AGING SERVICES

2030 Scenarios

LeadingAge®

Institute for Alternative Futures

The Institute for Alternative Futures with LeadingAge offers a way for the aging services community to explore questions about the future of aging services to better inform future-oriented, long-term strategies and efforts.

MARCH 2018

The rapid changes taking place in our field and uncertainties about public policy have led many LeadingAge members to wonder about the future — the threats, opportunities and realities. In response — and in keeping with our mission as the trusted voice for aging — LeadingAge seized the opportunity to take some positive steps to think into the future — a future that extends well beyond the end of the fiscal year.

Knowing that it is not possible to predict the future, we chose to employ the approach of scenario planning — possible and plausible narratives about how the future might unfold. They are not predictions. The scenarios are four different narratives, based on a reasoned analysis of the forces that impact aging services. Each scenario assumes a different lens and therefore, tells a different story about our world between now and the year 2030.

The 2030 Aging Services Scenarios represent an authentic collaboration of over a hundred members, LeadingAge staff, state partner executives and the LeadingAge Board, who provided thoughtful input and guidance. Institute for Alternative Futures skillfully guided the process.

My hope is that you will use this report and the scenarios to imagine the future and its potential impact on your organization. Consider the scenarios in the context of your strategic planning. Engage your board and staff. Take a break from your immediate challenges. Challenge your assumptions. Extend your time horizon. Long range thinking is not only possible and valuable, it is necessary.

I welcome your feedback, both on the report itself and on how you have used it. I look forward to hearing from you.

Katie Smith Sloan
President & CEO
LeadingAge

AGING SERVICES

2030 Scenarios

Table of Contents

Introduction

What will aging services be like in 2030? How will changes in demographics, economics, technology and cultural values influence the supply and demand for products and services sought by an aging society? And what implications do these changes have for the visions and plans leaders in aging services have today?

The 2030 Aging Services Scenarios offer a way for the aging services community to explore these questions to better inform future-oriented, long-term strategies and efforts. For this purpose, these scenarios consider a range of forces, challenges, and opportunities shaping human services and offer a plausible set of expectable, challenging, and visionary pathways for how aging services may change over the years to 2030.

WHY SCENARIOS?

The future is uncertain. However, scenarios—different stories with forecasts describing how the future may unfold—can be used to bound that uncertainty into a limited number of paths. These paths help us think about different probabilities in a larger space of possibilities. IAF scenarios also encourage leaders to distinguish preferred from probable changes, which is important when creating strategy. Scenarios also force us to consider the systems surrounding our field of interest and to clarify our assumptions about what will change and what will stay the same. People who work with scenarios find more creative options than those who plan based only on the past and present. Strategies, plans, and actions can also be "future tested" against the different scenarios to assure robust initiatives rather than continued efforts based on outdated assumptions that ignore the fact that changes are coming. Scenarios are thus a powerful method for systematically addressing the uncertain future.

METHODOLOGY

IAF partnered with LeadingAge to develop the scenarios using the "Aspirational Futures" approach (see Figure 1 below) which IAF has evolved over the last 3 decades. This technique develops forecasts and scenarios in 3 zones:

• A "zone of conventional expectations" reflecting the extrapolation of known trends into the expectable future which seems most likely (scenario 1);

• A "zone of growing desperation" which presents a set of plausible challenges that an organization or field may face, a challenging future (scenario 2); and

• A "zone of high aspiration" in which a critical mass of stakeholders pursues visionary strategies and achieves surprising success (scenarios 3 and 4).
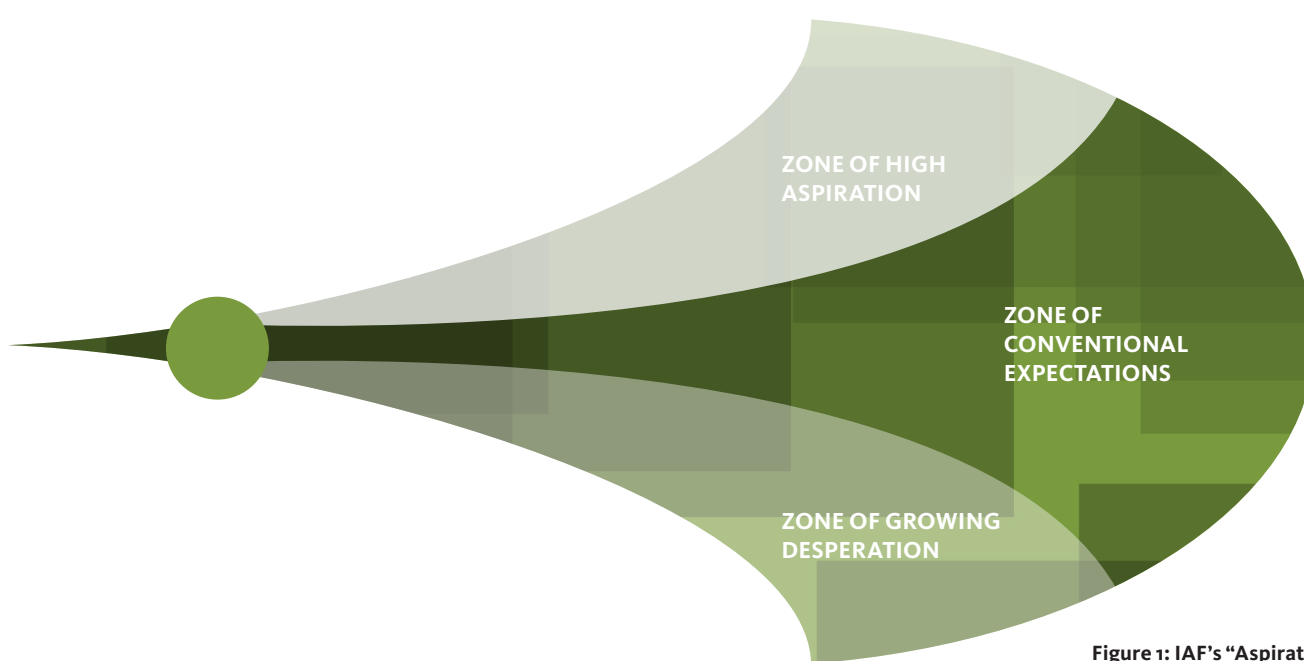

ZONE OF HIGH ASPIRATION

ZONE OF CONVENTIONAL EXPECTATIONS

ZONE OF GROWING DESPERATION

Figure 1: IAF's "Aspirational Futures" Technique

The Aging Services 2030 scenarios presented on the following pages were developed based on a review of national trends and interviews with aging services providers and state partners. On September 28, 2017, LeadingAge hosted IAF at its office in Washington, DC, where 17 leaders from the organization reviewed and enhanced preliminary forecasts. After incorporating their enrichments, IAF presented revised forecasts to participants at a session on October 30, 2017, at the LeadingAge Annual Meeting in New Orleans. More than 70 participants provided feedback and developed implications for forecasts for the following topics: overall economic and social conditions, demographics, housing and aging services, technology, financing and aging services workforce.

