care delivery was that a home care organization would send nurses to provide home health care and home care aides to perform personal care. Notably, it would not be the same nurse or the same home-care aide each time; in some cases, clients would see up to three dozen different care staff each month. This meant that the client lacked continuity of care, and the experience was often perceived by clients and home care staff alike as bureaucratic. Buurtzorg developed a more person-centered approach to the provision of home care, where both home health care and personal care for a group of 50-60 patients are organized and delivered holistically by a self-managing team of typically 8 to 12 nurses. The teams are composed of a mix of nurses with varying levels of education and experience. To allow the nursing teams to focus on care rather than paperwork, a centralized administrative staff handles billing and other logistical matters. Interview partners underscored that this back-office support is administrative, not managerial, as the nursing teams are self-managed. The nursing teams are also supported by regional coaches, who serve 40-50 teams each. The coaches meet with the nursing teams once or twice per year, mainly to assist with problem solving through a solution-oriented, consensus-based decision-making approach. The coaches also serve as stewards of the Buurtzorg methodology, ensuring the Buurtzorg model is adhered to by the nursing teams even as the organization has scaled up rapidly.[66]

The advantage of integrating home health and personal care is that the nurses are able to spend more time with their clients and to understand and meet their needs holistically. For example, in addition to bathing a client, they can also do wound dressing. The flexibility and autonomy that Buurtzorg gives its nursing teams goes even further: for clients for whom it is needed, they co-organize the individual's social support network in

For clients for whom it is needed, they co-organize the individual's social support network in the neighborhood.

the neighborhood. One interview partner, a Buurtzorg nurse, noted that, for example, if a nurse detects that a client is socially isolated and reticent to go to the local community center, they can accompany the client the first time, help ensure that they are comfortable, and then encourage them to go in the future on their own. This would be unheard of in traditional home health care, where as a consequence of neglecting the holistic needs of the care recipient, it is common for clients to find reasons to require more frequent visits from a nurse, when in fact the actual underlying condition is loneliness and lack of social connection. Buurtzorg (like all home health care organizations in the Netherlands) also provides palliative and hospice care at home. This is not only less expensive than doing this in an institutional setting, but is also more person-centered, since by the end of life, the nurse has been providing care to the client for a while and knows them well.

Buurtzorg nurses can also refer clients to a parallel service, Buurtdiensten (Neighborhood Services), which was founded in 2009. The home health and personal care provided by Buurtzorg is financed by the health insurance system (HIA), except in cases of intensive home care, in which case care is funded by the long-term care insurance program (LTCA). The ancillary services and supports (social care) provided by Buurtdiensten, like shopping, cooking, cleaning, transportation, and social participation, are financed by municipalities (SSA).

Buurtzorg nurses (and Buurtdiensten social caregivers) develop close relationships with their clients, which facilitates more holistic care. In Buurtzorg, typically three to four nurses from the team are assigned to a given client; in Buurtdiensten, because the work does not require shifts, one caregiver is assigned to a given client. Each client's nurses are organized in enduring self-managed teams geographically focused on one local community (hence the organization's name, Neighborhood Nursing); Buurtdiensten teams are similarly assigned to one community. In both cases, this allows the teams to become experts in all of their community's resources, services, and supports. Buurtzorg is currently in the process of upgrading its neighborhood nursing teams to encompass physical therapy as well—something they used to refer clients to, but which they will now be able to offer directly.

While Buurtzorg's operational approach is innovative (and replicated in Buurtdiensten), its philosophy aligns well with the broader reform agenda in the Dutch long-term care system of the past two decades. Buurtzorg and Buurtdiensten teams both follow the same methodology, the "onion model," to support a client's health, well-being, and autonomy. The client is the center of the onion, the inner layer of the onion around the client is their informal support network of family and friends, the next layer is the Buurtzorg nurses and/or Buurtdiensten caregiver, and the outer layer is the formal medical system (in the case of Buurtzorg) or the community (in the case of Buurtdiensten). The nurses/caregiver first seek to understand what is important to and needed by the client; then assess what the client can do—or can be empowered to do—themselves; then determine the extent to which the client's informal support network can be drawn in to help meet their care needs; and finally, the Buurtzorg nurses or Buurtdiensten caregiver only do what the client and their support network cannot do themselves. A client may use Buurtzorg or Buurtdiensten or both; in the case of the latter, the Buurtzorg nurses and Buurtdiensten caregiver communicate with each other regularly regarding the client's needs and concerns.[67]

The nurses explore what is important to the client and what the client can do themselves, then leverage support networks, and only do what the client and their network cannot.

Buurtzorg has grown steadily since 2007 and today has over 10,000 nurses working in about 950 teams across the Netherlands. Buurtdiensten employs over 4,000 caregivers. Taken together, this makes Buurtzorg Nederland (the overarching organization) the largest home care organization in the Netherlands. Buurtzorg is held in high esteem by both its clients and staff. Clients give Buurtzorg satisfaction ratings that are about 30% higher than comparable providers, and Buurtzorg nurses express appreciation for the autonomy they have in structuring their work and making decisions about client care in their self-managed teams. They also appreciate the well-designed IT systems that support their work, in which client information, employee information, care team information, and knowledge about best practices are well integrated into one system. This is reflected in levels of absenteeism and turnover that are one- to two-thirds lower than in comparable organizations. The flat organizational structure also means that there is far less overhead (both in terms of physical offices and middle management). Additionally, the higher-skilled, holistic care concept has led to more efficient care provision, in that fewer hours of care are needed per client, which offsets the higher cost per hour of providing both home health and personal care through nurses.[68]

INSIGHTS FROM BUURTZORG FOR THE U.S.

What lessons can be drawn from Buurtzorg for the United States? First, it is important to note that although many have tried, it has proven challenging to imitate the Buurtzorg concept even domestically, much less to transplant it to other countries. Many international attempts have failed, including one in Minnesota, although several have succeeded in other countries. It's a top-heavy model in that it uses highly credentialed workers to do both home health and personal care. In the U.S., it would likely be difficult to recruit large numbers of nurses to provide such care, particularly personal care. Indeed, there has been a shortage of nurses in the U.S., particularly in long-term care, for decades.

Furthermore, given that the U.S. lacks anywhere near as robust a home care financing system as exists in the Netherlands, a provider here may struggle to afford to pay nurses as much as they could earn in a hospital setting, and hence struggle with recruitment and retention. For the same reason, the guaranteed return on investment to incentivize the upfront recruitment, training, and technological investment costs is also lacking. Buurtzorg had the benefit of developing organically within the Dutch care landscape. Prior to Buurtzorg, community nursing was already a profession that had existed for over a century, meaning that the organization has had plenty of suitable nurses to recruit from. The Netherlands is also one of the most densely populated countries in the world; the highly decentralized nature of much of the U.S. makes "neighborhood nursing," where small teams cover a given community, more challenging. Additionally, the Netherlands has an egalitarian culture that is accustomed to collaborative work and consensus-based decision-making; in contrast, it is less common in the U.S. for a small team of colleagues to collaborate well over the medium to long term. Lastly, it is important to note that the Buurtzorg teams model requires low turnover to be successful, which is challenging to achieve in the highly fluid U.S. labor market.

This is not to say that certain aspects of the Buurtzorg approach could not be successfully incorporated into the business model of a U.S. home care agency. Self-management, while contrary to the traditional model of nurses working under the supervision of doctors, could be an enticing recruitment and retention tool. A worker-owned cooperative could be one approach conducive to successful incorporation of the self-management model. And because cooperatives already invest heavily in their workers, they could enjoy sufficient retention to allow teams to bond and endure. The biggest challenge would be financing, particularly billing and payment. In the Netherlands, home health and personal care are both paid by the same program, but in the U.S., a Buurtzorg-style home health care provider would either need to serve private pay clients or bill to both Medicare (for home care) and Medicaid (for personal care). Medicaid reimbursement rates, however, would likely not be sufficient to pay nurses a competitive wage to perform the personal care component of the work. In light of this, perhaps the model could be applied in a way that provides only personal care or integrates personal care with social care, with less credentialed staff who could be recruited and retained at Medicaid rates.

Reablement

Reablement, also known as restorative care, is an approach to home care that seeks to support older adults in regaining and maintaining their functional capacities, rather than accepting their functional decline as inevitable. It is a strategy developed in Sweden, where in 2007 the municipality of Frederica experimented with offering seniors experiencing functional decline intensive rehabilitation instead of traditional home care. The approach was successful, enabling most of the participants to live independently in the community without assistance with activities of daily living. In 2015, Denmark integrated reablement into home care nationwide with broad support from care worker unions and other provider organizations.

