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Healthcare in the United States

United States Health Spending and Outcomes

The health spending of the United States is the highest among the OECD countries. It was 2.5 times greater than the OECD average in 2013.[1] Health spending accounted for 16.4 percent of the gross domestic product in 2013[2] and, in 2020, it is projected to represent 20 percent.[3] By 2040 it is estimated that one third of all spending in the United States will be on healthcare.[4,5] Despite all of the spending, the health of Americans lags behind. This is, in large part, a result of America divesting from prevention and health promotion programs. Another contributing factor to such poor health outcomes is that the United States does not invest enough in building robust systems of primary care.[6] Although the United States spends close to the same amount as other Western countries on healthcare and social supports combined, the United States spends proportionately less on social services and more on healthcare to treat people after they become ill[7] from what are often preventable diseases. Adults in the United States are more likely than adults in other developed nations to forgo necessary healthcare because they cannot afford the cost.[8] From 2010 to 2012, 54 percent of people with chronic

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illness reported that cost was a barrier for them to access care. The patients surveyed reported that they skipped medications, treatments, and doctor visits because they could not afford the cost.[9] Life expectancy is shorter in the United States than most OECD countries. As of 2013 life expectancy in the United States was 78.8, while the OECD average was 80.5.[10] In 2014 the Commonwealth Fund ranked the United States healthcare last among 11 countries.[11,12] The measures included access, equity, quality, efficiency, and healthy lives. Because of these findings, the government and many health systems in the United States are creating new care models to address the issues of healthcare access, quality (including patient satisfaction), and cost. Many of these innovations are designed to serve older adults because the older cohort interacts with the healthcare system more than others.

> Our ultimate goal, after all, is not a good death, but a good life to the very end. (Atul Gawande, *Being Mortal: Medicine and What Matters in the End*)

Optimal Aging

In the United States and internationally, there is a continuing focus on community supports and inclusive societies that allow older adults to remain active and engaged. This focus includes age-friendly cities, inclusive housing, and employment opportunities. Most of the improvement in healthcare and inclusive environments will positively affect those with dementia, but providers and city planners are also committed to implementing dementia-specific care and support measures.

Geriatric Workforce Shortage

Geriatricians are a critical factor of high-quality care for older adults. The United States is already struggling with the ability to care for the older population with the high rates of dementia and other chronic illnesses and is lacking in a workforce that with appropriate training.[13] According to the American Geriatrics Society, as of 2015, the United States was

short of 9500 geriatricians.[14] This shortage threatens to grow as the population ages. The World Health Organization cites that to meet the need of the growing older population, all healthcare providers must be educated in gerontology and geriatrics.[15] Some suggest that having more geriatricians in the hospital setting could reduce costs.[16] This is important because 25 percent of Medicare spending is attributable to inpatient hospital care.[17] Geriatricians are trained to understand and diagnose cognitive problems and functional challenges with activities of daily living. They also are knowledgeable about how drugs act differently in the aging body and are adept at polypharmacy management. Additionally, geriatricians are trained to manage multiple comorbidities and understand that health management is often the primary focus rather than cure.

Prevalence of Chronic Disease

Longevity and lifestyle choices such as smoking, alcohol, and obesity have contributed to people developing more chronic illnesses. The occurrence of multiple chronic conditions increases with age,[18] which compounds the burden of caring for the growing aging population. Almost one half of older adults in America are living with both chronic conditions and functional limitations.[19] Eighty percent have at least one chronic condition, and 50 percent have at least two.[20] Approximately 75 percent of Americans 65 and older are living with multiple chronic conditions[21] and 20 percent are living with five or more chronic conditions.[22] The oldest old population (80 and older) is growing most rapidly[23,24] and has the highest rates of comorbidity.