IAF worked with LeadingAge to build upon these insights, which created the scenarios presented on the following pages. The first scenario is "expectable" or "most likely" given current trends. The second is challenging and considers some key things that "could go wrong" (including another great recession, helplessness, funding cuts). The third and fourth are visionary, which explore social mindfulness and technology as pathways for more equitable aging services.
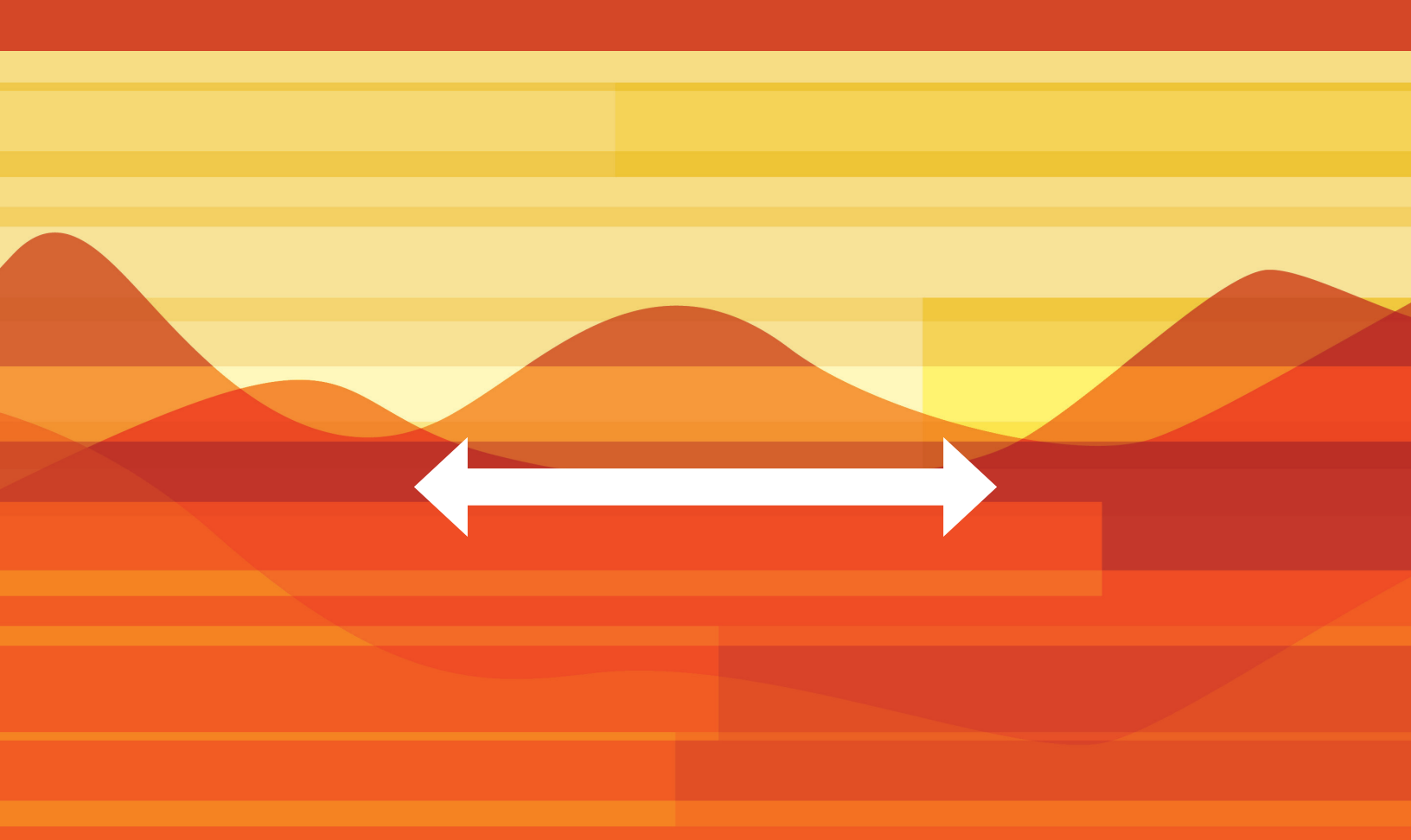
Scenario 1

Bills Come Due
Aging and Unprepared

The demographic reality that washed over U.S. society in the 2020s had been visible for decades, but when the reality of an aging population hit home in the later 2020s it was still a crisis. Headlines screamed:

"Wave of retirees cannot afford to retire"

"Too unhealthy to work and struggling to live on Social Security"

"Rents skyrocket with no affordable housing"

"President promises no more payroll tax increases for Medicare!"

Worries amplified further when the CDC announced its forecast for a dramatic increase in Alzheimer's deaths after 2030.

Each of these crises placed older people at the center of people's fears. Each crisis was foreseen well in advance by many books, studies and Congressional hearings, but the steps to forestall the problems were not fully taken while the number of those over 65 nearly doubled to 73 million, 20 million of whom had functional loss by 2030.

This increase of older adults brought both new opportunities and challenges for aging services providers, which some navigated successfully. Those who held fast to the business models and practices effective in previous generations got swept away by the new demands of the aging baby boomers. Only new business models and technologies designed for the reality of the economically polarized cohort helped providers survive and thrive during the turbulent 2020s. Some providers focused primarily on the wealthier of the older boomers, who were first to retire with relatively generous benefits and adequate savings. Others focused more on the low-income older adults with poorer health whose basic needs for nutrition, shelter and medical care could only be met by philanthropy or public assistance. A few of the most successful providers grew with the expanded number of older persons by seizing opportunities to serve both higher- and lower-wealth older adults, albeit in different ways. However, navigating the choppy waters of public policy shifts in Medicaid while keeping an eye on competitors was hazardous when serving the large number of frail older adults with little income beyond their Social Security payments.

The most successful business model for aging services, which provide great, cost-effective aging-in-place services to those better off and provide nursing care for those covered by Medicaid, proved to be workable for both people who could afford to age in place with help and those who need nursing home care. This model helped many aging services providers convert the new reality of the demographics into growth opportunities.

Those who held fast to the business models and practices effective in previous generations got swept away by the new demands of the aging baby boomers. Only new business models and technologies designed for the reality of the economically polarized cohort helped providers survive and thrive during the turbulent 2020s.

In the years before 2020 and the early 2020s, federal deficits seemed less important to aging services providers than the demographic bulge which had only begun to swell. In the early 2020s the wealth of some boomers combined with technology

> Majority of people unable to afford retirement, esp. rising Medicare & housing costs

> Rising deficits drive cuts in benefits

> Gap grows between people with homes / services versus those without access

> Major technology sector players provide aging services

innovations to enable fast growth for new services. This meant the newly retired could live in their homes longer and better than previous generations, assisted by health data monitors, home visits and even some of the early robots. With over $100 trillion of household wealth in the country and the lion's share of disposable income held by those over 65, the aging services field was poised for growth.

However, aging services providers devoted to the mission of caring for the entire socio-economic spectrum saw problems emerge early in the decade that they realized were just the tips of an iceberg that would prove difficult to navigate around. Federal deficits drove cuts in government spending, which meant reductions in affordable housing and increases in the cost of health insurance and medical care at a time when unemployment began rising for people whose jobs could be done by smart machines. Despite the growing loss of jobs in other sectors, it was harder to attract and retain a caregiving workforce after the immigration crackdown because for many, the financial rewards and social esteem of positions like caring for frail older adults were too small.

The less educated boomers who had little or no retirement savings were the most prone to diseases and disabilities, which made them less able to care for family members or to join the

workforce providing aging services. Older, white-collar workers who lost their jobs were attracted into the aging services field, but most sought administrative roles rather than caregiving.

Many of the boomers who needed publicly supported aging services suffered with high levels of obesity, diabetes, heart disease and cancers when they were in their 60s and early 70s. Those turning 65 who could not retire because they could not cover the growing costs of rent and medical care (the Medicare premiums, deductibles, co-pays or supplemental insurance) had to compete with the younger cohorts of unemployed looking for minimum-wage service jobs. For these unprepared boomers, inflation and technological displacement were the rock while cuts in entitlements were the hard place.