Reablement seeks to support older adults in regaining and maintaining their functional capacities, rather than accepting their functional decline as inevitable.

The Dutch government is now encouraging all home care agencies to integrate restorative care into their work.[69] Buurtzorg is leading the way in this regard. In 2023, Buurtzorg made reablement a prominent goal of the home health care it provides. While Buurtzorg's nursing teams had always referred clients to physical and occupational therapists, as needed, they are now integrating such specialists into their nursing teams and rebranding these as "Buurtzorg+" teams. This is part of a broader effort by the provider organizations—supported by the payment systems—to find ways to integrate reablement into home health care. If successful, it holds promise to sustain and enhance quality of life for aging individuals.

INSIGHTS FROM REABLEMENT FOR THE U.S.

Reablement holds significant promise to support and empower adults to age in place in the community by reducing sedentary behavior and maintaining or restoring functional capacity. It does so with far fewer demands on workforce and public financing than traditional home care on its own. That said, to be effective, it requires staff training and ongoing supervision. While this has worked well in Denmark, it has been hit or miss in the early years of practice in the Netherlands.[70] One challenge with reablement in the U.S., as with the Buurtzorg model, is the matrix of heterogeneous payers of health and long-term care. If a state invests in reablement through its Medicaid long-term care program, much of the potential savings from improved senior health status or reduced long-term care expenditures may end up being captured by a different payer, for example a for-profit Medicare Advantage plan. Meanwhile, a Medicare Advantage plan may not feel incentivized to invest in measures that could reduce long-term care expenditure a decade hence, potentially for a different insurer. That said, if stakeholders can get the incentives properly aligned, reablement could advance person-centered aging amidst fiscal and workforce constraints.

Dementia Care Settings that Feel Like Home: De Hogeweyk and Green Care Farms

One of the best-known delivery system innovations in the Netherlands is the dementia village De Hogeweyk, located in the town of Weesp. De Hogeweyk is a non-profit nursing home offering highly complex, skilled nursing. Only applicants with advanced dementia are approved by the LTCA to live in De Hogeweyk; hence, their 188 residents do not differ significantly from those in traditional nursing homes. De Hogeweyk is made up of a rectangular block of housing whereby the built environment creates an intramural village. Residents live in 27 small houses of six or seven clients each. Supported by a certified nursing assistant and a personal care aide, residents in each house cook their own meals, eat together in the dining room, and do their own laundry. This contrasts with traditional nursing homes, where staff execute these functions for residents in a centralized, institutional fashion. When a resident leaves their house in De Hogeweyk, they can walk around the village for fresh air, engage in social interaction through one of the 35 village clubs, or visit the variety of co-located amenities such as the restaurant, pub, supermarket, or theater. The focus is on safeguarding residents' autonomy and freedom to the greatest extent possible, in a setting that resembles the home and neighborhood environment, without compromising their safety.

When admitted to De Hogeweyk, clients answer a number of questions about their likes and dislikes, lifestyle, hobbies, etc. Based on their answers, as well as a home visit and conversations with family, residents are assigned to a house with like-minded people that embodies one of four "lifestyle" types representative of Dutch society: formal, traditional, urban, and cosmopolitan. These then shape the décor, music, food, drink, and etiquette in the home. This thoughtful placement process increases the probability of a resident landing in a home with

Residents are assigned to a house with like-minded people that embodies one of four "lifestyle" types. These then shape the décor, music, food, drink, and etiquette in the home.

like-minded individuals. While there are rich programmatic offerings, these are not forced on residents; residents are encouraged to engage beyond their house, but it is up to them as to when, how, and to what extent they do so.

De Hogeweyk is financed primarily by the national long-term care insurance program, the LTCA. Until 1993, a traditional (institutional) four-story concrete nursing home stood in its place—the prevailing model at that time. Initially, the team that ultimately planned De Hogeweyk began by changing the way care was delivered within that traditional high-rise; today's village design was not completed until 2009. The team insists that their care concept does not require a village; the concept is independent of the built environment. In fact, the provider that runs De Hogeweyk, the Vivium Care Group, operationalizes this care concept in traditional nursing home buildings—including at least one high-rise—in Amsterdam and some other parts of the Netherlands. The core of the care concept is letting people do what they want to do, when they want to do it, with staff support to live independently in an environment that feels like home. The emphasis is on fostering quality of life for residents, rather than treating them like patients, giving them excessive medication, and doing everything for them. De Hogeweyk views quality of life in terms of residents experiencing joy, pleasure, meaning, connection, and social inclusion.

The emphasis is on fostering quality of life for residents—joy, pleasure, meaning, connection, and social inclusion—rather than treating them like patients.

While De Hogeweyk is the internationally best-known person-centered (anti-)nursing home provider in the Netherlands, many other person-centered dementia-care models exist there as well. The model with the broadest reach is green care farms: small-scale, operating farms that offer either adult day care activities or 24-hour housing with care supports. There are 1,300 green care farms in the Netherlands, serving 30,000 clients.[71] About one quarter of these serve people with dementia, while others care for people with psychiatric conditions, addiction, mental disabilities, or children with autism. For people with dementia, care farms provide a safe, home-like environment with ample opportunities for social interaction, fresh air, and purposeful activities like gardening, feeding animals, and other farm chores. Studies of adult-day services at green care farms have found that they give people with dementia meaningful engagement, social interaction, exercise, and a healthy diet, while also providing critical respite to family caregivers.[72] For family farms, offering housing for dementia care is not only a meaningful contribution to society but also brings in an additional revenue source which helps them make ends meet and weather economic downturns.

There are 1,300 green care farms in the Netherlands, serving 30,000 clients.

The Netherlands is projected to have 620,000 people with dementia in 2050.[73] Because nursing home capacity has been frozen, roughly 500,000 of them will be living in their own home—either their original home or clustered senior housing, but outside of a long-term care setting like a nursing home or assisted living facility. The long-term care system will no longer be paying for their housing as the EMEA did prior to 2015. It will be paying for formal care as needed, but on a tighter budget and delivered primarily through home care, with a much stronger reliance on reciprocal care, technology, and informal care.

Research is also being done into how to adapt public space to accommodate people with dementia living in the community. One interview partner noted: "If 500,000 people with dementia live in neighborhoods in their own homes, you have to find a way to let them go on the street and find their way back. So, that's things you have to think about. There are some studies in Rotterdam, for example, that if you make routes with color codes and enough spots where you can sit down and go to the bathroom etc., then you'll help people—even those with dementia—to find their way and to be able to go the distance."

INSIGHTS FROM DUTCH DEMENTIA-CARE INNOVATIONS FOR THE U.S.

De Hogeweyk and green care farms are part of a broader movement in the Netherlands transforming nursing home care toward a more person-centered approach based on respecting and preserving individual autonomy, sense of identity, and quality of life. There are a number of lessons U.S. policymakers and providers can draw from De Hogeweyk, green care farms, and other humanistic dementia-care innovations in the Netherlands.

The first is that it is possible to support individuals experiencing severe dementia in a far more person-centered setting than has traditionally been the case. In the Netherlands, the humanistic turn in nursing-home care came through entrepreneurial innovation. In the U.S., parallel innovation to provide more autonomy and dignity to individuals experiencing dementia has long been underway as well: the Green House movement shares with De Hogeweyk foundational principles like the household model (private bedrooms in small homes with a shared cooking, dining, and living area), access to the outdoors, and autonomy in the structuring of the day.[74]

A second insight is that a robust long-term care financing system creates the funding infrastructure that makes a humanistic nursing home like De Hogeweyk, as well as green care farms, possible. The LTCA provides the guaranteed return on investment needed to justify Vivium Care Group's initial decision to build the village and take out a large mortgage to do so. Conceiving, building, and staffing a dementia care facility that provides person-centered care for its residents would be far riskier without this guaranteed future return on investment. Rather than having a reliable, permanent revenue stream from the LTCA, U.S. nursing homes must make business decisions in an environment where prospective clients' ability to pay is highly uneven and unpredictable: some clients begin as private pay but transition to Medicaid, which pays substantially lower rates; others come only temporarily for post-acute care paid by Medicare; those with very low income and assets are on Medicaid from the start; while the affluent are private pay throughout their care journey. This risky and unpredictable revenue environment has hindered the spread of Green Houses and other person-centered nursing homes. It also makes it hard for such facilities to diversify the population they serve beyond a predominately white, upper-middle-class or affluent clientele.[75] One positive recent development in this regard has been Ohio's authorization of $30/day add-on incentive payments for nursing homes that offer private rooms with a private bath, or $20/day for private rooms with a shared bath.[76] This is a modest but important step toward a funding approach that supports more person-centered care.