The number of people living with dementia is projected to increase by more than 200 percent, from 44 million in 2014 to 135 million by 2050.[25] One in nine people 65 and older have dementia. The statistics, however, do not accurately represent the prevalence of dementia because an estimated 50 to 90 percent of dementia cases go undiagnosed.[26,27] The global average rate of undiagnosed cases of dementia is 75 percent.[28] The rates of undiagnosed dementia vary from country to country. The highest rates are found in the low- and middle-income countries.[29] It is nearly impossible to separate elder care from dementia care after the age of 75 because that

population represents 81 percent of the cases of dementia.[30] As we mentioned, the oldest old is the population that is growing the fastest. Thirty-two percent of that cohort have received a diagnosis of dementia.[31]

It is more expensive to meet the complex care needs of people with multiple chronic conditions. Many will also need supportive help because those with multiple chronic conditions experience higher levels of poor functional status.[32,33] Older adults who are living with five or more chronic illnesses have, on average, 50 prescriptions and 14 different physicians and make 37 office visits annually.[34] Those with multiple chronic conditions account for 71 percent of the total healthcare spending in the United States.[35] The fee for service individuals with multiple chronic conditions, who are beneficiaries of the government-sponsored Medicare, accounts for 93 percent of the total Medicare spending.[36] The unsustainability of medical costs is an incentive for the Centers for Medicare and Medicaid to support more efficient, less costly, and better quality systems of care for the sickest people. The financial burden is also borne by people living with multiple chronic conditions through out of pocket costs and the high price of prescription medications.

Meeting the healthcare and social needs of the older population is a worldwide public health challenge. To properly and sustainably meet the needs of older adults, providers must challenge fragmented and complex care and social support systems and implement coordinated, person-centered care across a variety of care settings and providers. Providers must also foster chronic disease self-management programs and other forms of patient engagement. Two important concepts that we address throughout the book that serve to promote higher-quality accessible care with greater patient satisfaction at a lower cost are person-centered and value-based care.

Person-Centered Care

One theme that occurs throughout our interviews involving elder care is the concept of person-centered care.[37] Rather than being provider led, person-centered care has the patient in the center of the care team with all care decisions based around the goals and priorities of the patient. Person-centered care has been the focus of global health systems and pol-

icy makers.[38,39] Although beneficial for everyone, person-centered care is especially effective in treating those who are most frail and living with multiple chronic conditions. Person-centered care has the potential to lower the health system utilization of the patient by providing more coordinated care and better self-management support that helps keep patients out of the emergency departments and hospitals.

Person-centered care providers have discussions with their patients about the benefits and side effects of aggressive interventions. They involve the patient and their families in care planning including advanced directives for late life. In the last years of life, often people who are involved in their care planning will opt out of heroic medical interventions and enjoy life in the way they most prefer. Person-centered care is value-based care because it improves quality of life, reduces healthcare utilization, and lowers the care cost in late life.[40,41,42,43]

Value-Based Care

Value is measured as the ratio of health cost and outcomes. The goal of value-based care is to lower health spending by reducing redundancies and unnecessary care. In a fee for service reimbursement arrangement, providers are paid for each service they perform including office visits, tests, operations, and other medical procedures. The more volume, the more the provider makes, which can be seen as an incentive for too much care. Unnecessary medical tests and procedures cost the American healthcare system an estimated US$200 billion each year and overly aggressive care is responsible for an estimated 30,000 deaths annually.[44] Since the passage of the Affordable Care Act in 2010 and The Medicare and CHIP Reauthorization Act (MACRA) of 2015, the United States has been in the process of a historic change in the way healthcare is reimbursed. Healthcare providers are reorganizing how they deliver care in the response to reimbursements that incentivize value over volume.

The Centers for Medicare and Medicaid Services, private payers, fully integrated health systems such as managed care organizations, and large employers have led the push toward value-based reimbursement policy. They have built in incentives to provide value because they exist as the

payer and the payee of health services. Private insurers including Etna and Blue Cross Blue Shield are dedicating an increasing amount of their spending toward value-based care.[45] Large employers such as Intel, Starbucks,[46] Boeing, General Electric, Lowe's, and Walmart[47] have forged their own way to value-based care by negotiating with insurers and medical providers to receive better quality care at a lower cost.

Value care arrangements shift health systems from a medical model to a public health model. There are a variety of value-based reimbursement arrangements or alternate payment models.