After the 2024 election, federal immigration policies eased so more foreign-born caregivers entered positions with aging services providers. However, there was high demand for the best of these caregivers which meant higher wages for the most qualified. While employers in other sectors could offer low pay, due to automation and the large number of unemployed people seeking work, aging services providers had to increase pay for qualified, effective direct care workers.

The growing divide between higher- and lower-income retirees created a gap between the interests of aging services providers focused on serving the different segments. Providers benefiting from the wealthier population of retirees focused on financing innovative technology-based options while those serving people with lesser means advocated policies opposed to government reimbursement cuts. By the mid-2020s the large federal deficit and persistent growth of health care costs put constant pressure on Medicaid and Medicare budgets. Both political parties promised to address these problems in the 2024 elections, and by 2028 a more pragmatic and less polarized Congress was ready to work with a President who promised "a fair shake" for younger voters.

While employers in other sectors could offer low pay, thanks to automation and the large number of unemployed people seeking work, aging services providers had to increase pay for qualified, effective direct care workers.

Both Medicare and Medicaid incentivized the move by providers to value-based services and lowered their payment levels, particularly to fee-for-service providers. This shift further fed the concentration of health care providers into more integrated systems which provide tiered services—platinum, gold, silver, bronze and nickel—that in some cases included aging services. Many large, for-profit aging services providers were acquired, along with a few nonprofits, by health care systems.

Nonprofit aging services providers could only help a portion of the boomers with little to no retirement savings, and most of these nonprofit providers needed to subsidize their services by offering the affluent impressive new services that enabled a better life at home. In the early 2020s a higher proportion of retirees had sufficient wealth to create an attractive market for aging-in-place services and products. Intelligent agents or artificial intelligence (AI) guided major parts of these products and services. Rapid diffusion of intelligent agents with human-like names, voices and social skills helped support services that assisted people

with disabilities when daily living became more difficult. These systems entertained their users while carefully monitoring them. These systems could predict when new needs would arise, which tied aging services into health care provider systems through home identification of medical problems enabling earlier intervention. This integration of home and institutional systems enabled aging services providers to continually offer new options suited to different lifestyles and living arrangements.

The early 2020s showed the great promise of the "Boomer Boom" to combine entertainment, education and services for a fast-growing number of people in their early retirement years. Google and Amazon were major providers of AI and other technologies increasingly used to enable aging in place. They and other larger players in the technology sector even began providing aging services and by the late 2020s there was speculation that Google and Amazon may be interested in acquiring home-based service providers.

QUESTIONS TO CONSIDER

> What are the biggest implications in the Bills Come Due scenario for:

  • the older adults you serve?

  • demand for aging services?

  • supply/provision of aging services?

> Which technologies in this scenario will have the largest impact for older adults in the 2020s?

> What are the biggest workforce changes for aging services in this scenario?

> What policy changes matter most in this scenario?

Troubled Times
Economic and Social Regression

There is not enough money. Not enough money for adequate housing. Not enough money for Medicare or Medicaid. And for people over 65 with less than $500,000 in retirement funds, certainly not enough money to feel secure. Everybody blames "The Decession of 2023" which earned its moniker by combining the rapid descent into recession experienced in 2008 with the long recovery after The Great Depression from 1929 to 1939. Americans lost on average 25% of their wealth five years after the crash began in 2023. The losses were much worse for those who panicked when the stock market lost 50% of its value in the early months of 2023. They sold and never recovered.

Fortunately for others in 2030, there are many signs that an anemic economic recovery has begun. Still, there's not enough capital for investment, savings to meet needs or jobs to secure income. In 2030, a large cohort of baby boomers have too little money to retire comfortably.

Older Americans suffering functional losses leading to disability are among those who are hit hardest. The number of people affected by diabetes, depression and substance abuse began to overwhelm support systems by the mid-2020s, especially in large swaths of the country where diseases of despair have ravaged communities. There are estimates that in 2030, 25 million Americans with disabilities live in states that can no longer afford their share of Medicaid disability payments.

As many people in these areas have lost their homes, the number of homeless has soared. Encampments can be found in public parks and along highway access roads in most American cities in 2030. Many of these people die at earlier ages than in previous decades when housing and aging services were more available. Estimates are that early mortality has reduced the projected number of older Americans by over 3 million, and projected life expectancy at age 65 has declined because so many people in this age group suffer from multiple chronic diseases exacerbated by homelessness.

However, while nationally and across many states the problems have grown more difficult for older people, many communities have organized themselves to provide care and services. Amid difficult times, many churches, volunteer organizations and philanthropies work with local elected officials to provide emergency shelter, expand the affordable housing stock, deliver meals to people in their homes and assure that there are supports put in place for older people. These communities assured that aging services providers were buffered when Medicaid funding was disrupted. People are lucky to live in those communities where local leaders filled the void left by the national and state political failures of the 2020s. In other cities and towns circumstances just kept getting worse through the decade.

As many people in these areas have lost their homes, the number of homeless has soared. Encampments can be found in public parks and along highway access roads in most American cities in 2030. Many of these people die at earlier ages than in previous decades when housing and aging services were more available.

The health problems of older Americans were exacerbated by the disintegration in the 2020s of health care reforms as ideological conflicts meant the only political compromises were over short-term fixes to each funding crisis. These fixes included legislation in 2025 that capped total Medicare expenditures, leading to cuts to providers and increases in the share of costs borne by Medicare recipients. Different populations fared differently, depending on their circumstances:

KEY SCENARIO 2 DISTINCTIONS

> "Decession" in 2023

> Overwhelmed support systems

> Social breakdown — families & communities are torn apart

> Yet, the affluent thrive

- For those who had Medicare supplemental insurance policies, the insurance premium costs increased while the benefits were limited year after year. The Centers for Medicaid and Medicare Services shifted most payments to a form of capitation that was labeled "value-based" but effectively meant less costly.

- Those who could afford the steep increase in annual fees to join Medicare Advantage Plans have received good care and access to effective technology advances.

- For those relying on regular Medicare, as many doctors and providers stopped taking Medicare, their options in many communities have typically been limited to minute clinics or community health centers (usually with long waiting lists).

- A shortage of primary care providers meant many either go without health care or rely on self-care.

While nationally and across many states the problems have grown more difficult for older people, many communities have organized themselves to provide care and services. Amid difficult times, many churches, volunteer organizations and philanthropies work with local elected officials to provide emergency shelter, expand the affordable housing stock, deliver meals to people in their homes and assure that there are supports put in place for older people.

There was a shortage of affordable housing throughout the 2020s. Even before the 2023 decession, public financing for low-income housing had been cut. Through the decade, this has meant more older Americans have doubled up with family and friends or even with strangers to avoid the higher rental costs. Most older Americans who own their homes have tried to age in place.

Those who can afford integrated services at-home have been more able to successfully age in place. Smart-home technology has become increasingly effective and lower in cost. These technology tools were common in most homes by 2025, including low income homes, much as smart phones were found in the majority of low income homes in the 2010s. The best, and most costly, of these systems include health functions and monitoring systems that record changes in social, physical and mental health, and create immediate alerts for individuals, families and service providers.

Artificial intelligence ties this monitoring data in with predictive analytics, which anticipates problems such as acute episodes from chronic disease, falls and new disabilities due to declines in function.

Some aging services providers led in developing and deploying these systems and technologies that allow people to age in place, even to the end of their lives. Though most of these systems are costly, some have trickled down. The technology sector continued to thrive by offering innovations that became more central to a quality of life in the 2020s, while also rewarding investors. For example, assistive devices can be affordably produced via 3D printing which have created an array of robotics, prosthetics and wearable exoskeletons that can be coordinated through home assistants such as Alexa, SIRI, Google and others. These are widely available in homes and larger care settings, and they improve social connection by making voice and video with family or friends part of everyday life for older Americans in 2030.

