Market Scan: Future of Long-Term Care Amid Current Landscape of Barriers and Opportunities

May 2020
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Introduction
The Milken Institute’s Center for the Future of Aging and Innovative Finance teams are working on a research project to evaluate the most pressing barriers to effectively meeting the long-term care (LTC) needs of Americans across the country.

In partnership with Transamerica Institute, a nonprofit, private foundation, we are identifying and engaging key stakeholders and experts to examine the predominant issues surrounding the LTC market, including pricing, data modeling, and market forces and players that will impact the future of LTC.

The initial phase of this project focused on identifying new care delivery and funding models that can lower the risk and cost of LTC for consumers, policyholders, insurers, and federal and state governments.
Project Overview

Over the course of six months in 2019, the Milken Institute’s Center for the Future of Aging and Innovative Finance teams conducted market research related to LTC funding and delivery models. This work included over 50 interviews with key stakeholders and subject-matter experts from a wide variety of fields, including academia, financial services, government, insurance, health care, and technology. The first phase of research is presented here as a market scan that outlines the overall LTC market, funding and care delivery barriers, and potential solutions.

LTC is a pressing issue because the American population is aging rapidly, and 70 percent of adults aged 65 and older will require LTC at some point in their lives. Unfortunately, Medicare only covers limited aspects of care needs, and Medicaid eligibility is limited to individuals who meet strict income and asset requirements. In addition, most Americans are under-prepared to self-fund the very high costs of care, and the private LTC insurance market has suffered severe constriction in recent years. Through our research and outreach, we have identified a menu of potential solutions that may help address the related LTC funding gaps, market failures, and care delivery needs.

With the onset of the coronavirus (COVID-19) outbreak, the market failures and funding gaps in providing LTC stand out in stark relief. Public and private providers and payers face a uniquely daunting challenge of delivering LTC for those at high risk of severe illness and mortality. This new paradigm impacts everything from the provision of care for socially isolated older adults, the delivery of technology solutions as telehealth benefits expand in the wake of the crisis, and the sustainability of an LTC workforce plagued by low wages and few opportunities for professionalization. In the long term, the associated economic downturn will further strain families’ and individuals’ ability to save for supportive housing and care.
The Milken Institute will continue to work to identify actionable solutions that address LTC funding and delivery throughout 2020.

We intend to hold a Financial Innovations Lab that will bring together key stakeholders and decision-makers for a workshop, or series of workshops, to market test solutions and outline potential paths forward with the resulting findings published in a report shortly thereafter.

In the event that an in-person convening is not feasible in the near future, we are exploring a variety of alternative approaches that would be suitable for the next phase of work. Options under consideration include hosting a videoconference or producing a series of papers that highlight solution-specific research and modeling. We will work with stakeholders to identify the best next steps.
General Barriers

- The US population is aging rapidly. While many older adults will have decades of active, purposeful living, more than half will need a high degree of assistance with eating, bathing, or other routine daily activities. The aging of the baby boomers will double the number of Americans needing long-term care to 27 million by 2050.

- The costs of providing this degree of assistance through formal long-term care services are staggering. In 2019, the price of a nursing home stay averaged about $102,200 per year or well over twice an older (65 and up) middle-income family's income. The median rate for a private, one-bedroom unit in an assisted-living facility was $48,612 per year, while adult day services averaged $70 per day or $18,200 annually.

- Today, pensions aren’t available to most Americans, and very few have saved sufficiently for retirement. A typical American with savings and home equity, aged 65–74, has median financial assets of just $109,750 and only $86,800 in home equity.

- Individuals and families pay 55 percent of long-term care costs out of pocket. Medicaid pays for nearly 40 percent of long-term care costs, primarily for low-income people or those who have spent down all their financial assets to qualify for coverage. Private long-term care insurance pays less than 5 percent.

- Most Americans are unaware that Medicare does not cover long-term services and supports (LTSS) and therefore have not adequately assessed care costs, insurance options, and the income/asset limits associated with Medicaid.

- There are a lack of consumer confidence and demand in long-term care insurance (LTCI) products due to legacy actuarial shortcomings that resulted in sharp premium increases and the exiting of many insurers from the LTCI market.

