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The 100-Year-Old American and Our Health System

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There is a consensus among researchers that the US health system is inadequate when it comes to ensuring the health of older adults. Indeed, while many Americans live longer today than several decades ago, they often live those "extra" years in poor health.[1] In fact, Americans are generally less healthy than their counterparts in other high-income nations. For example, they are more likely to experience multiple chronic conditions and have far higher rates of obesity. And this is especially true for certain populations, most notably racial minorities and low-income individuals, who still suffer from structural racism and intergroup disparities in health.[2] This is ironic given that the US spends 4.3 trillion dollars a year on health care, much more than peer countries that enjoy far better health-related outcomes.[3]

In this chapter, we provide some insights into this conundrum, which has become acute due to the aging of the American population. Divided into three sections, this chapter will focus on offering structural interventions and their attendant benefits. Section 13.1 identifies the main goal of a successful health system in the twenty-first century – creating optimal health for a longer life – and the primary conditions needed for accomplishing this goal. These include a public health approach that zeroes in on ex-ante prevention, not just ex-post treatment, and an expanded geriatric healthcare workforce to meet the demands of an aging population. Section 13.2 considers the question of how to finance health care for the older population given the challenges posed by the rise in life expectancy. Section 13.3 imagines the unique opportunities – the so-called third demographic dividend – that may arise if Americans could live long, healthy lives.

[1] *U.S. Health Care from a Global Perspective, 2022: Accelerating Spending, Worsening Outcomes*, Commonwealth Fund (Jan. 31, 2023), https://www.commonwealthfund.org/publications/issue-briefs/2023/jan/us-health-care-global-perspective-2022.

[2] Dayna Bowen Matthew, Just Health: Treating Structural Racism to Heal America 4–13, 33–50 (2022).

[3] *NHE Fact Sheet*, CMS, https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet (accessed Aug. 27, 2023).

13.1 THE GOAL: OPTIMAL HEALTH FOR A LONGER LIFE

One important goal of a successful healthcare system in the twenty-first century is to prolong health span – the average length of healthy life[4] – so that people will be able to live meaningful and purposeful lives well into their nineties and beyond. Achieving this goal is no doubt a difficult task, but it is possible.[5] It requires taking a wide array of measures across several healthcare dimensions, such as physician compensation, insurance, and health professionals' training, as well as focusing on broader issues, including revising the public health system, nutrition, and affordable housing. Space does not permit a comprehensive analysis of all of the steps required to accomplish this goal. Instead, this chapter focuses on two exigent issues: (1) the particular importance, in the context of health span, of investing in public health systems; and (2) reshaping geriatric care. We discuss each of these issues in turn.

13.1.1 *Rebalancing and Aligning Public Health and Healthcare Systems*

Promoting older adults' health requires taking measures during the decades that precede old age. Indeed, as one of us has noted elsewhere, "people who arrive at old age healthy are positioned to remain healthier into the oldest ages."[6] To translate such a "life course" perspective into a practical framework, we need to focus not only on the delivery of health care but also on the conditions necessary for people to be healthy. This means, for example, guaranteeing that all Americans can access healthy food, participate in physical activities, and have opportunities for social engagement. In other words, we need to build a social infrastructure that makes healthy choices easy choices – an approach that has traditionally been associated with a public health framework. To do this, we need to reinvest in the US public health system and mandate it to increase health span for all.

The public health system is responsible for the actions "we, as a society, do collectively to assure the conditions in which people can be healthy,"[7] with particular focus on preventing disease, disability, and injury and on improving the health of the population. It accomplishes this through the work of the Centers for Disease Control and Prevention (CDC) and 3,000 state, local, tribal, and territorial departments, through actions ranging from surveillance to assess health and its drivers to recommending and implementing programs, policies, and practices for improved population health based on scientific evidence.

[4] Eileen M. Crimmins, *Lifespan and Healthspan: Past, Present, and Promise*, 55 Gerontologist 901, 901 (2015).

[5] National Academy of Medicine, Global Roadmap for Healthy Longevity 1–5, 221–222 (2022) [hereinafter Global Roadmap].

[6] Linda P. Fried, *Investing in Health to Create a Third Demographic Dividend*, 56 Gerontologist S167, S171 (2016).

[7] Institute of Medicine, The Future of Public Health 1, 19 (1988).

Unfortunately, as the COVID-19 pandemic made evident, the US health system has failed to fully realize a public health infrastructure. One primary reason is that the field of public health has been disinvested over the past sixty years. Responsible for 70 percent of a population's health,[8] it receives less than 3 percent of US health dollars. In the US, the healthcare sector has traditionally focused on *ameliorating or curing* conditions. Despite some progress in recent years, most notably as a result of the passage of the Affordable Care Act (ACA), policymakers have not given enough attention to the role of individualized prevention strategies in promoting health. At the same time, the complementary population-focused perspective of the public health system is critical for success.

In recent decades, the US has only decreased the share of its public health spending vis-à-vis total health spending. One reason has to do with the way federal legislation is scored for budget purposes; it's hard to quantify upfront, as federal law requires, short-term returns on investments in public health infrastructure. Relatedly, the longer timeline for returns on investments in public health often does not sync with election cycles and political arguments. Nevertheless, as a number of researchers have shown, our traditional focus on individualized treatment is often less cost-effective than population-based prevention and health promotion, and individualized care is not sufficient to accomplish prevention.[9] Both are needed, in the right balance.