The LTCA provides the guaranteed return on investment needed to justify Vivium Care Group's initial decision to build the village and take out a large mortgage to do so.

A third insight from Dutch dementia-care innovations that emerged from the expert interviews is the different budgetary priorities of the Netherlands compared to the U.S. The Netherlands' long-term care system has committed to investing heavily in ensuring that people experiencing frailty and/or dementia can still experience significant levels of dignity and independence. Indeed, despite a care worker shortage and fiscal sustainability concerns, the Netherlands introduced a new Nursing Home Quality Framework in 2017 that included higher nursing staff-to-client ratios, requiring a 20% increase in LTCA expenditures. While this staffing requirement was later dropped for fiscal reasons, many other elements of the quality framework remain.[77] Its goals are to better foster person-centered care and resident well-being, as well as greater innovation (in part through greater investment in professionalization of the workforce).[78]

The United States spends an equal or greater amount of money on people in their final years, but to different ends; the U.S. prioritizes funding medical interventions aimed at extending life by a few months or years and protecting providers and institutions from legal risk, over quality of life. The complex web of factors driving providers and public programs in the U.S. to prioritize lower-cost dementia-care models, defensive medicine, and legal risk mitigation over quality of life goes beyond the scope of this paper. Consideration of promising elements of successful Dutch innovations in person-centered dementia-care could help inform changes in the financing and regulatory environment to support the proliferation of affordable humanistic dementia care in the United States.

LESSONS FOR ADVANCING PERSON-CENTERED AGING IN THE U.S.

Access to person-centered care is limited in the United States, due primarily to affordability and financing challenges but increasingly also to workforce challenges. The most affluent can purchase private long-term care insurance or pay out of pocket (although this still does not guarantee that such care is person-centered). The rest of society struggles to pay for long-term care. Fewer than half of seniors with significant long-term care needs receive any paid services or supports.[79] The poor (and middle-class individuals who spend down their life savings) can access care through Medicaid, but are forced to surrender their financial independence in the process. Nearly 9 in 10 Americans would prefer to age in place,[80] but most cannot afford the home care they would need to do so safely, as home care costs equate to 83% of the income of a middle-income senior household.[81] Nursing home costs are even less affordable, equating to more than twice median senior household income.[82] Even when private or public funding is available, provider shortages can result in months-long delays in accessing needed support. These challenges will become even more severe as the population 85 and older nearly doubles (compared to 2016) by 2035 and triples by 2060, while the population of prime caregiving age (45-64) remains fairly stagnant.[83] These demographic shifts will also reduce the availability of informal (family) caregivers to meet the need when formal care is unaffordable.

This paper has explored how the Netherlands has navigated similar challenges from the opposite starting point: universal access to an unsustainable degree of paid formal care rather than too little access to formal long-term care. In response to rising costs, the Dutch had two options: to ration care, or to reimagine it. With fiscal and workforce challenges worsening and formal long-term care largely accessible only by the affluent and the poor (through Medicaid), the U.S. is climbing a far steeper hill while confronting a similar choice: to (continue to) ration care, or to innovate. What can U.S. providers, advocates, and policymakers learn from Dutch innovations to advance person-centered aging?

The U.S. is climbing a far steeper hill while confronting a similar choice: to (continue to) ration care, or to reimagine it.

1 Universal coverage with robust financing spurs provider innovation.

A key lesson from the Dutch experience is that a universal long-term care financing system brings ancillary benefits beyond making long-term care financially available to all. Multiple innovative providers interviewed for this project noted that both their initial investment and subsequent business model were predicated on the existence of guaranteed revenue from the Dutch long-term care system for all of their clients. Much of the risk of innovation is removed from the equation when providers can count on a steady stream of clients and revenue. This secure return-on-investment is highly conducive to innovation. Universal coverage in the Netherlands also means that upper-middle class households are politically invested in quality care—and in many cases, person-centered care—not just for themselves, but for all. In the U.S., more affluent households do not need to advocate for quality, person-centered care, they can simply purchase it. When everyone is in the same system, as in the Netherlands, this significantly strengthens advocacy campaigns to improve care for society as a whole.

Universal coverage in the Netherlands also means that upper-middle class households are politically invested in quality care—not just for themselves, but for all.

A universal social insurance financing scheme already exists in Washington State with the WA Cares Fund. Lifetime benefits are limited to $36,500, adjusted for inflation over time.[84] Rather than having high premiums and comprehensive benefits, as in the Netherlands, the WA Cares Fund has a modest premium and modest benefits. And while the Netherlands has no private long-term care insurance whatsoever, Washington State is considering enacting a statutory framework for a supplemental private insurance product, where middle-class consumers could choose from a range of additional coverage levels. Meanwhile, at the federal level, proposals such as the WISH Act would create a public catastrophic (back-end) long-term care insurance benefit that could supplement front-end state programs (programs with no deductible, elimination period, or waiting period) like WA Cares.[85] If WA Cares benefits were to become more robust or either a private supplemental market or public catastrophic benefit were introduced, or Medicare were expanded to cover long-term care, this could bring significantly more guaranteed revenue into the long-term care system overall and provide a more secure possibility of the kind of return-on-investment that has helped spur innovation in the Netherlands over the past two decades.

2 To incentivize investments in person-centered care, savings must be captured by the payers that make such investments.

Dutch home care providers like Buurtzorg are providing holistic care, including reablement therapies, to empower older adults and anchor them safely in the community. The national government is providing financial incentives to housing associations and nursing providers to build reciprocal care communities like Liv inn that support person-centered aging while reducing the need for formal care. Most of the savings from these interventions will be experienced by the same public-sector entities that pay for most of these initial investments:

the national government and the three branches of the long-term care system (LTCA, HIA, and SSA). And because the HIA finances both home health care and other medical care, longer-term health care savings from these investments are captured internally, as well. In the U.S. context, the heterogeneity of payers of health and long-term care, and their need for short-term return-on-investment, makes it harder to financially justify preventative interventions. Reforms are necessary to better reward the payers making such investments for the longer-term cost savings that result.

Dutch personal care workers earn the most among OECD countries. In the United States, by contrast, personal care workers earn the least.

3 Improving job quality will mitigate the care worker shortage and increase the likelihood of quality, person-centered care.

Dutch personal care workers earn the most among the 28 OECD countries for which data is available: 95% of the economy-wide average wage for facility-based and 91% for home care workers. In the United States, by contrast, personal care workers earn the least among these 28 countries–51% of the economy-wide average wage for both facility-based and home care workers.[86] In short, the Dutch have been committed to quality care jobs and despite age-wave fiscal pressures, are now doubling down. Long-Term Care Minister Helder has pledged to invest €500 million over the next three years to future-proof the care workforce by improving recruitment and retention. Measures include increasing internship opportunities and efforts to improve job satisfaction by providing more innovative work structures (e.g., flexible hours), better employment practices, and training and professional development.[87]

Similar measures will be necessary in the U.S. if we hope to mitigate the significant shortage of care workers as demand for care increases in the coming decades. Additionally, because of the predominately low compensation levels in the U.S. care workforce, investments in better wages and benefits will be essential. Investments in job training (both entry-level and continuing), career advancement opportunities within home care, and a dignified work experience will help ensure that quality jobs lead to quality care. Providers such as Cooperative Home Care Associates in the Bronx are pushing the limits of what is possible in this regard within existing workforce development, regulatory, and payment systems.[88] However, unless these macro-systems are reformed in ways that allow such high-road providers to remain economically viable, the model will not scale. Without significant investment in quality jobs, it is unrealistic to expect that most Americans will be able to receive person-centered care–or even adequate care–as they age.

Without significant investment in quality jobs, it is unrealistic to expect that most Americans will be able to receive person-centered care–or even adequate care–as they age.