Many of these technologies, as they have become affordable, have also tended to isolate people socially, as they interact with their machines rather than their neighbors. As great as the

technologies are for aging Americans, they cannot replace family and friends for people whose communities have broken down. Wherever possible, aging services providers use technology to replace workers, which leads to more complaints that services for older Americans have become more dehumanized.

The clampdown on immigration in the late 2010s made it harder for aging services providers to hire and retain employees working at the bedside, even with the massive unemployment of the 2020s. In many care settings, even the best workers are stressed as the number of people living with disabilities overwhelms the ability to provide high-quality support with a human touch. It becomes more difficult each year for the population in greatest need to get their needs met, and streets in cities and towns show more evidence every year that American society is leaving more people to fend for themselves. There have been a growing number of people over 65 who struggle with homelessness and a lack of affordable services.

This social breakdown is the most distressing feature of life for over a third of the population 65 or older, according to surveys taken in 2030:

- Families have been torn apart by unemployment, substance abuse and learned helplessness—psychological resignation and loss of resilience—which makes both family caregiving and professional caregiving less reliable.

- Reports of elder abuse increased every year through the 2020s and only communities with strong local governments are addressing the problem effectively.

- The aging services workforce also has been hit hard by opioid abuse, with studies indicating that upwards of 25% of professional nurses are estimated to have unreported substance use issues.

In many care settings, even the best workers are stressed as the number of people living with disabilities overwhelms the ability to provide high-quality support with a human touch.

For aging services employers, the paradox is that despite a large unemployed population in the country, finding and retaining good direct caregivers has grown more difficult and expensive in the 2020s. Immigration restrictions reduced the number of foreign-born providers and many American born workers are only willing to take caregiving jobs if the wages are high.

Other key personnel, such as systems engineers who can protect the safety of data, are in high demand and thus difficult to hire and retain.

QUESTIONS TO CONSIDER

> What are the biggest implications in the Troubled Times scenario for:

- the older adults you serve?

- demand for aging services?

- supply/provision of aging services?

> Which technologies in this scenario will have the largest impact for older adults in the 2020s?

> What are the biggest workforce changes for aging services in this scenario?

> What policy changes matter most in this scenario?
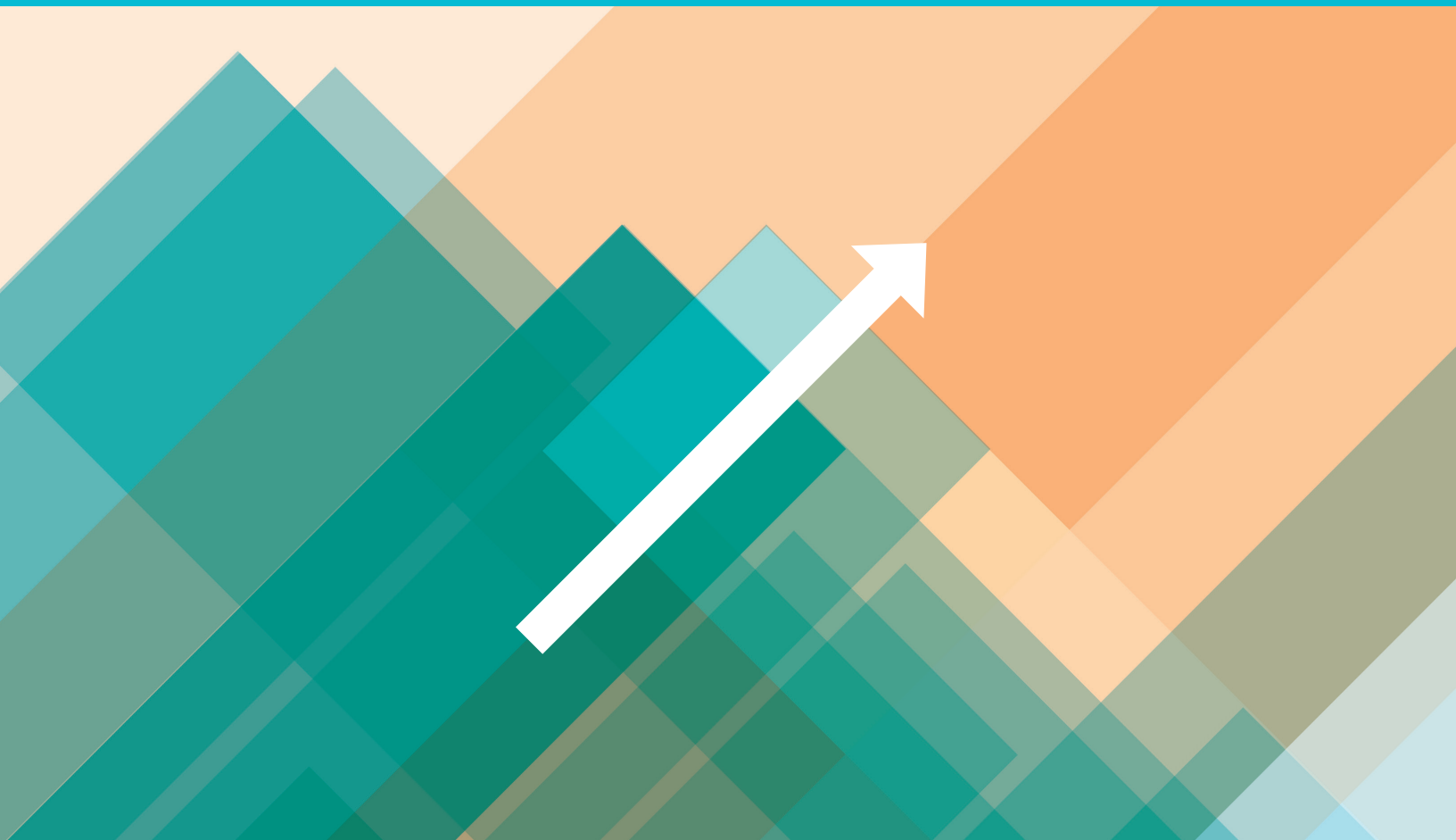
Scenario 3
A Bright Horizon
Mindful and Connected Aging

The "search for meaning and connectivity" amped up in the 2020s, particularly for aging boomers. Enhanced connectivity was supported by mindful social networks. Strikingly, it is the older people who form the hubs of many of these social networks, both virtual and face-to-face. These evolved from the "shallow social networks" of the 2010s and in response to harmful online impacts such as the spread of negative and hurtful beliefs.

In contrast, the mindful social systems that evolved in the 2020s offered hope and guidance to young people as well as renewed meaning for older people across the country and around the world. These networks foster deeper relationships and strengthen the social emotions of gratitude and compassion, leading to increased self-esteem along with an appreciation of others. While these very human emotions form the core of mindful social networks, they are supported by emotionally sensitive artificial intelligences. People using these "affective computer programs" which are part of home systems such as SIRI, Google and Alexa, learn about the emotional content of communications along with cognitive understanding.

In 2030, the proportion of the population that is over 65 has grown. While that brought some challenges, the benefits of having more older adults supporting families and children also strengthened communities in ways that previous generations never knew were possible. Does this mean all older Americans achieve prosperity and live happy lives? No, but this has greatly increased the proportion of older people remaining socially engaged and adds meaning to the lives of those across all ages.

By 2030, the number of older Americans with disabilities, particularly related to dementias, has doubled. Many are in far more supportive environments than in earlier decades. Connections to supportive people, neighborhood-based services and technologies makes 2030 the best year ever to be older and in need of help.