The US approach is exceptional from a comparative perspective. On average, the Organization for Economic Co-operation and Development (OECD) member countries spend more than double on non-healthcare social investments than they do on health care.[10] And the data unequivocally indicate that the approach taken by other OECD members leads to far better outcomes at lower cost: The US obesity rate is almost double the OECD average and the percentage of people experiencing chronic conditions is also much higher in the US than in other countries. Against this backdrop, the US National Academy of Medicine's recently released "Global Roadmap for Healthy Longevity" called for significantly increased investment in public health system-led prevention.[11]

Promoting a public health perspective has the potential to benefit everyone, but it is particularly important for older adults, who are at greater risk of experiencing chronic conditions such as cancer, hypertension, diabetes, and Alzheimer's. In recent years, there has been growing evidence showing that, despite common

[8] J. Michael McGinnis & William H. Foege, *Actual Causes of Death in the United States*, 270 JAMA 2207 (1993); Steven A. Schroeder, *We Can Do Better: Improving the Health of the American People*, N. Eng. J. Med. 1221 (2007).

[9] Inst. of Med., For the Public's Health: Investing in a Healthier Future 28 (2012) [hereinafter For the Public's Health].

[10] Ano Lobb, *Health Care and Social Spending in OECD Nations*, 99 Am. J. Pub. Health 1542, 1543 (tbl. 1) (2009).

[11] Global Roadmap, *supra* note 5, at 14–15, 178–179, 182–191.

beliefs, the emergence of chronic conditions in older ages is not inevitable; rather, it may depend on an array of individual, social, and environmental factors, and reducing such exposures is effective prevention.[12] Thus, we need the public health system to deliver programs for older adults, as well as middle-aged, to prevent heart disease, strokes, falls, diabetes, cognitive impairment, disability and frailty, as well as loneliness. Specific interventions include investing in a range of community-based public health programs aimed at increasing physical activity, eating healthy foods, and not smoking, as well as increasing social connection and engagement. For example, programs involving food labeling and public service announcements have been proven useful in encouraging people to consume healthier products.[13] Allowing older adults to buy affordable bags of vegetables, fruits, and protein from accessible stores serves as another example for an intervention in the area of nutrition. Other public health programs may include, perhaps more ambitiously, controlling air and water pollution and toxins in our environment that both damage children's brains and increase dementia risk.

Loneliness is epidemic among both old and young. The US Surgeon General's report in 2023 advocates public health systems and offices for the aging working together to build expanded opportunities for social connection and engagement in communities to help decrease loneliness.[14] For example, group exercise programs designed for older adults with different health statuses may foster connectivity and increase strength, balance, and fitness among participants.

There is strong evidence that a diversity of population-based programs to increase a community's physical activity levels, to make healthy foods accessible and affordable, and to teach people to prepare nutritious foods are important components of preventing obesity and diabetes, and lowering the risks of these diseases reduces risks of subsequent cardiovascular disease.[15] Moreover, in an oft-cited study conducted in Finland, researchers found that elderly people who were at risk of dementia and had received a two-year, "multidomain" preventive intervention (focusing on dietary changes, physical activity, and cognitive training) experienced a significant improvement in cognitive functions in comparison to their counterparts who only received general health recommendations.[16] This finding is promising in its own right, but it is especially important given that existing medical treatment for Alzheimer's disease,

[12] *Id.* at 26–27, 180.

[13] *Id.* at 184.

[14] Vivek H. Murthy, *Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community*, US Dep't of Health & Hum. Servs. (2023), https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf.

[15] Global Roadmap, *supra* note 5, at 180–191.

[16] Tiia Ngandu et al., *A 2 Year Multidomain Intervention of Diet, Exercise, Cognitive Training, and Vascular Risk Monitoring versus Control to Prevent Cognitive Decline in At-Risk Elderly People (FINGER): A Randomised Controlled Trial*, 385 Lancet 2255 (2015).

the most common type of dementia, has yet to prove meaningful, long-term efficacy.[17]

Given the promise of preventive care, why haven't we put more emphasis on public health interventions? One explanation found in the literature has to do with the so-called "prevention paradox," which means that individualized treatment is prioritized over preventive measures because the former (individualized medical care) is perceived as more exigent, even though the latter (preventive measures) may be more cost-effective. However, the data are clear that both are necessary to increase the health span of Americans or any population, and investment in public health needs to be adequate.

To prolong health span, we will need to overcome the prevention paradox. One possible avenue to promote preventive measures is to use tax benefits and reimbursement structures to incentivize healthcare providers to incorporate individualized prevention into the care provided to patients. Professor Lindsay Wiley points to several real-world examples of programs implementing this approach, including the ACA's preventive services mandate (which has recently been subject to legal challenges), tax benefits structures that trigger hospitals' engagement in community needs assessments, and other reimbursement structures that encourage hospitals to offer flu testing and vaccinations to their patients.[18] Yet as Wiley notes, a meaningful alignment of public health and healthcare systems requires more investment on both prevention and collective concerns.