Source: Nora Super, Kaiser Family Foundation (KFF), Genworth
Funding Barriers

- The Community Living Assistance Services and Supports (CLASS) Act was a voluntary, publicly administered long-term care insurance program enacted as part of the Affordable Care Act in 2010. **In 2013, CLASS was repealed** after the Obama administration concluded that it was financially unsustainable.

- Since then, the number of private insurers offering long-term care insurance has **plummeted from slightly more than 100 in 2002 to about a dozen** today. While some of this is due to consolidation, the more significant force driving the exit is a lack of profitability. **Less than 0.5 percent of US employers offer long-term care insurance.**

- Recently, **Medicare Advantage plans were permitted the flexibility to provide some home- and community-based services to enrollees.** However, these new benefits are relatively modest, and insurers only started offering these benefits in 2019, so there is not yet data on the effectiveness of this benefits expansion.

- **LTSS funding via Medicaid is only available after meeting income and asset limits, meaning middle-class individuals need to spend down their savings to qualify.**

- As evidenced by the inability to implement the CLASS Act, it is politically challenging to develop new social insurance programs at a state or federal level or expand existing systems. Proposals to increase taxes and demand mandatory participation have been seen as mostly unattractive.

- The private LTCI industry has contracted, bearing significant losses, a result of legacy underwriting, persistency, and adverse selection issues from in-force blocks of older policies, which has led to general affordability issues for consumers. A lack of public understanding of the products and limited employer offerings have translated into a difficult market for selling to and managing a pool of plan participants.

*Source: Nora Super*
Care Delivery Barriers

- The US health system does not reward integrated, coordinated service and care delivery between traditional health care and LTC, which leads to increased overall system costs.

- New technology, from wearables and home surveillance to predictive analytics, promises to help lower prices and improve quality of care. Many of the latest programs are still in the pilot phase, requiring funding and coordination to achieve scale. Given the stage of the development, there is little evidence of incremental cost savings, and monitoring/evaluation costs add to the funding gap for startups and care providers.

- Without integrated service delivery through existing and improved channels of care, there has been little ability to utilize patient/policyholder data to effectively manage estimated costs and improve overall efficiency to the system.

- To age successfully in the community, Americans need a range of affordable housing options, from accessible rental units to comprehensive continuing care retirement communities, and assisted living with wrap-around service.
Insights from the Interviews

Despite initial claims that the system is fundamentally broken and needs to be entirely redone to be fixed, over 80 percent of interviewees came up with concrete ideas for tweaks or designs that could chip away at the funding gaps, demonstrating that incremental change isn't inconceivable.

Interviewees indicated optimism about various insurance products:

- Expanding Medicare Advantage to cover some LTC services
- Exploring new state-based LTC approaches, remarking that these pilots will yield important information about cost and benefit design
- Creating new hybrid private insurance models, in lieu of the traditional LTCI products

Awareness around both public and private options, however, was noted in nearly every interview as a fundamental challenge.

Technology came up in every interview, from wearables to robots. Still, two main questions arose: Who pays for the integration of the technology and how real is the idea that this will be demonstrably cost-effective?

Integration of service delivery as a continuum from health care to long-term care came up in every call. There was optimism around drug stores partnering with health plans (e.g., CVS and Aetna), but also around pilot programs that have shown cost-efficiency and care quality improvements but have yet to be fully scaled.
Potential Solutions Overview

- Modify existing products, including retirement, health, and hybrid private LTCI models that allow for **better accessibility to personal savings and assets for LTSS** and increase awareness of need and options in the market.

- Expand Medicare to provide increased coverage of LTSS through the development of Medicare Advantage (MA) supplemental benefits, refinement and expansion of Value-Based Insurance Design (VBID) programs, and testing of new benefit offerings that will allow insurers to gather the data needed to measure health outcomes and related cost savings.

- Enhance LTCI program experimentation at the state level, exploring back-end “catastrophic” coverage options in addition to variations on the front-end approach currently being rolled out in Washington State.