- **Shared Savings**
- The provider is given an agreed upon fee that is based on the health profile of the patient. If the provider is able to meet specified outcome benchmarks at a lower cost, that savings is kept by the provider or shared at a predetermined rate with the insurer.
- **Shared Risk**
- If the organization spends more than the agreed upon amount, they are required to repay the insurer for some of the excess spending.
- **Bundled Payments**
- The insurer makes one payment for the total care linked to a particular procedure or period of time. This fee covers the cost of care across the continuum. If an organization is efficient and does not spend the total fee they received, they can keep the savings. The Centers for Medicare and Medicaid Services have made bundled payments mandatory for heart attack treatment, bypass surgery, hip and knee replacement, and surgical hip and femur fracture treatment.[48]
- **Global Capitation**
- Insurers pay a set monthly fee for each patient. The fee is meant to pay for all of the healthcare services used by the patient.
- **Pay for Performance**
- The provider is compensated based on the evaluation of the physician performance metrics. Those who meet the targets established by the insurer may receive a bonus.

Value-based agreements encourage providers to be committed to coordinated, high-quality care because a trip to the emergency department, complications resulting from medication mismanagement, a readmission after a care transition, and other often preventable adverse health events can increase the cost of care substantially. The agreements also give providers more flexibility in resource allocation. Value-based agreements have set the stage for better care in all settings including the home and community. With the new president, the United States is unsure of future healthcare reimbursement policies, but it is doubtful that we will move away from value-based care. Like the United States, all countries who are aligning their healthcare systems and policies to meet the needs of their growing older population will need to maintain a vigilant dedication to value-based care and health system redesign.

Alignment to Meet the Needs of the Older Population

The increase in life expectancy is a public health success, and possibly the greatest achievement of the twentieth century. However, the challenge remains for health systems, private entities, and policy makers, from the community level through the federal level, to ensure that people can live the highest quality of life possible (optimal aging) in their additional years. Optimal aging is not solely about health status; it is being able to live active, engaged, and productive lives due to policies and practices that foster inclusive communities for people of all ages and abilities. This public health challenge presents unprecedented opportunities for innovation and we are pleased to share some of our favorites in the following pages.

This is a book of solutions to some of the most pressing challenges in aging today.

In the following chapters, we will describe organizational cultures of elder care providers that are person-centered, coordinated, and efficient and, therefore, require fewer staff and result in better health outcomes, improved access, and lower care costs. We will also detail innovations that support people with dementia and their caregivers that enable those with

dementia to remain safely at home and included in their communities. We will show how some models of care have greatly reduced costs and improved outcomes by providing care in the home and community, while others combine social and health supports to improve function and enable aging in place. We will also present models of illness and injury prevention and chronic disease self-management that reduce healthcare utilization greatly and improve the well-being of older adults. We will begin with long-term care financing and why the long-term care industry is less than vibrant in the United States. The next chapter makes a convincing case for the need for universal health coverage to meet the growing global long-term care needs of the aging population.

Notes

1. OECD. Health at a glance. How does the United States compare? https://www.oecd.org/unitedstates/Health-at-a-Glance-2015-Key-Findings-UNITED-STATES.pdf. Accessed April 2017.
2. Ibid.
3. Institute for Healthcare Improvement. IHI Triple Aim Initiative. Better care for individuals. Better health for populations, and lower per capita costs. http://www.ihi.org/Engage/Initiatives/TripleAim/Pages/default.aspx. Accessed April 2017.
4. Aldridge, M.D., & Kelley, A.S. (2015). The myth regarding the high cost of end-of-life care. *American Journal of Public Health*, 105(12), 2411–2415.
5. Emanuel, E.J. (2012). Where are the health care cost savings. *Journal of American Medicine*, 307(1), 39–40.
6. Koller, C.F. & Khullar, D. (2017). Primary care spending rate: A lever for encouraging investment in primary care. *New England Journal of Medicine*, 377(18), 1709–1711.
7. Squires, D., & Anderson, C. (2015). Issues in international health policy. U.S. healthcare from a global perspective: spending, use of services, prices, and health in 13 countries. The Commonwealth Fund. http://www.commonwealthfund.org/~/media/files/publications/issue-brief/2015/oct/1819_squires_us_hlt_care_global_perspective_oecd_intl_brief_v3.pdf. Accessed October 2017.