Another avenue is to create a legal infrastructure in which public health departments provide data and monitoring to support healthcare providers. For example, stronger public health–clinical care alignment may allow public health entities to utilize population-level data and assist the medical care delivery system in "identifying ineffective or inappropriate clinical care."[19] This entails recruiting public health practitioners with expertise in health promotion and prevention, with an emphasis on older adults' health.

13.1.2 *Reshaping Geriatric Care*

Even with the needed focus on a healthy life span throughout the ever-longer "old age," older adults often do experience age-related illnesses and decline in physical and cognitive functioning. As a result, older adults are more vulnerable to frailty, falls, disability, and injury or acute illness than their younger counterparts. Further,

[17] Elodie Passeri, *Alzheimer's Disease: Treatment Strategies and Their Limitations*, 23 Int. J. Molecular Sci. 13954 (2022).

[18] Lindsay F. Wiley, *From Patient Rights to Health Justice: Securing the Public's Interest in Affordable, High-Quality Health Care*, 37 Cardozo L. Rev. 833, 867–871 (2016).

[19] For the Public's Health, *supra* note 9, at 21.

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approximately 80 percent of people sixty-five and older have one or more chronic conditions, and half have two or more such conditions.[20]

Yet geriatric care in the US remains inadequate, in terms of both workforce size and quality of care, despite the essential expertise that geriatric medicine provides in the care of older adults. However, understanding the physiologic changes with aging and managing older people with multiple chronic conditions and complex needs require that expertise. For example, according to one estimation, there are only 7,500 certified geriatricians in the US[21] – approximately half of the estimated number of practicing urologists (14,000)[22] and less than a fifth of practicing OB-GYNs (50,000).[23] As we describe further below, the low number of geriatric specialists leads to a shortage at a time when there is an increasing demand for geriatric health care.

By way of comparison, consider the way in which the demand for pediatric services created by the mid twentieth-century "baby boom" transformed pediatric care. Between 1938 and 1955, the number of pediatricians in the US tripled,[24] and by the end of the 1960s, the American Association of Pediatricians had almost quadrupled in size compared to 1950.[25] During this period, pediatricians in the US shaped a "new," holistic form of pediatric practice, in part in response to the jump in the number of births after World War II.[26] One would expect the US health system to similarly evolve to meet the needs of the growing population of older adults, but this has not been the case. Indeed, the current number of certified geriatricians reflects only a minuscule increase in comparison to the already small number of certified geriatricians almost two decades ago.[27]

Thus, to adapt to the increasing number of older adults and the ensuing demand for high-quality geriatric services, there is a need to fundamentally invest in geriatric care. In doing so, policymakers should focus on four existing dilemmas: (1) how to

[20] Joelle H. Fong, *Disability Incidence and Functional Decline among Older Adults with Major Chronic Diseases*, 19 BMC Geriatrics 323 (2019).

[21] *Current Number of Board Certified Geriatricians by State*, Am. Geriatrics Soc'y (updated July 2022), https://www.americangeriatrics.org/sites/default/files/inline-files/Current%20Number%20of%20Board%20Certified%20Geriatricians%20by%20State%20%28July%202022%29.pdf.

[22] *Practicing Urologists in the United States 2022*, Am. Urological Ass'n 5, 16 (2023), https://www.auanet.org/documents/research/census/State%20Urology%20Workforce%20Practice%20US.pdf.

[23] US Dep't of Health & Hum. Servs., Projections of Supply and Demand for Women's Health Service Providers: 2018–2030 (2021), at 10, https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/projections-supply-demand-2018-2030.pdf.

[24] Dorothy Pawluch, The New Pediatrics: A Profession in Transition 31 (1996).

[25] Am. Acad. of Pediatrics, 90 Years of Caring for Children, 1930–2020 (2020), at 10–12.

[26] Alexandra Minna Stern & Howard Markel, *Introduction*, *in* Formative Years: Children's Health in the United States: 1880–2000, 1, 12 (Alexandra Minna Stern & Howard Markel eds., 2002).

[27] Inst. of Med., Retooling for an Aging America: Building the Health Care Workforce 125 (2008) [hereinafter Retooling for an Aging America].

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attract and retain high-quality geriatric specialists; (2) how to improve training and education; (3) how to design settings and systems in which proper care can be provided; and (4) how to create robust social and digital infrastructure for care and health promotion.

Let us begin with the healthcare workforce. Over the past two decades, an array of reports and studies have consistently shown that the US healthcare system experiences significant shortages of board-certified geriatricians, and this supply–demand gap is projected to increase in the near future.[28] There are several reasons for this deficiency, but one particular factor is compensation: Geriatricians have lower salaries than general internists and family medicine physicians, even though geriatric certification generally requires additional training (most commonly in the form of fellowships) that goes beyond what is required for internal or family medicine certification.[29]

When the relatively low compensation is combined with the perceived lower prestige of the profession and the complex clinical needs associated with some older adults, specializing in geriatric health care may be less appealing. To make things even more complicated, the widespread reliance on the relative value unit (RVU) as a metric to assess clinical productivity for reimbursement purposes fails to adequately account for the time and effort needed to provide high-quality care for older adults with complex healthcare needs.[30] As a result of these structural features of geriatric care, some medical professionals may choose an alternative, higher-income medical specialty. In fact, some physicians cannot even afford to become geriatric specialists. And the problem does not end with certified medical geriatricians: Similar shortages exist across other elder-care professions, from nurses, to pharmacists, to social workers, to other healthcare providers.