- Facilitate new private insurance product design with funding programs to allow for better testing for models that **increase the market and improve liquidity for insurers**.
Potential Solutions Continued

- Improve cost savings and efficiency through better integration of technology with care delivery and by scaling successful funding models to allow for greater adoption
- Explore new models for integration and utilization of data at both the payer and consumer level (e.g., CVS Health Hub)
- Create more effective public-private partnerships to move community-based programs from pilot to scale
- Design new innovative funding models for more affordable housing that allow for more integrated service delivery
- Support caregivers, both paid and unpaid, through training and incentive programs
Current State of Long-Term Care
Long-Term Care: The Facts and Figures

Aging Population

- Older adults are living longer, in large part due to advances in medical care and public health. Life expectancy in the US for those reaching 65 was ~20 years on average in 2019.
- By 2030, one in five residents in the US will be age 65 or older.

Financially Unprepared

- The middle class is largely underprepared to pay for long-term care.
- By 2029, it is projected that 54 percent of seniors will be financially ill-prepared to pay for senior housing.
- A typical American with savings and home equity, aged 65–74, has median financial assets of just $109,750 and only $86,800 in home equity.

Significant Need

- An elderly adult who is 85 years old or older with substantial physical and cognitive disabilities receives an average of 11 hours per day of assistance from both paid and unpaid care sources.
- By 2040, the total prevalence of Alzheimer’s disease and related dementias in the US is expected to approximately double from 7.2 million to nearly 13 million, with 8.5 million women and 4.5 million men expected to develop dementia.

Sources: Centers for Disease Control and Prevention, US Census Bureau, Caroline Pearson, et al., KFF, Family Caregiver Alliance, Milken Institute Center for the Future of Aging
Long-Term Care: The Need
Aging Population

An Aging Nation
Projected Number of Children and Older Adults

For the First Time in U.S. History Older Adults Are Projected to Outnumber Children by 2035

Projected percentage of population

Adults 65+ 22.8% 15.2%
Children under 18 9.8% 19.8%

Projected number (millions)

2016 2018 2020 2025 2030 2035 2040 2045 2050 2055 2060

Source: National Population Projections, 2017
www.census.gov/programs-surveys/popproj.html

From Pyramid to Pillar: A Century of Change
Population of the United States


1960

2060

Millions of people

Source: National Population Projections, 2017
www.census.gov/programs-surveys/popproj.html

United States Census Bureau
U.S. Department of Commerce
Source: US Census Bureau
Projected Financial Resources of Middle-Income Older Adults in 2029, by Resource Level

Source: Caroline Pearson, et al.
### LTC Continuum Defined

Long-term services and supports encompass a variety of health, health-related, and social services that assist individuals with functional limitations due to physical, cognitive, or mental conditions or disabilities. LTSS includes assistance with activities of daily living (ADLs, such as eating, bathing, and dressing) and instrumental activities of daily living (IADLs, such as housekeeping and managing money) over an extended period.

<table>
<thead>
<tr>
<th>Level</th>
<th>Services</th>
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<tr>
<td>Low</td>
<td>Personal Care Assistant Services, Home Care, Adult Day Centers, Homemaker/Companion Services</td>
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<tr>
<td>Moderate</td>
<td>Home Health Care, Senior Housing, Assisted Living, Residential Care Home, Intermediate Care Facility</td>
</tr>
<tr>
<td>High</td>
<td>Skilled Nursing Facility, Hospice, Acute Care Facilities, Post-Acute Care Facilities</td>
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Sources: Connecticut Association of Not-for-profit Providers For the Aging, Milken Institute

Continuing Care Retirement Community (provides full continuum of care in one location)
Need for LTSS

The number of people in need of LTSS in the United States is already at 14 million and expected to grow to 27 million by 2050.

United States Adults Who Need Long-Term Services and Supports, by Age, 2018

Source: AARP Public Policy Institute estimates based on data from the 2018 National Health Interview Survey and L. Harris-Kojetin et al., Long-Term Care Providers and Services Users in the United States, 2015-2016, National Center for Health Statistics, Vital Health Statistics 3(43), 2019.

Note: Community residents with LTSS needs are people who, because of a physical, mental, or emotional condition, need the help of others with personal care needs (e.g., bathing, dressing) and/or handling routine needs (e.g., everyday household chores, shopping for necessities).
Cost of LTC

According to Genworth, in 2019, the average annual associated costs were as follows:

- Private room in a nursing home: $102,200
- Shared room in a nursing home: $90,155
- Assisted living facility: $48,612
- Adult day health care: $19,500
- Homemaker Services (44 HPW): $51,480
- Home health aide (44 HPW): $52,642

Sources: Urban Institute (original data source Favreault and Dey, 2015), Genworth
Cost of LTC – Caregivers

Family and friends are often the primary caregivers to people in need. This work is unpaid and may require the caregiver to incur expenses and experience adverse effects on their work life and financial position.