4 Innovative home care agencies can attract workers to this sector and serve as hubs of person-centered care.

The tremendous success of Buurtzorg and many other Dutch home health agencies in providing holistic care demonstrates that such agencies have the potential to do much more than simply perform home care tasks. They can be hubs for person-centered health and long-term care. Clients can receive the personal care they need from nurses who can also handle most medical needs that emerge. If the home health nurse encounters a need that requires a physician, the nurse can promptly refer the client to their general practitioner or a specialist. This model gives the client comprehensive, continuous care from a nursing team that is deeply aware of their individual preferences, community supports, and home environment. Buurtzorg teams can also refer clients to other neighborhood resources, or do so indirectly through the social workers at the affiliated Buurtdiensten. Overall, this model enhances client autonomy and well-being, forestalls deterioration of health status due to delays in care, and reduces (re-) hospitalizations.

This model enhances client autonomy and well-being, forestalls deterioration of health status due to delays in care, and reduces (re-)hospitalizations.

The Buurtzorg model likely does not translate directly to the U.S. context due to three interrelated factors: the critical shortage of nurses (projected to worsen in the coming years),[89] the high cost of relying on nurses for home care, and the lack of a robust financing source for holistic home care. However, a modified version of the Buurtzorg model could potentially succeed in the U.S.: home care teams consisting of workers of a diverse range of training and certification levels such as personal care aides, home health aides, nursing assistants, and nurses. The bulk of such teams could be less credentialed, less costly staff, with nurses available largely remotely and to monitor clinical conditions as needed. Nurse delegation of certain restricted tasks could also be leveraged, with specific training as needed. Such an adaptation of the Buurtzorg team approach could be part of a career lattice for direct care workers, with opportunities for increased training and compensation. Providing quality jobs, in terms not only of compensation but also the employee experience (in self-managing teams) and possibilities for advancement, will be key to attracting workers into the direct care field to combat the workforce shortage. Some innovative providers in the U.S. already implement elements of the Buurtzorg approach. The Green House model of person-centered nursing-home care organizes its direct care workers in self-managed teams with consistent assignment and combined job responsibilities to improve knowledge of the client and job satisfaction. And the aforementioned Cooperative Home Care Associates in the Bronx creatively leverages workers with a range of credentials to collaboratively deliver person-centered care to its clients.[90]

5 Timely access to formal home care in the community may yield greater quality of life, happiness, and social connection than medicalized institutional care.

Access to formal home care appears to be available at lower levels of functional limitation in the Netherlands compared to other countries.[91] There is much discussion in the Netherlands in recent years around what constitutes appropriate care toward the end of life. The country spends significantly less on hospital care and more on long-term care compared to the U.S. in the final year of life.[92] Among 15 OECD countries compared, the Netherlands exhibits the second lowest share of people who, during their last 30 days of life, experienced more than one unplanned or urgent inpatient hospital admission—roughly one-eighth as many as the OECD-15 average.[93] In sum, the Netherlands appears to be making a societal choice to invest more in upstream home care and prevention and less in end-of-life medical intervention. One interview partner summed this up as "adding life to the days instead of days to the life." This tradeoff between investments in quality of life versus marginal prolongation of life is likely to become a topic of increasing public debate in the United States as the age wave strains resources available for both types of care. Hard choices could be required with regard to what kinds of spending on older adults is prioritized.

The Netherlands appears to be making a societal choice to invest more in upstream home care and less in end-of-life medical intervention: "adding life to the days instead of days to the life."

It is hard to come away from site visits to humanistic Dutch nursing homes, green care farms, and clustered senior housing communities without thinking that the U.S. may be overinvesting in medicalized, institutional, defensive end-of-life care (both in nursing homes and emergency rooms) and under-investing in empowering—and potentially even reabling—home care. Timely investments in the latter have the potential to stabilize and revitalize an aging individual, while allowing them to remain in the community with contact to friends, family, and neighborhood. Comparatively early access to formal, quality home care may bring greater happiness, meaning, and social connection to one's final decade of life, for example, than medicalized interventions near the end of life pursued exclusively for the sake of prolonging life by a few months or years.

6 Tort and regulatory reform embracing the dignity of risk could make person-centered nursing-home care more broadly available.

There is a fundamental misalignment in the U.S. nursing home market between the person-centered care consumers desire, and what is available. Reform approaches such as the Green House model, the humanism of which was praised by Dr. Atul Gawande in his classic work, Being Mortal,[94] could take much of the fear and loneliness out of facility-based long-term care. A 2023 report from the National Academies of Sciences, Engineering, and Medicine noted the positive impact this household model of nursing home design has been

shown to have on residents' health, safety, and quality of life.[95] Such models struggle to attract investment in the U.S., however. This is in part due to their higher cost and the lack of a robust financing system for long-term care that could cover this cost (see Lesson 1 above). Tort and regulatory barriers likely also impede the proliferation of person-centered nursing home care.[96] Investors may view more traditional nursing homes as less risky investments than Green House type approaches that give residents greater autonomy. Both states and nursing home providers end up designing care much more for the 1 in 10 residents who might experience an adverse incident than for the 9 in 10 who might prefer the dignity of risk and quality of life inherent in person-centered care. The Netherlands is a far less litigious society, and its jurisprudential framework is far less likely to expose providers and public programs to high tort damages. This legal and regulatory risk is a barrier to U.S. nursing homes ceding power to residents and their families, yet precisely such autonomy is at the core of person-centered care, well-being, and quality of life.

Legal and regulatory risk is a barrier to U.S. nursing homes ceding power to residents and their families, yet precisely such autonomy is at the core of person-centered care.

The Dutch trend toward more humanistic dementia care in places such as De Hogeweyk or green care farms is predicated on embracing the dignity of risk. Residents have more freedom to move around, structure their day, and engage in activities that bring them joy. In the U.S., in many cases, risk mitigation still tends to drive decisions around the built environment and the organization of life in nursing homes more than individual resident preferences do.

7 Civic engagement and cross-sector collaboration are critical to sustainably supporting person-centered aging.

Dutch civil society and providers have sprung into action to fill the gaps from a gradually retrenching public role. Resident care cooperatives are forming around the country, where residents engage in reciprocal, community-level support. Adults in their 50s and 60s, supported by technical experts at the Knarrenhof Foundation, are forming resident associations to co-manage the development of new Knarrenhof communities, where residents pitch in to age meaningfully together. Housing associations like Habion work with architects, nursing providers, municipal governments, community partners, and prospective residents to develop and implement person-centered approaches to aging like the reciprocal care concept of Liv inn. Older adults are moving into these communities and committing to participating in reciprocal care.

Historically, the United States has had a vibrant culture of volunteerism, civic engagement, and corporate social responsibility, although that culture has eroded considerably since the late 20th century.[97] More must be done to revive and leverage this culture to support person-centered aging and caring communities. Promising civil-societal initiatives in the U.S. today include the cohousing movement which, similar to reciprocal-care clustered housing in the Netherlands, seeks to create intentionally designed, self-managed communities of private homes (typically apartments or townhouses) with easily accessible communal spaces and shared resources;[98] the age-friendly communities movement, which works to ensure communities are livable for people of all ages, including older adults and people

with disabilities;[99] the Accessory Dwelling Unit (ADU) movement, which advocates for statutory and zoning changes to allow the construction of small, self-contained residential units on the same lot as an existing single-family home;[100] the Village movement, where neighbors form an organization that helps its members cope with the challenges of aging in place;[101] and the time-banking movement, where people earn credits through community work and can later spend those credits on services from other community members.[102] The Multisector Plans for Aging underway in 24 states are well-suited overarching mechanisms to help secure the financial, regulatory, and logistical support needed to scale such initiatives.[103]

The Multisector Plans for Aging underway in 24 states are well-suited overarching mechanisms to help secure the financial, regulatory, and logistical support needed to scale such initiatives.

8 Policy and provider innovation are required to develop less costly ways of providing housing with care supports.

A broad range of factors make aging in the community affordable for Dutch seniors: a universal long-term care system that prioritizes home care, government regulatory and zoning support, and significant historical investments in—and regulation of—the social (non-profit) housing sector, to name a few. In the U.S., there is ample supply of independent and assisted living communities that provide housing with access to personal care. This market caters predominately to the affluent and upper middle-class, however. The median monthly base fee nationally for assisted living is $5,350, not including fees for personal care and myriad other services. The median monthly cost for independent living is $3,065; in this setting, personal care is not directly available from the provider, but can often be contracted on site.[104] Medicare doesn't cover either setting (or home care, for that matter). While Medicaid will theoretically cover personal care in these settings for those with very low income and assets, in all but a handful of states (where there is a corresponding state waiver), it will not cover room and board, which for most low-income seniors puts these communities out of reach. A University of Chicago study examined access to independent and assisted living communities for those with income and assets too high to qualify for Medicaid and too low to afford to pay out of pocket for very long. The study projected that a majority of the 14.4 million adults aged 75 and older who will be middle-income (defined as those in the 41st to 80th percentiles of the distribution of income and annuitized assets) in 2029 will not be able to afford to live in independent or assisted living communities, even if they were to liquidate all their housing assets.[105]

A majority of middle-income adults aged 75+ will not be able to afford to live in independent or assisted living communities, even if they were to liquidate all their housing assets.