To address the workforce problem, policymakers should craft plans to recruit high-quality healthcare professionals with geriatric specialty. In addition to increasing wages, policymakers should use scholarships, loan forgiveness, clinical internships, and other financial incentives to attract qualified geriatricians, as well as to solve reimbursement and financial disincentives.[31]

We do not think that machines can or should replace clinical support workers. A number of scholars have argued that so-called "care robots" – which have been recently introduced to support elder care around the world – can address shortages in skilled labor and may "increasingly play a role in supplementing lower-skilled

[28] *Id.* at 123–126.

[29] John W. Rowe, Terry Fulmer & Linda P. Fried, *Preparing for Better Health and Health Care for an Aging Population*, 316 JAMA 1643, 1643 (2016).

[30] Neil M. Resnick & Nichole Radulovich, *The Relative Value Unit in Academic Geriatrics: Incentive or Impediment?* 62 J. Am. Geriatric Soc. 553 (2014).

[31] Terry Fulmer et al., *Actualizing Better Health and Health Care for Older Adults*, 40 Health Aff. 219, 220 (2021).

work and providing new avenues for patient engagement."[32] Insofar as artificial intelligence (AI) and care robots can assist patients and healthcare workers with performing technical, administrative tasks such as reminding a person to take routine medication, this may ameliorate some of the demands on the geriatric workforce. Nevertheless, the use of care robots also exposes patients to digital devices with far-reaching recording and surveillance capacities, which raises significant concerns about the ability to protect patients' privacy and autonomy. Moreover, we are wary that the use of AI and robots could distract decision-makers from the need to invest in the elder-care workforce. Thus, to the extent robots are being used to provide care, it should be in addition to – not instead of – human physicians and providers.

However, recruitment and retention of a high-quality workforce is not enough; the education and training provided to healthcare professionals, both geriatricians and nongeriatricians, should also be improved. Although people sixty-five and older use various health services – including hospital visits and emergency medical service responses – at much higher rates than the rest of the US population, many healthcare professionals lack the sufficient competency to understand and deal with the challenges associated with age-related frailty and vulnerability. A 2008 Institute of Medicine report pointed to "lack of faculty, lack of funding, lack of time in already-busy curricula, and the lack of recognition of the importance of geriatric training" in medical schools as the primary reasons for this inadequacy.[33]

Another recent report found that the US healthcare system is rife with "neglect, insensitivity, and even abuse" when it comes to treating older adults.[34] The report documents physicians' use of demeaning language directed toward older adults and concludes that the "lives of older patients are seen as less valuable than younger patients."[35] It also finds that elder abuse in nursing homes and other institutional settings results in part from insufficient staff training that could otherwise prevent such disturbing phenomena. These findings reflect the entrenched ageism in the US healthcare system – ageism that was exacerbated during the COVID-19 pandemic, when institutionalized older adults were put at great risk. Although more than 165,000 nursing home residents have died from COVID-19,[36] the conditions that gave rise to the deaths of institutionalized older Americans have still not been addressed postpandemic.

[32] Valarie K. Blake, *Regulating Care Robots*, 92 Temp. L. Rev. 551, 553, 555 (2020).

[33] Retooling for an Aging America, *supra* note 27, at 128.

[34] The Anti-Ageism Taskforce at the International Longevity Center, Ageism in America (2022), at 71, https://aging.columbia.edu/sites/default/files/Ageism_in_America.pdf [hereinafter Ageism in America].

[35] *Id.*

[36] *COVID-19 Nursing Home Data*, Centers for Medicare & Medicaid Services (Sep. 10, 2023), https://data.cms.gov/covid-19/covid-19-nursing-home-data.

To improve the geriatric competence of healthcare workers, researchers have proposed several strategies that pertain to both geriatricians and nongeriatricians. First, with respect to all healthcare workers, both in clinical care and in public health, researchers recommend training such workers in a variety of settings, including nursing homes and older people's homes, as well as incorporating simulations and virtual learning into their training. Adopting this strategy would change the status quo, whereby most of the training of healthcare professionals takes place in hospitals, even though older adults receive large portions of care in nonhospital settings. Second, with respect to providers who pursue a career in geriatrics, researchers suggest conditioning the granting of license and certifications on proof of competence in the care and health promotion of older adults, as well as raising minimum training standards for certain paraprofessionals, including certified nursing assistants and personal care aides. While these proposals address different objectives and target different healthcare and public health professions, they all share the underlying recognition that respectful and effective care for older adults begins at the training stage and requires regulators to take proactive approaches.