In the late 2010s the growing number of older Americans felt to many like a crisis. Health care costs rose dramatically to over 18% of GDP in 2018, more than 19% in 2019 and almost 21% in 2020. Most of the swelling cost came from increasing prices, and intensity of medical goods and services which providers substitute for cheaper but equally effective care. Prices had detached from value. Population health studies showed that while more was spent on medical care, the health of the nation was in decline.

Fortunately, there were a sufficient number of exceptions—communities that were thriving while spending half the national average on medical care—that served as bright spots showing the way. A system of outcome measures focused on well-being and combined with compelling narratives to show that efforts aimed at improved social health did more to prevent episodes of care for chronic diseases than medical spending. Big data also provided compelling evidence that older people play a vital role in improving social health. Thus, by the early 2020s what had looked like a crisis turned into an important opportunity to improve the health and well-being of the nation.

Connections to supportive people, neighborhood-based services and technologies makes 2030 the best year ever to be older and in need of help.

KEY SCENARIO 3 DISTINCTIONS

> Equity and inclusion via deep, diverse social networks improve social health and well-being

> Local leaders/networks cross sectors to improve health, housing, work

> Public policies and business models increase social impact

> Widespread access to low-cost, effective community-based care

The trend in the 2020s was for "ecological community designs" that recognized the vital role older adults play in helping children and young families. This was a countertrend to the previous segregation of older adults into separate communities, nursing homes and assisted living, which limited interaction with younger people.

Aging services providers in many communities also played leading roles in promoting low-income housing options and greater community integration. This aligned with the enhanced business model that leading aging services providers pursued in the 2020s: the "social ecology business design model." This model identifies environmental niches offering both high need and rapid business growth based on technological innovation. This model seeks both rapidly growing profit areas and gently declining markets that provide a balanced portfolio of innovative new revenue sources and sustainable financial returns for the long term. For example, as new robotic and emotionally intelligent AI appliances came to the market, many aging services providers integrated them into living units for people with disabilities, allowing them to live safely in modified homes.

The trend in the 2020s was for "ecological community designs" that recognized the vital role older adults play in helping children and young families. This was a countertrend to the previous segregation of older adults into separate communities, nursing homes and assisted living, which limited interaction with younger people.

With the economy flourishing and more people able to finance their care options in the later decades of life, the growth opportunities for aging services providers were in helping people age in place while having rich social lives that include service to others. Yet the new technology supports are balanced with a human care culture that pays attention to hands-on caregiving.

Economic growth continued through the 2020s, aided by both new business models and a political consensus that brought major policy agreements over raising taxes. This funding enabled major expansions of public support for vulnerable people. Those vulnerable to job loss from automation, for example, gained

Just as elders played a key role in social health, aging services providers provided vital leadership in the 2020s. The revitalization of communities came from local leaders across sectors—churches, businesses, nonprofits and governments—who brought solutions to the major challenges of our time: health, housing and meaningful work.

Aging services providers were in a unique position to create and capitalize on boards drawing from all sectors, which helped integrate the strengths of each sector. In most communities, all sectors joined in addressing the core issues that defied national solution. For example, building healthy housing units for multi-generational living proved local innovation could make major inroads on a national problem. New materials and 3-D printers made the rapid proliferation of affordable housing (public housing units, voucher housing, and auxiliary dwelling units (ADUs) feasible in both urban and rural areas. Creative financing solutions such as social impact bonds enabled multi-sector investments in affordable housing supported by zoning law changes to encourage economically and socially diverse neighborhoods in which older and younger people played mutually supportive roles.

support with the Guaranteed Basic Income (GBI) Act of 2025. This provided a low but stable income to all citizens over the age of 18 not on Social Security (though it "topped up" those Social Security recipients receiving less than the GBI annual payment to this amount).

That same year, Medicare Part E was passed to add public funding for low-cost, effective long-term care so those 65 and older, who lack the funds or private long-term care insurance, will be supported when they face limitations in carrying out activities of daily living. Medicaid LTC funding was shifted to Part E. In-home care was encouraged to reduce institutional-based medical services. The economics for aging services providers, who could provide low-cost, effective home-based and institutional care, improved significantly by 2030.

The workforce for aging services providers also offers more in terms of diversity of skills, quality of caregiving and levels of education. Direct caregivers' pay increased and they were supported by a range of technologies during the 2020s. These jobs were upgraded as they became more technical and more caring. The outcomes measuring systems and their "big data" and predictive analytics can measure the degree to which care givers deploy "loving hands and a healing touch." These systems can aid direct care workers to improve their capacities and identify those workers not capable of providing this evolving standard of care.

By 2030 aging services is a high-status area of employment that is attractive to old and young alike. The sector's growth is fed by societal support for the search for meaning and connectivity. The support enables the pay increases and upgrading of direct care workers' jobs, the ability to match workers with positions where they could be successful, the movement of a greater portion of aging services into people's homes, and the shift of some aging services tasks to virtual providers.

QUESTIONS TO CONSIDER

> What are the biggest implications in A Bright Horizon scenario for:

- the older adults you serve?

- demand for aging services?

- supply/provision of aging services?

> Which technologies in this scenario will have the largest impact for older adults in the 2020s?

> What are the biggest workforce changes for aging services in this scenario?

> What policy changes matter most in this scenario?
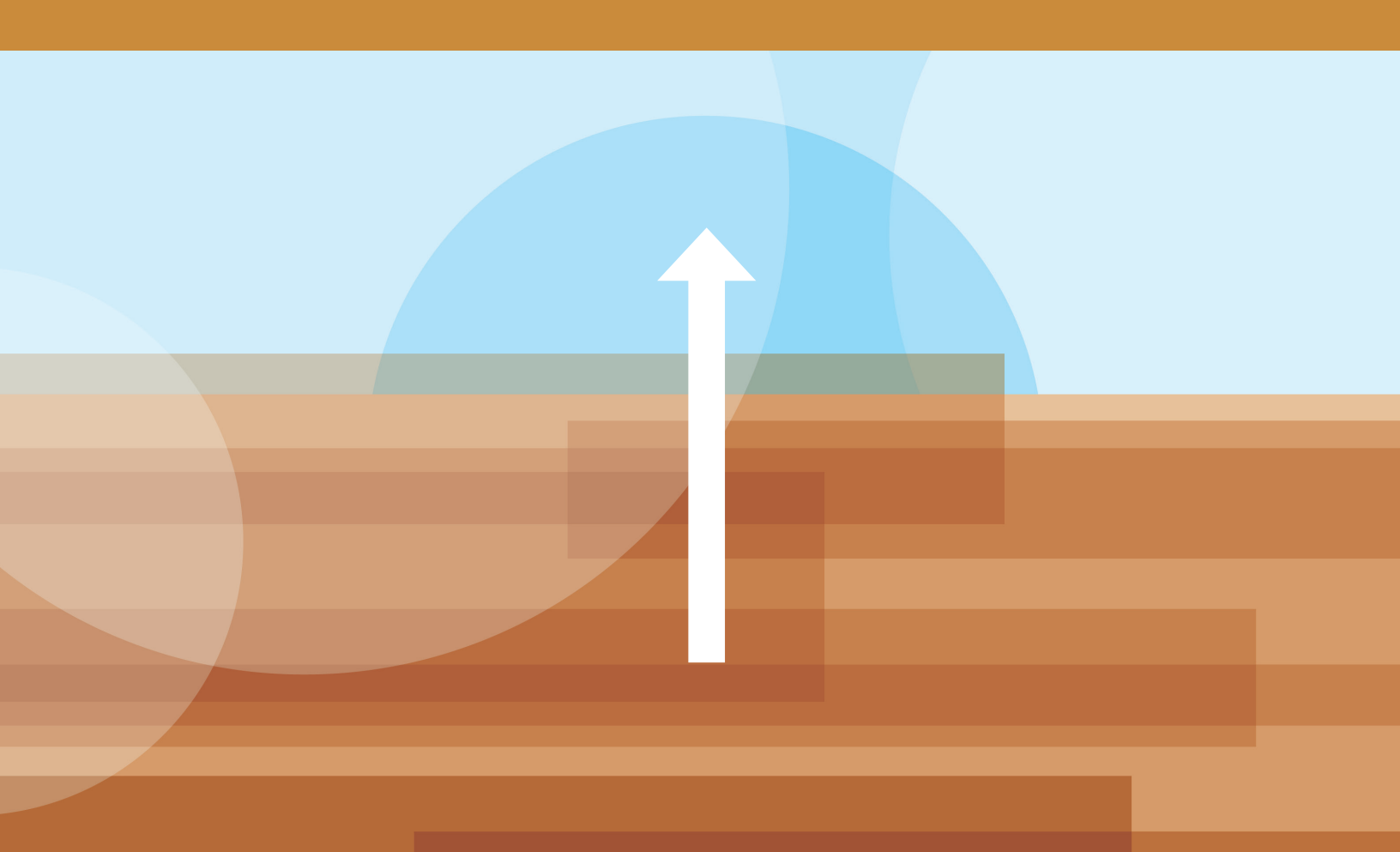
Scenario 4