For the 7 in 10 Americans turning 65 today who will need long-term care, aging in place in their own home or in the community will be viable only if they have loved ones who can provide such care or can afford to purchase sufficient formal home care, which

only 14 percent of single households aged 75 and older can.[106] Preventing unnecessary institutionalization is good for the dignity and independence of aging adults, good for middle-class retirement security (also for surviving spouses), and good for Medicaid budgets. Developing less costly ways of providing housing with care supports will be critical to addressing the needs of our aging population in a fiscally sustainable way.

The Dutch example shows that it is possible to develop a robust stock of housing with care supports that is affordable for the broad middle class. Social housing is ubiquitous (housing over one third of Dutch seniors) because of historical and ongoing public subsidies and loan guarantees that have provided non-profit housing associations access to capital and land on below-market terms. Care supports are financed through universal social insurance, which finances long-term care via non-profit nursing providers. In the U.S., investments in housing and care on anywhere close to this scale are lacking, and regional for-profit companies, private equity firms, and real-estate investment trusts have become increasingly involved in the senior living sector, such that now half of assisted living operators earn returns of 20% or more.[107] For aging in the community with formal or informal care supports to become more broadly affordable, not only is innovation by providers and civic initiatives (such as the aforementioned cohousing, ADU, Village, and time-banking movements) required; public, non-profit, and philanthropic investment to subsidize the development of affordable senior living communities will be needed as well. Promising public policy innovations to this end are explored in a tandem publication.[108]

9 Universal access to person-centered care is possible.

Dutch provider innovations have spurred a reimagining of person-centered aging in the Netherlands. Buurtzorg and De Hogeweyk are leaders, but they are part of a broader movement toward more humanistic elder care. These innovations have been able to gain traction and scale because of the country's universal long-term care financing system. Access to such quality, person-centered care is extremely limited in the U.S. due primarily to affordability challenges. A lesson from the Dutch experience is that rationing access to person-centered care by income and wealth is not inevitable.

Acknowledgments

The author is grateful to Frederik Schut, Peter Alders, Bram Wouterse, Pieter Bakx, Jan Megens, Niels Groeneweg, Henk Nies, Madelon van Tilburg, Marleen Ellen Dworkin, Pauline Vonk, Hans Adriani, Iris van Slooten, Eloy van Hal, Marleen Treur, and Conny Moons for providing thoughtful insights as interview partners for this research. Thank you to all of the interview partners as well as to Robert Jenkens, Mauro Hernandez, David Grabowski, Howard Gleckman, Hanneke van Deursen, Bea-Alise Rector, Adria Powell, Rani E. Snyder, Allison Cook, and Alexandra L. Bradley for insightful feedback on the paper, and to Alexandra L. Bradley for copy editing the final manuscript.

ENDNOTES

1. Interagency Coordinating Committee on Healthy Aging and Age-Friendly Communities, "Aging in the United States: A Strategic Framework for a National Plan on Aging," Report to Congress, May 2024, https://acl.gov/sites/default/files/ICC-Aging/StrategicFramework-NationalPlanOnAging-2024.pdf.

2. Alzheimer's Association, Greater Missouri Chapter, "Person Centered Care in Nursing Homes and Assisted Living," July 2017, https://www.alz.org/media/greatermissouri/person_centered_care.pdf. While this paper focuses on person-centered aging, person-centered care is equally important in long-term services and supports for people with disabilities.

3. Christopher Kelly, Jennifer Morgan, and Kendra Jason, "Home Care Workers: Interstate Differences in Training Requirements and Their Implications for Quality," *Journal of Applied Gerontology*, October 2013, Vol. 32(7):804-32, https://pubmed.ncbi.nlm.nih.gov/25474799/.

4. Nicole Ruggiano and David Edvardsson, "Person-Centeredness in Home- and Community-Based Long-Term Care: Current Challenges and New Directions," *Social Work in Health Care*, 52:846–861, 2013, https://www.tandfonline.com/doi/abs/10.1080/00981389.2013.827145.

5. National Academies of Sciences, Engineering, and Medicine, *The National Imperative to Improve Nursing Home Quality: Honoring Our Commitment to Residents, Families, and Staff* (Washington, DC: The National Academies Press, 2022), https://doi.org/10.17226/26526.

6. "WA Cares Fund," wacaresfund.wa.gov, accessed December 30, 2023.

7. Benjamin W. Veghte, "Designing Universal Long-Term Services and Supports Programs: Lessons from Germany and Other Countries," National Academy of Social Insurance, 2021, https://www.nasi.org/wp-content/uploads/2021/06/NASI_LTSSProgramsAbroad.pdf.

8. Benjamin W. Veghte, "Promising Policy Innovations to Make Person-Centered Aging Affordable for All Despite Fiscal and Workforce Constraints: Lessons from the Netherlands," National Academy of Social Insurance, January 2025, https://www.nasi.org/wp-content/uploads/2025/01/Promising-Dutch-Long-Term-Care-Innovations.pdf.

9. Frederik Schut and Bernard van den Berg, "Sustainability of Comprehensive Universal Long-Term Care Insurance in the Netherlands," Social Policy & Administration, Vol. 44 (2010), Nr. 4: 411-435, https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1467-9515.2010.00721.x; Peter Alders and Frederik Schut, "Financing Long-Term Care: The Role of Culture and Social Norms," *International Journal of Health Policy and Management* 2020, 9(4) 179-81, https://www.ijhpm.com/article_3695_a78d3820a966c3fcce480b9fb1278510.pdf.

10. Frederik Schut and Bernard van den Berg, " Sustainability of Comprehensive Universal Long-Term Care Insurance in the Netherlands," *Social Policy & Administration*, Vol. 44 (2010), Nr. 4: 411-435, https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1467-9515.2010.00721.x.

11. Pieter Bakx, Frederik Schut, and Bram Wouterse, "Netherlands," in OECD/WHO, Pricing Long-Term Care for Older Persons, September 8, 2021, https://doi.org/10.1787/a25246a6-en.

12. Peter Alders and Frederik Schut, "The 2015 Long-Term Care Reform in the Netherlands: Getting the Financial Incentives Right?" Health Policy Vol. 123, Nr. 3 (2019): 312-316, https://doi.org/10.1016/j.healthpol.2018.10.010.

13. Pieter Bakx, Eddy Van Doorslaer, and Bram Wouterse, "Long-Term Care in the Netherlands," National Bureau of Economic Research Working Paper No. 31823, November 2023, https://www.nber.org/system/files/working_papers/w31823/w31823.pdf.

14. CAK, "De eigen bijdrage" https://www.hetcak.nl/wet-maatschappelijke-ondersteuning/eigen-bijdrage, accessed January 6, 2024.

15. All amounts are for 2024. CAK, "Hoe Berekent het CAK de Lage Eigen Bijdrage?" https://www.hetcak.nl/regelingen/zorg-vanuit-de-wlz/berekening-van-de-eigen-bijdrage-wlz/lage-of-hoge-eigen-bijdrage, accessed November 28, 2023.

16. Benjamin W. Veghte, "Designing Universal Long-Term Services and Supports Programs: Lessons from Germany and Other Countries," National Academy of Social Insurance, 2021, https://www.nasi.org/wp-content/uploads/2021/06/NASI_LTSSProgramsAbroad.pdf.

17. OECD, "Spending on Long-Term Care," November 2020, https://www.oecd.org/health/health-systems/Spending-on-long-term-care-Brief-November-2020.pdf.