As the population ages, healthcare professionals – regardless of whether they specialize in geriatrics – will increasingly need to be attuned to elder mistreatment. Healthcare professionals are often in the best position to recognize the warning signs of elder abuse, neglect, and exploitation. In addition, they may be in a unique position to intervene. Since abusers often isolate their victims, older adults' healthcare providers may be their only meaningful human contact other than their abuser. When healthcare providers do not recognize mistreatment, they not only miss a potentially valuable opportunity to intervene but may end up facilitating the mistreatment. For example, a provider who does not recognize a caregiver's abuse of a patient may implicitly signal to the caregiver or patient that the mistreatment is "normal" and that it can continue with impunity.

Similarly, it will be ever more imperative for healthcare professionals to have a sophisticated understanding of how to support patients with diminished cognitive capacity. For example, healthcare professionals will increasingly need to not only be alert to the possibility that their older patients may be experiencing cognitive decline, but also recognize when additional support or time may be needed for patients to be able to make informed choices.

As for the settings in which care is provided, most older adults in the US live in their homes or in a family member's house.[37] By contrast, 1 million older adults (4 percent of the entire older adult population) live and receive care in nursing homes. While this may seem a relatively small number, it is important to address the consequences of providing care to older adults in nursing homes and other institutional settings. The COVID-19 pandemic exposed the inadequacy of some

[37] Allison K. Hoffman, *Reimagining the Risk of Long-Term Care*, 16 Yale J. Health Pol'y. L. & Ethics 147, 165–171 (2016).

institutional long-term care facilities in the US, including care provided in many nursing homes. The devastating number of COVID-19-related deaths, noted above, alongside long-standing evidence about the poor conditions surrounding many nursing homes across the country, has led to major proposals for designing long-term care in people's homes and other noninstitutional settings. There is also a pressing need to redesign nursing homes to prevent infectious diseases and maintain human contact.

While scholars disagree about whether nursing homes – as a distinct concept – are necessarily part of the problem or potentially part of the solution, all seem to recognize that most US nursing homes are currently underresourced and prone to abuse and neglect. According to a 2022 report, 90 percent of nursing homes suffer from inadequate staffing,[38] and this is particularly the case when it comes to settings with high percentages of Black residents.[39] To address this problem, in April 2024, the US Department of Health and Human Services adopted a final rule setting a minimum staffing threshold for nursing homes that participate in Medicaid and Medicare.[40] Some elder advocates, however, argue that more ambitious standards are necessary to meaningfully improve the conditions in nursing homes.[41]

The US nursing home problem is exacerbated by the fact that (1) Medicare, which provides health insurance to people aged sixty-five and older, covers only peripheral aspects of long-term services, and (2) to be eligible for long-term services under Medicaid, one must first exhaust their own financial resources. Moreover, Medicaid coverage for long-term care is limited and reflects a preference for nursing homes over private homes and community-based settings in that it requires states' programs to provide funding for long-term care in nursing homes while at the same time conditioning the provision of care in people's homes on the availability of discretionary "waiver programs."[42]

To be sure, recent decades have seen a shift in federal policy with the aim of moving people from nursing homes and institutions to community-based settings, a shift that was initially bolstered by the Supreme Court 1999 decision in *Olmstead v. L.C. ex rel. Zimring*,[43] which held that undue institutionalization constitutes disability discrimination. But the Court also considered states' budgetary constraints,

[38] Ageism in America, *supra* note 34, at 9.

[39] Global Roadmap, *supra* note 5, at 205.

[40] 89 Fed. Reg. 40876, 40879 (2024); *Biden-Harris Administration Takes Historic Action to Increase Access to Quality Care, and Support to Families and Care Workers*, CMS (Apr. 22, 2024), https://www.cms.gov/newsroom/press-releases/biden-harris-administration-takes-historic-action-increase-access-quality-care-and-support-families.

[41] Jordan Rau, *Federal Officials Propose New Nursing Home Standards to Increase Staffing*, N.Y. Times (Sep. 1, 2023), https://www.nytimes.com/2023/09/01/health/nursing-home-staffing-cms.html.

[42] Larisa Antonisse, *Strengthening the Right to Medicaid Home and Community-Based Services in the Post-COVID Era*, 121 Colum. L. Rev. 1801 (2021).

[43] 527 U.S. 581 (1999).

holding that a state could avoid liability if it showed that it had a "working plan" for placing disabled people in community-based settings. The upshot is that, even after *Olmstead*, many states keep long waiting lists for Americans who wish to receive home- and community-based services.[44] Thus, expanding in-home Medicaid coverage would allow more older adults to receive care in their homes – which is where they usually prefer to reside – instead of in nursing homes. The goal should be a coordinated continuum of care rather than discrete systems with lack of care continuity and shared medical records.

The final problem addressed here is that the social, digital, and legal infrastructure in the US is not strong enough to allow all older adults to take advantage of recent technological developments, most notably telehealth. For example, according to estimates, 21–42 million people in the US do not have access to broadband internet,[45] and those who are connected to the internet may lack the digital literacy necessary to receive high-quality telemedicine care. This is ironic, given that older adults in remote and rural places – where it is sometimes hard to find specialists in various medical disciplines – are more likely to benefit from telehealth but are less likely to have access to the digital infrastructure needed for such services. Thus, the unequal access to digital devices and broadband internet may *increase* health disparities across socioeconomic and geographic lines, notwithstanding the promise that telemedicine holds.