A Thriving System
Technology Abounds

Transformations came across the board for the aging population in the 2020s. In technology, housing, employment, immigration, community development and income supports, these changes reshaped how older adults lived, aged and died. By 2030 smart technology integrated artificial intelligence (AI), virtual reality and social networks to create highly supportive environments that make homes especially healthy for older people in their final years of life. These years are extended because people experience higher personal meaning as they make greater contributions to the lives of younger people, and this enhances their health. For many older Americans, chronic conditions and disabilities are eased and supported through healthy aging in their smart homes.

Housing options, including those for people with low incomes, expanded in urban, suburban and rural settings, with varying levels of services, costs and size of dwellings available across the nation. The most striking trend among Americans over 65 has been the growing number who choose their housing based on the social health benefits provided. For some this has meant living in vibrant urban centers where high-rise buildings connect to public parks, urban farms and trendy restaurants. For others, it's a new array of detachable houses with auxiliary dwelling units (ADUs) in suburbs near golf courses. Many older adults also moved to rural areas where they can stay connected to family and friends virtually. In all these settings, there were more options when new materials emerged from the rapid adoption of technology in new socially designed living environments.

This trend started in the late 2010s when leaders began to aggressively integrate findings from neuroscience, population health management and social sciences into new community development efforts. These leaders include some in the aging services field who became remarkably adept at forming communities in ways that attract people and keep them positively engaged with others. Working with key multi-sector groups, aging services providers became important partners in bringing health equity and prosperity to community development. They demonstrated the vital role older adults have in improving community social health.

By using well-being metrics, the community development movement has shown that better social health translates into secondary benefits, including: economic prosperity, lower health care expenditures, reduced employee absenteeism, improved school performance and less crime. Positive demonstrations, attracting people of all ages, sprang up across the country in support of new and progressive community development efforts. News media began reporting on a large number of local efforts that provided evidence for these gains in well-being. This attracted more older adults to aging services providers who participated in these demonstrations, which brought new investors. All of this fueled a remarkable growth in aging services during the 2020s, ushering in new lifestyle opportunities for an aging population.

Technology in homes helped:

- "Smart home" technology for home security

- Biomonitoring/health monitoring

- Secretary and butler functions

- Technologies that foster personal growth and socializing, or provide informal advice or act as a virtual counselor

- Technologies that support financial management and in-home food and energy production

Many vendors, including Google, Apple and Amazon, provide these services and products. Aging services providers often integrate these tools or provide quality assurance, usually in ways that foster community development and the person's contributions to others. These systems were a critical part of in-home care as it developed through the 2020s.

By using well-being metrics, the community development movement has shown that better social health translates into secondary benefits, including: economic prosperity, lower health care expenditures, reduced employee absenteeism, improved school performance and less crime.

Part of this shift toward social health in housing began in the late 2010s when highly successful retirees moved from the suburbs into cities where intergenerational urban life offered a greater variety of social benefits as well as services. By 2020, the more entrepreneurial aging services providers were buying and converting high-rise buildings into highly desirable "vertical communities." Many of these buildings offered intergenerational community life based on values that attracted a growing number of millennials and families attracted to a way of life promising "a better 21st century." This meant a commitment to sustainability, social justice and ecological responsibility.

By 2024, over 200 large high-rises were built or converted in cities across the country using the vertical village model. This way of life included social integration of lower, middle and upper income families with social designs—building and community designs which contribute to social well-being—

for community formation as central elements shaping the architecture. In common areas, children played under the watchful eyes of older adults. Family differences in incomes were irrelevant.

To integrate the different social and economic strata, many aging services providers adopted the "social ecology business model" used for vertical villages, incorporating wealthy investors and buyers into a blend of private and public funds supporting all social classes. The penthouse level of a vertical village might be beautifully spacious, while a 400-foot cottage unit on lower levels would be beautifully functional. Residents of both would interact socially in common areas and have stakes in the sustainability of the whole community. These new vertical village high rises make both economic and ecological sustainability part of life for old and young. The millennial cohort that moved into cities in droves during the 2020s championed both live-work spaces and the vertical farms which became part of the business model pioneered by leading aging services providers for their intergenerational properties. In many buildings, there are floors where business incubators work next to small 3-D printing operations that assemble products made available throughout the building (or exported to other buildings which want to buy local).

Even more people work on the wide variety of artificial intelligences that support daily life in 2030 and are embedded in consumer products. Most vertical (and more conventional horizontal) villages have many gig workers contracted by
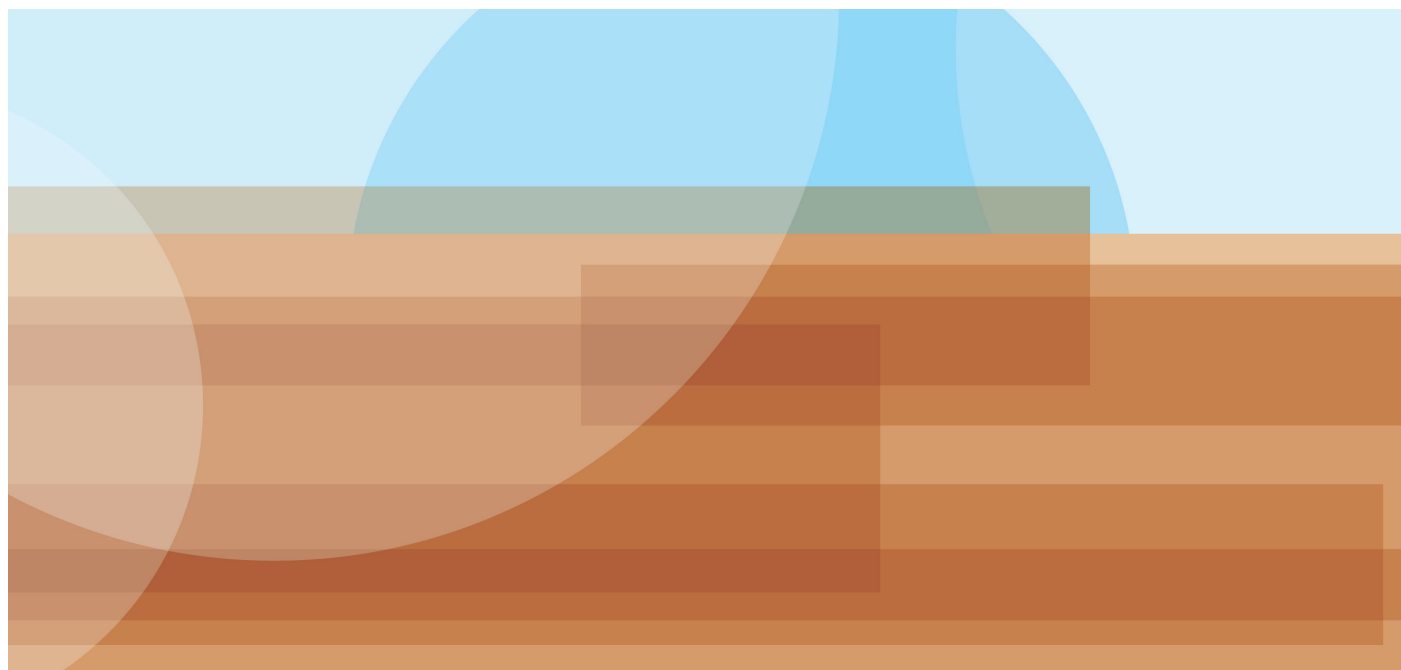
companies including Google, Amazon, Apple, Facebook or SalesForce; and many of them work with older people in the village to develop products for the aging market. The formal economy in these villages sometimes employs older people, but the informal economy commonly supported by time banking (formally structured bartering of time) has far higher participation rates for older adults.