18. OECD Health Statistics 2023, "Figure 10.23. Total Long-Term Care Spending as a Share of GDP, 2021 (or nearest year)," July 3, 2023, https://stat.link/fobxem. National data on long-term care spending is not precisely comparable internationally, despite OECD efforts to develop a comparable dataset. Experts interviewed contend that the Dutch spending figures are slightly overestimated compared to other countries because they include more social assistance spending on long-term care and because part of what the Netherlands provides through its long-term care system is organized in other countries through medical/hospital care. The OECD caveats its expenditure data as follows: "LTC spending comprises both health and social services provided to LTC-dependent people who need care on an ongoing basis. Based on the System of Health Accounts, the health component of LTC spending relates to nursing care and personal care services (help with ADL). It also covers palliative care and care provided in LTC institutions (including costs for room and board) or at home. LTC social expenditure primarily covers help with IADL. Progress has been made in improving the general comparability of LTC spending in recent years, but there is still some variation in reporting practices between the health and social components of some LTC activities. In some countries, social LTC is (partly) included under health LTC; in others, only health LTC is reported. There is also some variation in the comprehensiveness of reporting for privately funded LTC expenditure."

19. Marc Pomp, Nick Zonneveld en Henk Nies, "Verschillen in Uitgaven aan Langdurige Zorg Tussen Nederland, Denemarken en Zweden: Feiten en Verklaringen," Vilans, March 2020, https://research.vu.nl/en/publications/verschillen-in-uitgaven-aan-langdurige-zorg-tussen-nederland-dene.

20. Carolien H. M. Smits, Hugo K. van den Beld, Marja J. Aartsen, Johannes J. F. Schroots, "Aging in The Netherlands: State of the Art and Science," *The Gerontologist*, Volume 54, Issue 3, June 2014: 335–343, https://doi.org/10.1093/geront/gnt096.

21. Albert van der Horst, Frank van Erp, and Jasper de Jong, "Trends in Gezondheid en Zorg," Centraal Planbureau Policy Brief No. 11, 2011, https://www.gezondezorg.org/files/cpb-policy-brief-2011-11-trends-gezondheid-en-zorg.pdf.

22. Peter Alders and Frederik Schut, "The 2015 Long-Term Care Reform in the Netherlands: Getting the Financial Incentives Right?" Health Policy Vol. 123, Nr. 3 (2019): 312-316, https://doi.org/10.1016/j.healthpol.2018.10.010.

23. Syntrus, "Healthcare," accessed March 9, 2024, https://investmentupdates.realestate-mortgages.achmea.nl/2022-q2-en/healthcare.

24. OECD, "Beyond Applause? Improving Working Conditions in Long-Term Care," Annex Figure 5.A.1. Oldest Population Grows Fast While Working-Age Population Starts to Shrink, June 27, 2023, https://stat.link/files/27d33ab3-en/ediknl.xlsx.

25. Nikolett Arnold, "Challenges for Aged Care in the Netherlands," European Network on Intercultural Elderly Care, May 20, 2023, https://www.eniec.com/2023/05/20/challenges-for-aged-care-in-the-netherlands/.

26. OECD Health Statistics 2023, "Figure 10.19. Share of Long-Term Care Workers Who Work Part Time or on Fixed-Term Contracts, 2021 (or Nearest Year)," July 3, 2023, https://stat.link/files/7a7afb35-en/omb8lx.xlsx.

27. Centraal Bureau voor de Statistiek (CBS), "Employment in Healthcare and Welfare; Job Characteristics, Region," accessed June 22, 2024, https://azwstatline.cbs.nl/#/AZW/nl/dataset/24017NED/table?dl=69096.

28. OECD Health Statistics 2023, "Figure 10.18. Long-Term Care Workers per 100 People Aged 65 and Over, 2011 and 2021 (or Nearest Year)," July 3, 2023, https://stat.link/files/7a7afb35-en/pnuacr.xlsx.

29. Personal care workers are those included in ISCO-08 category 53, which groups together personal care workers and childcare workers. OECD Health Statistics 2023, "Figure 10.20. Average Hourly Wages of Personal Care Workers, as Share of Economy-Wide Average Wage, 2018," July 3, 2023, https://stat.link/jpqgil.

30. Wetenschappelijke Raad voor het Regeringsbeleid, "Kiezen voor Houdbare Zorg. Mensen, Middelen en Maatschappelijk Draagvlak," wrr-Rapport 104, Den Haag: wrr, 2021, https://www.wrr.nl/binaries/wrr/documenten/rapporten/2021/09/15/kiezen-voor-houdbare-zorg/Kiezen+voor+houdbare+zorg_Mensen_middelen+en+maatschappelijk+draagvlak_WRRrapport+104.pdf.

31. "Het Aantal Arbeidsplaatsen in de Zorg Kan Niet Oneindig Groeien, Vindt Minister Helder (Langdurige Zorg), Dus Moet de Zorg Anders Worden Georganiseerd," *Friesch Dagblad*, May 16 2022, https://frieschdagblad.nl/samenleving/Minister-Helder-Langdurige-Zorg-wil-rem-op-groei-zorgpersoneel-27698970.html.

32. Wetenschappelijke Raad voor het Regeringsbeleid, "Kiezen voor Houdbare Zorg. Mensen, Middelen en Maatschappelijk Draagvlak," wrr-Rapport 104, Den Haag: wrr, 2021, https://www.wrr.nl/binaries/wrr/documenten/rapporten/2021/09/15/kiezen-voor-houdbare-zorg/Kiezen+voor+houdbare+zorg_Mensen_middelen+en+maatschappelijk+draagvlak_WRRrapport+104.pdf.

33. Carrie Graham and Shannon Guzman, "The Village Model: Current Trends, Challenges, and Opportunities," AARP Public Policy Institute, October 7, 2022, https://www.aarp.org/pri/topics/livable-communities/housing/the-village-model-current-trends-challenges-opportunities.html#:~:text=It%20is%20a%20consumer%2Ddriven,living%20in%20their%20own%20homes.

34. Jogé Boumans, Winke Swinkels, Ien Van de Goor, Katrien Luijkx, "Zorgcoöperatie: een wetenschappelijke verkenning vanuit drie perspectieven," *Journal of Social Intervention: Theory and Practice* 24(4): 23-44, http://doi.org/10.18352/jsi.441.

35. OECD Health Statistics 2023, "Figure 10.15. Share of Informal Carers among the Population Aged 50 and Over, 2019 (or nearest year)," July 3, 2023, https://stat.link/files/7a7afb35-en/eovg59.xlsx.

36. Nederland Zorgt Voor Elkaar, nlzorgtvoorelkaar.nl, accessed December 2, 2023.

37. Van Zorg naar Gewoon Leven, https://vanzorgnaargewoonleven.nl, accessed November 28, 2023.

38. The "capping limit" (*aftoppingsgrens*) for a full housing benefit is the rent level above which level in principle no subsidy can be paid. In 2023, for a one- or two-person household this maximum rent level was €647,19, higher than the average rent in Liv inn Hilversum. Directorate for Employment, Labour and Social Affairs, "The OECD Tax-Benefit Database for the Netherlands," August 2023, https://www.oecd.org/els/health-systems/TaxBEN-Netherlands-latest.pdf.

39. Benjamin W. Veghte, "Promising Policy Innovations to Make Person-Centered Aging Affordable for All Despite Fiscal and Workforce Constraints: Lessons from the Netherlands," National Academy of Social Insurance, January 2025, https://www.nasi.org/wp-content/uploads/2025/01/Promising-Dutch-Long-Term-Care-Innovations.pdf.

40. Zorgsaam Wonen, "Liv Inn, Doorleefhuis in Hilversum," May 19, 2022, https://www.zorgsaamwonen.nl/artikel/liv-inn-doorleefhuis-hilversum.

41. "Liv Inn Hilversum," https://www.habion.nl/onze-woningen/onze-woningen/provincie-utrecht/liv-inn-hilversum, accessed December 2, 2023.

42. INBO, "Zelfredzaamheid en Nabuurschap," https://inbo.com/nl/projects/zelfredzaamheid-en-nabuurschap-knarrenhof/, accessed December 30, 2023.

43. "Knarrenhof," accessed June 22, 2024, https://knarrenhof.nl/; "Knarrenhof: Living Differently, Caring and Living Together," Vastgoed Journal, October 24, 2022, https://vastgoedjournaal.nl/news/57361/knarrenhof-anders-wonen-zorgen-en-samenleven.

44. "Age-Friendly Cities & Communities State of the Art and Future Perspectives," Edited by Joost van Hoof and Hannah R. Marston (Basel: MDPI, 2021), https://mdpi-res.com/books/book/4127/Feature_Papers_AgeFriendly_Cities__Communities_State_of_the_Art_and_Future_Perspectives.pdf?filename=Feature_Papers_AgeFriendly_Cities__Communities_State_of_the_Art_and_Future_Perspectives.pdf.