In sum, the myriad problems described earlier require an overhaul to the structural and institutional systems that affect the compensation, education, training, and evaluation of geriatricians and other healthcare professionals, as well as the systems and environments in which care is provided.

13.2 FINANCING A TWENTY-FIRST-CENTURY ELDER-CARE SYSTEM

The question of how to finance health care for the older population is particularly challenging given the demographic trend that is the focus of this volume, as well as the sociopolitical situation surrounding the US healthcare system's funding. For example, Medicare is facing "significant financing issues."[46] According to 2023 federal reports, the annual cost of Medicare is projected to increase from 3.9 percent of GDP in 2023 to 6 percent of GDP by 2045. As a result, Medicare's Hospital Insurance trust fund – which covers inpatient hospital care and posthospitalization care in rehabilitation or nursing facilities – is projected to become depleted as early as 2031. The main reason, of course, has to do with the aging population, which

[44] Nina A. Kohn, *Nursing Homes, COVID-19, and the Consequences of Regulatory Failure*, 110 Geo. L.J. Online 1, 11 (2021).

[45] Linda P. Fried, *The Need to Invest in a Public Health System for Older Adults and Longer Lives, Fit for the Next Pandemic*, 9 Frontiers in Pub. Health (2021).

[46] Social Security and Medicare Boards of Trustees, Status of the Social Security and Medicare Programs: A Summary of the 2023 Annual Reports (2023), at 2.

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increases the number of beneficiaries and consequently the costs of insurance coverage. Existing proposals to solve this problem include increasing Medicare tax rates, introducing changes into Medicare's funding mechanisms, and increasing the program's enrollment age.

So, what can be done to tackle the financing issue? Let us begin by noting that adopting some of the proposals described in Section 13.1 might actually *save* money for the US health system. In an ideal world, that money, in turn, could be used to finance additional services and programs aimed at prolonging Americans' health span. The problem is that federal spending is often siloed; money saved in Medicare isn't given to the CDC for public health infrastructure investment, for example. And the way federal budget scoring occurs, long-term investments in public health are often scored as deficits on the books, if the expected benefits occur outside a ten-year budget window.[47]

Nevertheless, there is robust evidence that increasing public health investments is likely to reduce healthcare costs associated with treating disease and injury by advancing prevention at the population level. One study, for example, estimated that ex-ante interventions aimed at preventing obesity, diabetes, and hypertension would accrue considerable health-related benefits at reduced costs compared to the costs associated with ex-post clinical treatment.[48] In fact, the decrease in cardiovascular disease and other causes of ill health reduces healthcare costs, with a fourteenfold return on investment.[49] However, America's health has been worsening,[50] with rising infant and maternal mortality, obesity, diabetes, homicides and suicides, loneliness, worsening mental health, and drug addiction. In combination, these contribute to rising healthcare costs.

There is also evidence that providing care in homes and community-based settings is not more expensive – and may even be cheaper per individual – than institutional settings and nursing homes. One study examined data pertaining to the expansion of home- and community-based services in Ohio over a twenty-year period and found that the expansion did not result in a significant increase in expenditures.[51] Another study, which analyzed data from the vast majority of US

[47] This might result in sequestration under PAYGO ("pay-as-you-go") rules, which require that new legislation involving mandatory spending "must not increase projected deficits." *The Statutory Pay-As-You-Go Act of 2010: A Description*, White House Off. of Mgmt. & Budget, https://obamawhitehouse.archives.gov/omb/paygo_description/#:~:text=2010%3A%20A%20Description-,The%20Statutory%20Pay%2DAs%2DYou%2DGo%20Act%20of%202010,must%20not%20increase%20projected%20deficits (accessed Sep. 26, 2023).

[48] Dana P. Goldman et al., *The Benefits of Risk Factor Prevention in Americans Aged 51 Years and Older*, 99 Rsch. & Practice 2096 (2009).

[49] Matt McKillop & Dara Alpert Lieberman, The Impact of Chronic Underfunding on America's Public Health System: Trends, Risks, and Recommendations (2021), at 8.

[50] Inst. of Med., U.S. Health in International Perspective: Shorter Lives, Poorer Health 1–4 (2013).

[51] Diane Berish et al., *Is There a Woodwork Effect? Addressing a 200-Year Debate on the Impacts of Expanding Community-Based Services*, 31 J. Aging & Soc. Policy 85, 94–96 (2019).

jurisdictions, estimated that the provision of home- and community-based services actually saved money in comparison to the costs associated with the provision of care in nursing facilities.[52] All of this is to say that the US healthcare system can do more to improve older adults' health with the money already spent on health-related measures.

But even if creating a health system with well-balanced investments in public health and medical care would entail an additional investment of public funds, such an investment is essential. An aging population that is unhealthy in large part will bring new financial stresses, not to mention increasing stress on family caregivers. In 1965, when Medicare was enacted, President Lyndon Johnson declared that older Americans would no longer "be denied the healing miracle of modern medicine."[53] He referred to Medicare protection as "the hand of justice" that is offered to older adults who themselves had given "a lifetime of service and wisdom and labor to the progress" of the US.[54] As these statements make clear, federal legislation concerning healthcare funding for the elderly has been inextricably linked to norms about caring for older adults.