Many high-rise buildings also produce food, which enables older people help produce what many in the village consume while contributing to sustainable agriculture. Whether producing leafy vegetables, GMO exotics or cultured meat, many vertical villages take great pride in the food they offer. Children often learn about urban farming in their day care classes, which typically engage older people as well as honorary grandparents (non-biological grandparents who are matched with children). These social and technological transformations spread to rural and suburban areas, taking modified forms.

For many aging services providers, innovative offerings help to address the social, medical, physical and spiritual dimensions of health. Research has shown that these integrated services improve well-being scores while lowering medical costs so most that aging services providers receive bonus payments from supplemental insurance plans for Medicare beneficiaries and from Medicaid for dual eligible enrollees. The providers offer a host of services ranging from wellness to hospice. And these providers typically contract with integrated health care systems for the episodes of care that demand intensive medical treatments.

Because diagnostics, home monitoring, sensors and predictive analytics became so widespread and effective, the intensity of care has diminished for most individuals, including those 85 and older. Hands-on care still matters, but is limited to where it best helps people feel connected. While the number of people diagnosed with dementia and living with disabilities grew through the 2020s, so too did the ability to design environments that supported people by extending abilities with technological supports. Medicare and Medicaid payment for innovative population health products and services are assessed using outcomes research supported by networks of researchers using AI—producing predictive analytics alongside retrospective studies. The outcomes research shows conclusively that improvements in well-being associated with social health correlate strongly with reduced medical spending.

For many aging services providers, innovative offerings help to address the social, medical, physical and spiritual dimensions of health. Research has shown that these integrated services improve well-being scores while lowering medical costs so most that aging services providers receive bonus payments from supplemental insurance plans for Medicare beneficiaries and from Medicaid for dual eligible enrollees.

With 73 million baby boomers over the age of 65 in 2030, there are a large number of older people living in a wide range of settings: homes they own, apartments, assisted living, villages or campuses—even some nursing homes. Whatever the setting, improvements in technology and the aging service workforce make home life better for older Americans. AI interfaces help coordinate family and friend connections ("Alexa, connect me to my grandson!"). Robotic helpers improve mobility around the house and neighborhood, while self-driving cars became widespread in the 2020s. Almost all clothing contains monitors and most homes have protective kits that assure against falls, much as airbags had for cars. Alongside the many technology supports, an aging services workforce emerged over the decade that offers knowledgeable care for older adults with an improved human touch. This emergence came about through a remarkable set of policy shifts and knowledge gains in the 2020s.

One dramatic policy shift was the passage of the Guaranteed Basic Income (GBI) in 2025, which provided a low but stable income to all citizens over the age of 18 not on Social Security (though it "topped up" those Social Security recipients receiving less than the GBI annual payment to this amount). The GBI was made possible when productivity gains, massive job losses to automation, and a positive economy for business expansion created public demand. That same year Congress passed Part E of Medicare to add public support for those over 65 who needed help paying for long-term services and supports. In the years prior to this landmark legislation, the government also reformed immigration policy. This made it far easier for the aging services

field to employ direct care workers from cultures that revere older adults. While most such caregivers were paid poorly in previous decades, outcomes research showed how valuable caring touch and soothing words are for older adults, and the case for improved wages became compelling. Medicare and Medicaid payment levels were raised to support this higher pay.

For aging services providers, the policy changes encouraged financially conscious long-term care services exquisitely sensitive to both outcomes and finances. Direct care workers received higher wages for better care while smart technology supports optimal outcomes at lowest cost. In 2030, it is clear that aging services is part of a transformation from services that perpetuated social and educational inequities to a more sustainable and humane form of wealth creation that supports all generations.

By 2030, the financial, policy, business and technology circumstances have made the aging services field a vibrant sector that offers older Americans more options than ever before. As a result, people view aging as more of a gift than a period of decline. In communities across the country, younger people express appreciation for the contributions of older adults and this gives greater meaning to a time of life more people look forward to achieving.

QUESTIONS TO CONSIDER

> What are the biggest implications in A Thriving System scenario for:

- the older adults you serve?

- demand for aging services?

- supply/provision of aging services?

> Which technologies in this scenario will have the largest impact for older adults in the 2020s?

> What are the biggest workforce changes for aging services in this scenario?

> What policy changes matter most in this scenario?

2030 Aging Services Matrix

Aging Services 2030 Scenarios

Scenario / Element	SCENARIO 1 Bills Come Due — Aging and Unprepared	SCENARIO 2 Troubled Times — Economic and Social Regression	SCENARIO 3 A Bright Horizon — Mindful and Connected Aging	SCENARIO 4 A Thriving System — Technology Abounds
Economic Growth	Slow growth, mild recessions	"Decession" of 2023; slow recovery	Steady growth of GDP	Steady Growth of GDP
Job Loss to Automation	High	High job loss to both automation and economic decline	Loss of manufacturing, clerical and driving jobs; gain in high-touch services and creative jobs in gig economy	High growth in AI-based innovations and services helps compensate for losses in other sectors
Social Conditions	Increasing inequality; periodic unrest	Breakdowns in many communities; some bright spots	Social health improved by compassion, generosity and shared pride in community gains.	Mind change that supports equity and inclusion; focus on social and community integration
Aging Conditions				
Aging Demographics 65+ 40.3 million (2010) 85+ 5.5 million (2010)	65+ 73 million 85+ 9 million	65+ 70 million 85+ 8 million	65+ 75 million 85+ 10 million	65+ 75 million 85+ 10 million
Functional loss 65+ 27.2% of 65+ (2010) 11 million (2010)	26.5% 20 million	29% 20.3 million	25% 17.5 million	25% 17.5 million
Alzheimer's 11% of 65+ (2016) 5.4 million 65+	11% 8 million	11% 7.7 million	10% 7.5 million	10% 7.5 million
Diabetes 12.3 million 65+, diagnosed and undiagnosed	18.3 million	20 million, many undiagnosed and untreated	17 million, almost all diagnosed and treated	Same as 3
Healthy eating; healthy living; wellness; prevention	Grows slightly among 65+	Declines with rise in poverty, stress, environmental challenges, isolation	Increases due to social reinforcement and slows onset and progression of some chronic diseases, incl. diabetes	Increases enough to slow onset and progression of some chronic diseases, incl. diabetes