45. Knarrenhof, "Hoe," https://knarrenhof.nl/hoe/, accessed December 30, 2023.

46. Jeannette E. Nijkamp and A.H. (Lidy) Bosker, "Enabling Older People to Live Independently: A Shared Responsibility of Citizens and Municipality," Companion Proceedings from the European Facility Management International Conference 2020, EFMIC 2020, October 1, 2020, https://eurofm.org/wp-content/uploads/2020/09/Nijkamp_etal_EFMIC2020.pdf.

47. Benjamin W. Veghte, "Promising Policy Innovations to Make Person-Centered Aging Affordable for All Despite Fiscal and Workforce Constraints: Lessons from the Netherlands," National Academy of Social Insurance, January 2025, https://www.nasi.org/wp-content/uploads/2025/01/Promising-Dutch-Long-Term-Care-Innovations.pdf.

48. "Over WSW," accessed August 24, 2024, https://www.wsw.nl/over-wsw.

49. Aedes Data Centrum, "Living Situation by Characteristics," accessed June 22, 2024, https://aedesdatacentrum.nl/jive/?Var=kub_woon_adc_sum&dimlevel=dnc_adc_woon_eigendom,dnc_adc_woon_lft&Mostrecentperiods=3&geolevel=nederland&geoitem=1&geocompare=.

50. For households 65-75 years old, these figures are marginally higher: the average rent paid in social housing is €626 (including utilities), compared to €894 in private-market housing. CBS Statline, "Household Housing Costs; Characteristics of Household, Home," accessed June 22, 2024, https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84487NED/table?ts=1719150933265.

51. A slightly higher share (29%) of older seniors (85+) receive the rental allowance, and a slightly lower share (19%) of younger seniors (65-75) receive it. CBS Statline, "Household Income; Income Components, Household Characteristics," accessed June 22, 2024, https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84493NED/table?ts=1719631482157.

52. Benjamin W. Veghte, "Promising Policy Innovations to Make Person-Centered Aging Affordable for All Despite Fiscal and Workforce Constraints: Lessons from the Netherlands," National Academy of Social Insurance, January 2025, https://www.nasi.org/wp-content/uploads/2025/01/Promising-Dutch-Long-Term-Care-Innovations.pdf.

53. Ministerie van Binnenlandse Zaken en Koninkrijksrelaties and Volkshuisvesting en Ruimtelijke Ordening, "Programma Wonen en Zorg Voor Ouderen," November 2022, https://open.overheid.nl/documenten/ronl-77e877afb987ba3a86f5e5cdd11a7db73475295c/pdf; Rijksdienst voor Ondernemend Nederland, "Stimuleringsregeling Zorggeschikte Woningen (SZGW)," September 14, 2023, https://www.rvo.nl/subsidies-financiering/szgw.

54. Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, "Programma Wonen en Zorg voor Ouderen," November 23, 2022, https://open.overheid.nl/documenten/ronl-b02c031a0d6f3b17a3002c526b3ee4b8acf2f1d1/pdf.

55. See discussion of Dutch polder model in Benjamin W. Veghte, "Promising Policy Innovations to Make Person-Centered Aging Affordable for All Despite Fiscal and Workforce Constraints: Lessons from the Netherlands," National Academy of Social Insurance, January 2025, https://www.nasi.org/wp-content/uploads/2025/01/Promising-Dutch-Long-Term-Care-Innovations.pdf.

56. Peter Alders and Frederik Schut, "The 2015 Long-Term Care Reform in the Netherlands: Getting the Financial Incentives Right?" *Health Policy* Vol. 123, Nr. 3 (2019): 312-316, https://doi.org/10.1016/j.healthpol.2018.10.010.

57. Marlous Elisabeth Arentshorst, Roy Reinier Kloet and Alexander Peine, "Intergenerational Housing: The Case of Humanitas Netherlands," *Journal of Housing for the Elderly* (33:3, 2019): 244-256, https://www.tandfonline.com/doi/full/10.1080/02763893.2018.1561592.

58. "Humanitas Deventer," accessed June 22, 2024, https://www.humanitasdeventer.nl/english/73-english/194-the-living-students-of-humanitas.

59. David Everett and Lauren Hassani, "The Human Touch at Humanitas," May 31, 2019, AARP International, https://www.aarpinternational.org/the-journal/past-editions/the-human-touch-at-humanitas.

60. "Kabinet Steekt Structureel 49 Miljoen in Samenwonen Jong en Oud," Rijksoverheid, May 31, 2023, https://www.rijksoverheid.nl/actueel/nieuws/2023/05/31/kabinet-steekt-structureel-49-miljoen-in-samenwonen-jong-en-oud.

61. Benjamin W. Veghte, "Promising Policy Innovations to Make Person-Centered Aging Affordable for All Despite Fiscal and Workforce Constraints: Lessons from the Netherlands," National Academy of Social Insurance, January 2025, https://www.nasi.org/wp-content/uploads/2025/01/Promising-Dutch-Long-Term-Care-Innovations.pdf.

62. See discussion of Dutch polder model in Benjamin W. Veghte, "Promising Policy Innovations to Make Person-Centered Aging Affordable for All Despite Fiscal and Workforce Constraints: Lessons from the Netherlands," National Academy of Social Insurance, January 2025, https://www.nasi.org/wp-content/uploads/2025/01/Promising-Dutch-Long-Term-Care-Innovations.pdf.

63. "Multisector Plan for Aging," accessed December 30, 2023, https://multisectorplanforaging.org.

64. Sightline Institute, "FAQ: Co-living for Washington State," November 21, 2023, https://www.housingconsortium.org/wp-content/uploads/2024/01/Policy-Brief-Co-Living-FAQ-11-21-23.pdf.

65. Zorgautoriteit, "Kerncijfers Wijkverpleging," accessed October 26, 2024, https://www.nza.nl/zorgsectoren/wijkverpleging/kerncijfers-wijkverpleging.

66. Ethan Bernstein, Tatiana Sandino, Joost Minnaar, and Annelena Lobb, "Buurtzorg," Case Study, Harvard Business School, October 20, 2022.

67. Ibid.

68. Ibid.

69. "Reablement: a Solution to the Increasing Demand for Care," Henk Nies Interview with Tine Rostgaard," Vilans, https://www.vilans.org/item/reablement-a-solution-to-the-increasing-demand-for-care/, accessed February 17, 2024.

70. Teuni H. Rooijackers et al., "Effectiveness of a Reablement Training Program for Homecare Staff on Older Adults' Sedentary Behavior: A Cluster Randomized Controlled Trial," *Journal of the American Geriatrics Society* Vol. 69,9 (2021): 2566-2578, doi:10.1111/jgs.17286.

71. Harold van der Meulen et. al., "Kijk op Multifunctionele Landbouw: Omzet 2007-2020," Rapport 2022-30. Wageningen University and Research, https://research.wur.nl/en/publications/kijk-op-multifunctionele-landbouw-omzet-2007-2020.

72. Simone R. de Bruin et. al., "'I Want to Make Myself Useful': The Value of Nature-Based Adult Day Services in Urban Areas for People with Dementia and Their Family Carers," *Ageing and Society* (Vol. 41, Issue 3, pp. 582–604), 2021, https://www.cambridge.org/core/journals/ageing-and-society/article/abs/i-want-to-make-myself-useful-the-value-of-naturebased-adult-day-services-in-urban-areas-for-people-with-dementia-and-their-family-carers/0DE1-34BF1735A7612C11CCB3AF0251E7. For an extensive list of evaluation studies, see Jan Hassink, "De Kracht van de Zorgboerderij. Welke Kwaliteiten Vinden Deelnemers Belangrijk?" Wageningen University & Research, accessed July 13, 2024, https://www.zorgboeren.nl/images/kwaliteitskader/de-kracht-van-de-zorgboerderij-welke-kwaliteiten-vinden-deelnemers-belangrijk.pdf.

73. Alzheimer Nederland, "Mensen met Dementie per Gemeente," March 26, 2024, https://media.alzheimer-nederland.nl/s3fs-public/media/2024-04/documents/Mensen%20met%20dementie%20per%20gemeente.pdf.

74. Rob Waters, "The Big Idea Behind a New Model of Small Nursing Homes." *Health Affairs,* 2021, 40(3):378–383, https://www.healthaffairs.org/doi/10.1377/hlthaff.2021.00081.

75. Ibid.

76. Ibid.

77. Centraal Planbureau, "Centraal Economisch Plan 2023," March 2023, https://www.cpb.nl/sites/default/files/omnidownload/CPB-Raming-Centraal-Economisch-Plan-CEP-2023.pdf.