Long-term care is one of the areas where investment of public funds is most needed. Although the Community Living Assistance Services and Supports Act (CLASS) established a social insurance program aimed at addressing this issue, the program has never been activated because of its sole reliance on participants' premiums (with no additional tax dollars), which was insufficient to ensure solvency. Given the limited coverage offered by Medicaid and Medicare, as described earlier, and the fact that the vast majority of Americans do not have private insurance coverage for long-term care, it is imperative to increase funding for such care – either under Medicaid or a potential universal social insurance policy – to allow Americans to receive care in the setting they prefer and to relieve some of the burden on older adults' caregivers.[55]

Indeed, the failure to ensure adequate funding for long-term care has been detrimental not only to the older adults who need such care but also to their formal and informal caregivers. With respect to formal caregivers, federal labor laws in the US have historically provided insufficient wage and work-hour protections to direct-care workers who provide older adults with clinical services, emotional support, and assistance with bathing, dressing, and other everyday activities. This state of affairs has resulted, at least in part, from concerns that improving labor standards for such

[52] Charliene Harrington, N. G. Terence & Martin Kitchener, *Do Medicaid Home and Community Based Service Waivers Save Money?* 30 Home Health Care Services Q. 198 (2011).

[53] Lyndon B. Johnson, *Remarks with President Truman at the Signing in Independence of the Medicare Bill* (July 30, 1965), https://www.presidency.ucsb.edu/documents/remarks-with-president-truman-the-signing-independence-the-medicare-bill.

[54] *Id.*

[55] Rachel M. Werner, Allison K. Hoffman & Norma B. Coe, *Long-Term Care Policy after COVID-19: Solving the Nursing Home Crisis*, 383 N. Eng. J. Med. 903 (2020).

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workers would increase the costs of long-term care and ultimately force older adults to receive fewer services.[56] While some progress has been made in this regard (most notably by extending Fair Labor Standards Act protections to home-care workers in 2013), many home-care workers – who are disproportionally women and people of color – are still underpaid and often unable to gain overtime payments.[57] Moreover, poor working conditions for direct-care workers may lead to high turnover rates and low motivation among these workers, which run counter to the interests of older adults themselves.

The lack of a social insurance policy for long-term care also affects informal caregivers, who are disproportionately women and often have to reduce their own household or workforce productivity to care for elderly family members. In fact, family members and friends frequently have no choice but to fill the caregiving vacuum, resulting in tremendous monetary and emotional costs.[58] As Professor Allison Hoffman has demonstrated, these costs are currently not accounted for under existing policies.[59] And taking them into consideration, Hoffman notes, helpfully "redefines the scale of the problem of long-term care."[60] Addressing the problem will require a multidimensional solution, but one thing seems clear: Part of the solution should involve increased state and federal funding. As the final section will illustrate, investing in the health of older adults may actually have unexpected benefits for society at large.

13.3 IMAGINING HEALTHY LONGEVITY: UNLEASHING A THIRD DEMOGRAPHIC DIVIDEND

Our contention is that the measures proposed in this chapter to improve Americans' health span could unleash a "*third* demographic dividend" whereby society reaps the benefits – both economic and noneconomic – of having a healthy and engaged older population.[61]

According to the conventional narrative, a first demographic dividend occurs when children survive and age into employability.[62] A second demographic dividend results from labor supply then exceeding the share of the population that is

[56] Lisa I. Lezzoni, Naomi Gallopyn & Kezia Scales, *Historical Mismatch between Home-Based Care Policies and Laws Governing Home Care Workers*, 38 Health Aff. 973, 976–977 (2019).

[57] Pamela J. Doty, Marie R. Squillace & Edward Kako, *Analysis of State Efforts to Comply with Fair Labor Standards Act Protections to Home Care Workers*, US Dep't Health & Hum. Services (Dec. 2019), at 2–3, https://aspe.hhs.gov/sites/default/files/migrated_legacy_files//193336/FLSAimpl.pdf.

[58] Hoffman, *supra* note 37.

[59] *Id.*

[60] *Id.* at 156.

[61] Fried, *supra* note 6.

[62] David E. Bloom, David Canning & Jaypee Sevilla, The Demographic Dividend 39 (2003).

below working age. As a result of this shift in labor supply, society experiences an increase in production and benefits from a stronger workforce, strengthening the economy and investments that further increase longevity. As people live longer, they are more likely to save money and prepare for retirement. With more productivity and national wealth, increased life expectancy creates opportunities and incentives to invest in education and human capital.