Scenario / Element	SCENARIO 1 Bills Come Due — Aging and Unprepared	SCENARIO 2 Troubled Times — Economic and Social Regression	SCENARIO 3 A Bright Horizon — Mindful and Connected Aging	SCENARIO 4 A Thriving System — Technology Abounds
Housing				
Home security; biomonitoring /health monitoring; secretary; friend; counselor; supporting in-home food & energy production	Homes of most affluent and middle income 65+ have health, security, friendship & socializing, assistant functions	Same as 1	Homes of affluent, middle and low income 65+ have health, security, friendship & socializing, assistant functions as well as support for home food & energy production	Same as 3
Security breaches & malfunctions	Security breaches & malfunctions periodically	Security breaches, identity & money theft, and malfunctions common	High reliability, few security breaches & malfunctions	Same as 3
Vendors of smart home technology and systems	Many smart home vendors; including Google & Amazon	Same as 1	Same as 1 plus greater cross-sector entrepreneurs	Same as 1 plus community-based innovations
Aging services provider uses of smart homes	Some systems integrated by aging services providers supporting in-home care	Integrated systems offered to wealthy clientele; piecemeal tech used to make care more affordable	Fully integrated systems help build social connections and monitor medical health so people live in homes for all their lives	Same as 3
Villages & Naturally Occurring Retirement Communities (NORCs)	Grow in number, location, older residents Both physical and virtual villages	Increasing in number and functions; but many 65+ with low income lose their homes or rental units	Grow dramatically in number and location, both in communities and virtually Most large apt. buildings and public housing, voucher housing and ADUs are "village enabled"	Grow dramatically in number and location, both in communities and virtually Most large apt. buildings and public housing, voucher housing and ADUs are "village enabled"
Low income housing > **Sect. 8** > **Public housing** > **Development inclusions of low income** > **Allowing greater density** > **Accessory dwelling units**	Decrease in federal spending for housing, then rebound in 2020s; but demand grows faster Rent and other housing costs increase faster than Social Security; low income 65+ lose homes and apartments Many communities increase density, promote ADUs, with mixed success	Federal spending cuts late 2010s, then further cuts in 2020s Job loss, recession, rent inflation lead to housing insecurity Density encouraged and done illegally, with pushback in many communities	Decrease in federal spending with major increases in 2020s Basic income helps meet rent and housing costs Success in most communities in greater density, mixed income neighborhoods, many ADUs for 65+	Increase in options for urban, suburban and rural housing with innovative materials and designs Same as 3 More urban and suburban density with integrated housing

Scenario / Element	SCENARIO 1 Bills Come Due — Aging and Unprepared	SCENARIO 2 Troubled Times — Economic and Social Regression	SCENARIO 3 A Bright Horizon — Mindful and Connected Aging	SCENARIO 4 A Thriving System — Technology Abounds
Aging services providers' roles with low-income housing/community development	Hundreds of units, mostly in multi-unit buildings built by a few aging services providers; many more market rate units built	Same as 1	Thousands of low income units in mixed income and mixed age high-rise buildings; many built by aging services providers	Same as 3
Health Care and Long Term Care				
Primary care for 65+	65+ continued as major users of primary care; some primary care practices limit how many 65+ they will take; some 65+ had difficulty accessing care; more 65+ used community health centers Medicare costs to patients increased Most primary care increased quality (Person-Centered Medical Home —PCMH); were able to integrate personal biomonitoring and home monitoring data and anticipate declines or events	Cuts in Medicare payments to providers led more primary care practices to drop service Community health center fund cuts prevented them from expanding 65+care More self-care, urgent care, "doc in a box" based on ability to pay Some primary care increased quality (PCMH); were able to integrate personal biomonitoring and home monitoring data and anticipate declines or events	Primary care PCMH to community centered health home (CCHH) including social determinants focus More primary care is part of managed care, with broad primary care team including more responsibility for PAs, nurse practitioners, and community health workers along with social health coops Community health centers provide primary care for many 65+ Health data, personal biomonitoring and genomics integrated to anticipate declines and to reinforce prevention	Primary care PCMH to community centered health home (CCHH) including social determinants focus More primary care is part of managed care, with broad primary care team including more responsibility for PAs, nurse practitioners, and community health workers Community health centers provide primary care for many 65+ Health data, personal biomonitoring and genomics integrated to anticipate declines and to reinforce prevention
Specialty care	Some integration, but much specialty care remains fragmented; telemedicine brings visits home; some predictive analytics	Fewer Medicare specialty providers; much not integrated; telemedicine only in capitated plans; some predictive analytics	Specialty and primary care well integrated; predictive analytics anticipate events Telemedicine and virtual visits, as well as Doc Watson specialists widely used	Specialty and primary care are limited by outcomes research to high-value interventions Same as 3
Medicare	Premiums, deductibles, coinsurance, copayments, prescription drug coverage costs steadily increased while payments to providers decreased Medicare advantage grew, as did other forms of paying for value	Cuts to Medicare funding led to cuts to providers and increased costs to recipients	Medicare for all instituted in mid 2020s; promotes pay for value, particularly managed care. Medicare Part E funds low-cost, effective LTC services	Same as 3

Scenario / Element	SCENARIO 1 Bills Come Due — Aging and Unprepared	SCENARIO 2 Troubled Times — Economic and Social Regression	SCENARIO 3 A Bright Horizon — Mindful and Connected Aging	SCENARIO 4 A Thriving System — Technology Abounds
Medicaid	Increasing diversity in state access, coverage and payment levels for medical coverage and disability	After Decession of 2023, 25 million in multiple states lost disability payments and cut nursing home payments Reductions in payment levels, tighter eligibility	Medicaid coordinated with universal access; state portion of Medicaid reduced	Local innovations in social health supported by Medicaid
Medicaid Long-Term Care *Medicaid is the default payer for about 62 percent of nursing home residents and provides over half of long-term care spending in America.*	Spending and number seeking Medicaid LTC increased through 2020s with cuts in services and payment levels. LTC providers were innovative in adopting cost-reducing technology. Effective aging-in-place reduced some LTC demand	Cuts in payment levels in most states; in many states for-profit companies provide low-quality rentals with poor service options paid for by Medicaid	Shifted as Medicare Part E funds low-cost, effective LTC services; local innovations provide bright spots supported by state Medicaid programs	Same as 3
Family caregiving for long term services and support	Most middle and low-income elders in need of LTSS, family caregiving remained the mainstay for care	Many stressed families fail to provide LTSS; poverty among families with middle and low income; slower diffusion of low cost, effective technology	Family caregiving mainstay of care; greater technology support; family caregiving supplemented by neighbor and community caring (NORCs, time banking, from intergenerational communities)	Families and friends provide social caregiving; smart homes and aging services offer medical caregiving integrated with health systems
Ratio of potential caregivers per person 80 years and older = 7.2 to 1 in 2010	Ratio declines to 4 to 1 in 2030 Smart home, transportation, and other technology ease some aspects of family caregiving	Ratio declines to 3 to 1 Some smart home and other technology advances aid caregiving in families with low income	Decline to 4 to 1 offset by greater neighbor and intergenerational caring Smart home, transportation, and other technology ease some aspects of family and community caregiving	Same as 3 Same as 3
Aging Services Workforce Direct Care Workers	Frequent shortages, exacerbated by immigration restrictions, pay increases less than inflation	Frequent shortages despite high unemployment; exacerbated by immigration restrictions and continued low pay	Outcome metrics reinforce caring, healing touch; immigration reform adds workers; better pay plus more technology support upgrade the job	Same as 3