8. Osborn, R., Squirew, D., Doty, M.M., Sarnak, D.O., & Schneider, E.C. (2016). In new survey of eleven countries, US adults still struggle with access to and affordability of healthcare. *Health Affairs*, 35(12), 2327–2336.
9. Sasson, Comilla, Wiler, J.L., Haukoos, J.S., Sklar, D., Kellermann, A.L., Beck, D., Urbina, C., Heilpern, K., & Magid, D.J. (2012). The changing landscape of America's health care system and the value of emergency medicine. *Academic Emergency Medicine*, 19(10), 1204.
10. OECD. Health at a glance. How does the United States compare? https://www.oecd.org/unitedstates/Health-at-a-Glance-2015-Key-Findings-UNITED-STATES.pdf. Accessed April 2017.
11. Commonwealth Fund (2014). US health system ranks last among eleven countries on measures of access, equity, quality, efficiency, and healthy lives. http://www.commonwealthfund.org/publications/press-releases/2014/jun/us-health-system-ranks-last. Accessed April 2017.
12. Commonwealth Fund (2014). Mirror mirror on the wall, 2014 update: How the U.S. health care system compares internationally. http://www.commonwealthfund.org/publications/fund-reports/2014/jun/mirror-mirror. Accessed May 2017.
13. Institute of Medicine (2008). *Retooling for an aging America: building the health care workforce*. National Academies Press.
14. Olivero, M. (2015). Doctor shortage: Who will take care of the elderly? *U.S. News*. http://health.usnews.com/health-news/patient-advice/articles/2015/04/21/doctor-shortage-who-will-take-care-of-the-elderly. Accessed April 2017.
15. World Health Organization. Health workforce for aging population. http://www.who.int/ageing/publications/health-workforce-ageing-populations.pdf?ua=1. Accessed April 2017.
16. Sorbero, M.E., (2012). Addressing the geriatrician shortage may help reduce costs without compromising quality. Rand Corporation. http://www.rand.org/blog/2012/08/addressing-the-geriatrician-shortage-may-help-reduce.html. Accessed April 2017.
17. Ibid.
18. US Department of Health and Human Services. (2014). Multiple chronic conditions—A strategic framework: Optimum health and quality of life for individuals with multiple chronic conditions. https://www.hhs.gov/sites/default/files/ash/initiatives/mcc/mcc_framework.pdf. Accessed June 2017.

19. The Lewin Group (2010). Individuals living in the community with chronic conditions and functional limitations: A closer look. Office of the Assistant Secretary for Planning & Evaluation. United States Department of Health and Human Services.
20. U.S. Department of Health and Human Services. About the multiple chronic conditions initiative. https://www.hhs.gov/ash/about-ash/multiple-chronic-conditions/about-mcc/. Accessed January 2017.
21. Ibid.
22. Chen, C.Y., Thorsteinsdottir, B., Cha, S.S., Hanson, G.J., Peterson, S.M., Rahman, P.A., Naessens, J.M., & Takahashi, P.Y. (2015). Health care outcomes and advance care planning in older adults who receive home-based palliative care: A pilot cohort study. *Journal of Palliative Medicine*, 18(1), 38–43.
23. UN.org. World Population Aging 1950–2050. Chapter IV. http://www.un.org/esa/population/publications/worldageing19502050/. Accessed June 2017.
24. National Institute on Aging. Why population aging matters: A global prospective. Trend 3: Rising numbers of the oldest old. https://www.nia.nih.gov/publication/why-population-aging-matters-global-perspective/trend-3-rising-numbers-oldest-old. Accessed June 2017.
25. World Health Organization (2014). "Aging well" must be global priority. http://www.who.int/mediacentre/news/releases/2014/lancet-ageing-series/en/. Accessed February 2017.
26. Chan, A. (2011). 75% of people with dementia may be undiagnosed: Report. *Huffington Post*. http://www.huffingtonpost.com/2011/09/14/dementia-undiagnosed-world_n_960210.html. Accessed April 2017.
27. Dementia statistics. Numbers of people with dementia. Alzheimer's Disease International. https://www.alz.co.uk/research/statistics. Accessed April 2017.
28. Ibid.
29. Ibid.
30. Alzheimer's Association, (2016). 2016 Alzheimer's disease facts and figures. Pg. 17.
31. Ibid.
32. Benjamin, R.M. (2010). Multiple chronic conditions: A public health challenge. *Public Health Report*, 125(5), 626–627.
33. Centers for Medicare and Medicaid Services (2016). CMS quality strategy 2016. https://www.cms.gov/medicare/quality-initiatives-