Longevity, however, has more to offer US society. If we develop the proper public health, social, and legal infrastructure, our society can extend health span and enable older adults' social capital to confer generative impact through more paid employment, national or local service, volunteering, and social and political activism. This, in turn, could give rise to a third demographic dividend in which society can thrive due to both healthy longevity and transformations to a society that enables the opportunities of our longer lives to support all ages flourishing.[63]

To have a sense of what such a society might look like, consider the education arena. As students in the US try to fill the educational gaps that resulted from the COVID-19 pandemic, the American education system could benefit from older volunteers assisting students in various academic and social tasks. Such a mentoring and tutoring program – the "Experience Corps" – is already operating in twenty cities across the country, connecting senior adults with students in public elementary schools who need assistance in reading and other aspects of academic performance. The senior volunteers benefit not only from the human interaction and generative impact that the program facilitates[64] but also from improved cognition, mental health, and physical strength.[65] Similar programs can address other social goals. For example, during public health emergencies such as the COVID-19 pandemic, older adults could take on community roles aimed at supporting their neighbors, sharing advice, and building resilience. As a different kind of example, many retired health professionals were called back into service to fill work shortages during the pandemic.[66] Here again, such programs would not only contribute to the public's health but also reduce older adults' loneliness and promote their self-esteem and sense of belonging.

Other examples pertain to the potential contribution of older adults to labor and consumer markets. Many of today's jobs do not entail physically strenuous work and could be fulfilled by older adults. Requiring employers to provide reasonable accommodations for aging workers regardless of disability status may

[63] Global Roadmap, *supra* note 5, at 51–81.
[64] *Id.* at 72–73.
[65] Linda P. Fried et al., *Experience Corps: A Dual Trial to Promote the Health of Older Adults and Children's Academic Success*, 36 Contemp. Clin. Trials 1 (2013).
[66] Chris Farrell, *Retired Doctors Return to Work for COVID-19*, Next Avenue (Mar. 27, 2020), https://www.nextavenue.org/retired-doctors-return-to-work-for-covid-19/.

allow more older adults to retain their jobs.[67] Further, employers are increasingly recognizing that intergenerational teams are more proactive and innovative. They are developing flexible approaches to retirement and time commitments, which ultimately benefit adults of all ages. To incentivize employers to hire older adult workers, Fried and her colleagues suggest using subsidies that would help to reduce employers' costs associated with employing older adults, for example, by ensuring that Medicare would serve as a primary payer for health insurance for such employees.[68] Another way to increase work opportunities among older adults is retraining programs that allow people to develop new expertise and careers.[69]

As people live and work longer, more age-friendly products will be needed to fit their needs. That, in turn, is likely to give rise to the involvement of older adults in the development and design processes of such products. A new market that relies upon the contribution of older adults as expert designers and customers may emerge – and with it, expanded jobs for all ages.

To be sure, healthy longevity alone is not sufficient for creating a society in which older adults are active participants in every aspect of social life; we also need to find the ways to counteract ageism and establish the social institutions that would allow such participation. But ensuring the health of older adults – through public health investments and a healthcare system better prepared for this specific and growing population – is necessary for unleashing the third demographic dividend. Indeed, research suggests that one of the major factors hindering the emergence of large-scale programs, such as the Experience Corps, is older adults' chronic conditions and disability.[70] Thus, if we want to enable the unique and valuable social capital of older adults in an aging population, we first need to make sure they have the conditions to stay healthy.

13.4 CONCLUSION

This chapter has explored some ways in which the US health system has to change to accommodate the 100-year-old American. It identifies the creation of optimal health for a longer life as the health system's primary goal, and points to two primary avenues to achieve this goal: (1) investing in a public health system that can increase health span for the whole population and (2) improving geriatric care and health

[67] Michael Ashley Stein et al., *Accommodating Every Body*, 81 U. CHI. L. REV. 689, 755 (2014).
[68] Linda P. Fried, *A Prescription for the Next Fifty Years of Medicare*, 39 GENERATIONS 180 (2015).
[69] Ramsey Alwin & Lona Choi-Allum, *Career Changes Are Becoming More Common with Increased Longevity*, AARP RSCH. (Apr. 23, 2020), https://www.aarp.org/pri/topics/work-finances-retirement/employers-workforce/adults-career-journeys.html.
[70] Linda P. Fried, *Older Women: Health Status, Knowledge, and Behavior*, *in* WOMEN'S HEALTH, THE COMMONWEALTH FUND SURVEY, 175, 177–181, 188–190 (Marilyn M. Falik & Karen Scott Collins eds., 1996).

systems. As for the first avenue, we argue that implementing population-based preventive measures under the auspices of the public health system could reduce chromic conditions among older adults and lead to better health outcomes in the long term. As for the second avenue, we argue that the provision of high-quality and age-friendly care requires a more robust and well-trained geriatric workforce, focusing on providing a coordinated continuum of geriatrically informed systems of care and using emerging technologies to make health care more accessible for everyone. Further, enabling engagement that older adults seek will improve health in aging while supporting societal flourishing.

As this chapter has shown, the sharp increase in the share of older adults in the US population poses significant challenges for the American healthcare system. This is particularly true with respect to funding, the subject of the chapter's second section. We argue that even though there are no easy solutions for the financing dilemma, some of our reform proposals could actually save money in the long term.

Ultimately, the constant increase in life expectancy not only poses challenges but also creates unique opportunities: If we find the ways to incorporate health into older adults' so-called extra years, older adults will be able to use their experience and expertise to contribute to society by engaging in work, volunteering, leadership, and advocacy activities. Perceived this way, longevity can have ripple effects that have the potential to create a long-lived society in which all ages can thrive.