78. Ministerie van Volksgezondheid, Welzijn en Sport, "Thuis in het Verpleeghuis: Waardigheid en Trots op Elke Locatie," Programma Kwaliteit Verpleeghuiszorg, April 2018, https://open.overheid.nl/documenten/ronl-a52e34f3-6da8-407b-a986-39e5bc5d0f50/pdf.

79. Richard W. Johnson and Claire Xiaozhi Wang, "How Many Older Adults Can Afford to Purchase Home Care?" U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 2019, https://aspe.hhs.gov/reports/how-many-older-adults-can-afford-purchase-home-care-0#:~:text=Four%20out%20of%2010%20older,care%20with%20their%20income%20alone.

80. 88% of Americans would prefer to receive any ongoing living assistance they need as they age at home or with loved ones. The AP-NORC Center for Public Affairs Research, "Long-Term Care in America: Americans Want to Age at Home," May 2021, https://www.longtermcarepoll.org/project/long-term-care-in-america-americans-want-to-age-at-home.

81. Susan Reinhard et al., "Innovation and Opportunity: A State Scorecard on Long-Term Services and Supports for Older Adults, People with Physical Disabilities, and Family Caregivers," AARP Public Policy Institute, September, 28, 2023, https://ltsschoices.aarp.org/scorecard-report/innovation-and-opportunity.

82. Ibid.

83. The population aged 85 and older is projected to increase by 198 percent between 2016 and 2060 while the population aged 45-64 is projected to increase by only 15 percent. Jonathan Vespa, Lauren Medina, and David M. Armstrong, "Demographic Turning Points for the United States: Population Projections for 2020 to 2060," Current Population Reports, February 2020, https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf.

84. "WA Cares Fund," wacaresfund.wa.gov, accessed December 30, 2023.

85. Marc A. Cohen and Stuart M. Butler, "The Middle Ground for Fixing Long-Term Care Costs: The WISH Act," *Health Affairs*, August 9, 2021, https://www.healthaffairs.org/content/forefront/middle-ground-fixing-long-term-care-costs-wish-act.

86. Personal care workers are those included in ISCO-08 category 53, which groups together personal care workers and childcare workers. OECD Health Statistics 2023, "Figure 10.20. Average Hourly Wages of Personal Care Workers, as Share of Economy-Wide Average Wage, 2018," July 3, 2023, https://stat.link/jpqgil.

87. Blik Op Nieuws, "Half Miljard Euro per Jaar voor Toekomstbestendige Arbeidsmarkt in Zorg," September 30, 2022, https://www.blikopnieuws.nl/nieuws/295864/half-miljard-euro-per-jaar-voor-toekomstbestendige-arbeidsmarkt-in-zorg.html.

88. Cooperative Home Care Associates, https://www.chcany.org/, accessed March 23, 2024.

89. Makinzi Hoover, Isabella Lucy, and Katie Mahoney, "Data Deep Dive: A National Nursing Crisis," U.S. Chamber of Commerce, January 29, 2024, https://www.uschamber.com/workforce/nursing-workforce-data-center-a-national-nursing-crisis.

90. Cooperative Home Care Associates, https://www.chcany.org/, accessed March 23, 2024.

91. Blik Op Nieuws, "Half Miljard Euro per Jaar voor Toekomstbestendige Arbeidsmarkt in Zorg," September 30, 2022, https://www.blikopnieuws.nl/nieuws/295864/half-miljard-euro-per-jaar-voor-toekomstbestendige-arbeidsmarkt-in-zorg.html.

92. Eric French et al., "End-of-Life Medical Spending in Last Twelve Months of Life is Lower than Previously Reported," *Health Affairs* (Millwood). 2017;36(7): 1211-1217, doi: 10.1377/hlthaff.2017.0174.

93. OECD Health Statistics 2023, *Health at a Glance 2023*, "Figure 10.27. Share of deceased people who, during their last 30 days of life, experienced more than one unplanned or urgent inpatient admission, by cause of death, 2021 (or nearest year)," November 7, 2023, https://stat.link/gpm9so.

94. Atul Gawande, *Being Mortal: Illness, Medicine and What Matters in the End* (New York: Henry Holt and Company, 2014).

95. National Academies of Sciences, Engineering, and Medicine, *The National Imperative to Improve Nursing Home Quality: Honoring Our Commitment to Residents, Families, and Staff* (Washington, DC: The National Academies Press, 2022), https://doi.org/10.17226/26526.

96. Jonathan Evans, "Person-Centered Care and Culture Change," *Pioneer Perspective* (Vol. 18, Issue 8, p. 6) August 2017, https://www.caringfortheages.com/article/S1526-4114(17)30326-8/fulltext.

97. Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Simon & Schuster, 2000).

98. The Cohousing Association of the United States, "Cohousing," accessed June 8, 2024, https://www.cohousing.org/.

99. AARP Livable Communities, "AARP Network of Age-Friendly States and Communities," accessed June 22, 2024, https://www.aarp.org/livable-communities/network-age-friendly-communities/.

100. Ellie Sheild and David Luberoff, "Accessory Dwelling Units: Lessons for Massachusetts from Around the Country," Joint Center for Housing Studies of Harvard University, November 9, 2023, https://www.jchs.harvard.edu/blog/learning-state-efforts-encourage-accessory-dwelling-units.

101. Carrie Graham and Shannon Guzman, "The Village Model: Current Trends, Challenges, and Opportunities," AARP Public Policy Institute, October 7, 2022, https://www.aarp.org/pri/topics/livable-communities/housing/the-village-model-current-trends-challenges-opportunities.html#:~:text=It%20is%20a%20consumer%2Ddriven,living%20in%20their%20own%20homes.

102. Krista Wyatt and Kathy Perlow, "Time Banking: A Community Path to Addressing Social Exclusion," *Non-Profit Quarterly,* June 1, 2022, https://nonprofitquarterly.org/time-banking-a-community-path-to-addressing-social-exclusion/.

103. "Multisector Plan for Aging," accessed December 30, 2023, https://multisectorplanforaging.org.

104. Kate Van Dis, "Assisted Living vs. Independent Living: Four Main Differences," National Council on Aging Advisor, July 27, 2023, https://www.ncoa.org/adviser/local-care/assisted-living/assisted-living-vs-independent-living/#:~:text=Unlike%20assisted%20living%2C%20personal%20care,health%20aides%20or%20physical%20therapy; Genworth, "Cost of Care Survey (2023)," https://www.genworth.com/aging-and-you/finances/cost-of-care.

105. Caroline F. Pearson, et. al., "The Forgotten Middle: Many Middle-Income Seniors Will Have Insufficient Resources For Housing And Health Care," *Health Affairs*, 38, NO. 5 (2019): 851–859, https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2018.05233. The study defined the middle market as those individuals in the 41st to 80th percentile of individual income and annuitized assets in 2014. For seniors aged 75-84, that band corresponds to $25,001 to $74,298 in annual income and assets. The band is wider for older seniors aged 85 and above, where it ranges from $24,450 to $95,051.

106. U.S. Department of Health and Human Services, "LongTermCare.gov," https://acl.gov/ltc/basic-needs/how-much-care-will-you-need, accessed February 22, 2024; Joint Center for Housing Studies of Harvard University, "Housing America's Older Adults 2023," November 30, 2023, https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_Housing_Americas_Older_Adults_2023.pdf.

107. Jordan Rau, "Extra Fees Drive Assisted Living Profits," Dying Broke: A KFF Health News-New York Times Project, *KFF Health News*, November 20, 2023, https://kffhealthnews.org/news/article/dying-broke-extra-fees-drive-assisted-living-profits/#xd_co_f=ZmM1NTI2Y2QtZGI2YS00NTRmLTk5YzEtMmE2YjY2ZmIyYThk~.

108. Benjamin W. Veghte, "Promising Policy Innovations to Make Person-Centered Aging Affordable for All Despite Fiscal and Workforce Constraints: Lessons from the Netherlands," National Academy of Social Insurance, January 2025, https://www.nasi.org/wp-content/uploads/2025/01/Promising-Dutch-Long-Term-Care-Innovations.pdf.

MIT CoLab

Department Of Urban Studies And Planning
Massachusetts Institute Of Technology
Building/Room 9-238
77 Massachusetts Avenue
Cambridge, MA 02139

colab.mit.edu
colab-info@mit.edu
@MITCoLab

Design by **Isidor Studio**