patient-assessment-instruments/qualityinitiativesgeninfo/downloads/cms-quality-strategy.pdf. Accessed March 2017.
34. Benjamin, R.M. (2010). Multiple chronic conditions: A public health challenge. *Public Health Report*, 125(5), 626–627.
35. Gerteis, J., Izrael, D., Deitz, D., LeRoy, L., Ricciardi, R., Miller, T. & Basu, J. (2014). Multiple chronic conditions chart book. Agency for Healthcare Research and Quality, Publications No, Q14-0038. https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/prevention-chronic-care/decision/mcc/mccchartbook.pdf. Accessed March 2017.
36. Centers for Medicare & Medicaid Services, (2012). Chronic conditions among Medicare beneficiaries, chart book 2012. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/2012ChartBook.html. Accessed March 2017.
37. The American Geriatrics Society Expert Panel on Person-Centered Care (2015). Person-centered care: A definition and Essential Elements. *Journal of the American Geriatrics Society*. https://doi.org/10.1111/jgs.13866. Accessed November 2016.
38. Institute of Medicine (2001). Crossing the quality chasm: A new health system for the 21st century. http://nationalacademies.org/hmd/~/media/Files/Reportpercent20Files/2001/Crossing-the-Quality-Chasm/Qualitypercent20Chasmpercent202001percent20percent20reportpercent20brief.pdf. Accessed December 2016.
39. World Health Organization (2013). Towards people-centered health systems: An innovative approach for better health outcomes. http://www.euro.who.int/__data/assets/pdf_file/0006/186756/Towards-people-centred-health-systems-an-innovative-approach-for-better-health-outcomes.pdf. Accessed December 2016.
40. Colligan, E.M., Ewald, E., Ruiz, S., Spafford, M., Cross-Barnet, C. & Parashuram, S. (2017). Innovative oncology care models improve end-of-life quality, reduce utilization and spending. *Health Affairs*, (36)3, 400–440.
41. Committee on Approaching Death: Addressing Key End of Life Issues; Institute of Medicine (2015). Dying in America: Improving quality and honoring individual preferences near the end of life. National Academies Press. Chapter 2.
42. Tabbush, V., Coulourides Krogan, A., Mosqueda, L. & Kominski, G. (2016). Person-centered care: The business Case. Scan Foundation.
43. Stewart, M., Ryan, B.L & Bodea, C. (2011). Is patient-centered care associated with lower diagnostic costs? *Healthcare Policy*, 6(4), 27–31.

44. Terhune, C. (2017). Putting a lid on waste: Needless medical tests not only cost $200B—they can do harm. California Healthline. http://californiahealthline.org/news/putting-a-lid-on-waste-needless-medical-tests-not-only-cost-200b-they-can-do-harm/?utm_campaign=KHN%3A%20First%20Edition&utm_source=hs_email&utm_medium=email&utm_content=52143508&_hsenc=p2ANqtz-9fHx6id5bgg12UIoaK7uuug_Vr1QdNRtusHwQDkvEPpDUrna38J6bDCWNlgdfOn_qmBpusggBz-4wNfhhQRYPbYQbflxA&_hsmi=52143508. Accessed May 2017.
45. Gerhardt, W., Korends, L., Mitchell, M. & Vadnerkar, G. (2015). The road to value-based care. Your mileage may vary. https://dupress.deloitte.com/content/dam/dup-us-en/articles/value-based-care-market-shift/DUP-1063_Value-based-care_vFINAL_5.11.15.pdf. Accessed March 2017.
46. McDonald, P.A., Mecklenburg, R. & Martin, L.A. (201). The employer-led healthcare revolution. *Harvard Business Review*. https://hbr.org/2015/07/the-employer-led-health-care-revolution. Accessed March 2017.
47. Slotkin, J.R., Ross, O.A., Coleman, M.R., & Ryu, J. (2017). Why GE, Boeing, Lowe's, and Walmart are directly buying health care for employees. *Harvard Business Review*. https://hbr.org/2017/06/why-ge-boeing-lowes-and-walmart-are-directly-buying-health-care-for-employees. Accessed June 2017.
48. https://www.advisory.com/daily-briefing/2016/12/21/cms-launches-two-new-mandatory-bundled-payment-models. Accessed March 2017.