- In 2017, caregivers in the US were estimated to provide $470 billion in unpaid care.
- In 2016, 78 percent of caregivers experienced out-of-pocket costs, nearly $7,000 annually.
- For caregivers who opt to exit the workforce, the lifetime associated costs are approximately $300,000 in lost wages and retirement benefits.
- Over 50 percent of caregivers experience at least one adverse effect to their work life, including altered work schedule, reduced or increased hours, and taking time off (paid or unpaid).
- By 2030, the US will need an estimated 3.4 million direct care workers to provide LTSS, a 1.1 million increase over the 2.3 million who filled these jobs in 2015.
- According to the Alzheimer’s Association, approximately 16 million unpaid caregivers are caring for someone with dementia.
- 40.4 million people in the US provide unpaid care to an older adult in need.

Sources: AARP, Center for Health Care Strategies, Health Resources and Services Administration, Alzheimer’s Association, US Bureau of Labor Statistics
According to the Bureau of Labor Statistics, only 17 percent of US workers have access to paid family leave benefits. There are currently only eight states (plus the District of Columbia) with government-sponsored family-leave insurance programs, and, of those, only five have taken effect yet.

Sources: National Partnership for Women and Families, AARP
Lack of Understanding and Preparation

The 2014 survey of Long-term Care Awareness and Planning, sponsored by the Office of the Assistant Secretary for Planning and Evaluation/US Department of Health and Human Services, posed a series of questions to a “representative sample of noninstitutionalized adults 40–70 years old residing in the United States.” The survey identified a lack of general understanding of the costs involved with LTSS and the funding options for that care. However, understanding of the issues increased for those individuals with personal experience with LTSS.

### LTSS/LTCI Knowledge by LTSS Experience

<table>
<thead>
<tr>
<th>Knowledge of LTC</th>
<th>% Correct</th>
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<tbody>
<tr>
<td>Cost of 1 month of nursing home care</td>
<td>20.2</td>
</tr>
<tr>
<td>Cost of 1 hour of home health aide care</td>
<td>15.3</td>
</tr>
<tr>
<td>Medicaid is primary government LTC payer</td>
<td>25.3</td>
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<tr>
<td>Average nursing home LOS &lt; 5 years</td>
<td>34.9</td>
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Source: RTI International Analysis of the 2014 Survey of Long-Term Care Planning and Awareness.

Source: RTI International
Long-Term Care: Current Funding
Current Payment Structure

Paying for LTSS falls within three main buckets

- Out-of-Pocket (Self-Insurance)
- Private LTC Insurance
  - Traditional
  - Hybrid
- Public Programs
  - Medicaid
  - Medicare (limited coverage under Medicare Advantage and for post-acute services)
Payment Breakdown by Source

Average Lifetime LTC Spending for Adults Age 65+ by Source

- All Services: 52% Out of Pocket, 34% Medicaid, 13% Other
- Home and Residential Care: 68% Out of Pocket, 19% Medicaid, 13% Other
- Nursing Home Care: 35% Out of Pocket, 51% Medicaid, 14% Other

Source: Bipartisan Policy Center (original data: Favreault, M. M., & Dey, J, graphic concept: Anne Tumlinson Innovations)
Out-of-Pocket Payments (Self-Insurance)

On average, in the US, about half of an individual's costs for LTSS will be paid out-of-pocket.

- Average out-of-pocket costs are $140,000 for those individuals who utilize paid LTSS
- Roughly 17 percent will spend over $100,000 on LTSS
- Almost 9 percent will spend over $250,000 on LTSS

Potential sources of funding for out-of-pocket payment of LTC

- Savings, assets, income, and contingency reserves
- Contributions by family members
- Home equity (line of credit, reverse mortgage, sale of home)
- Retirement funds (401k or 403b)
- Health Savings Accounts (HSAs)

Source: ASPE
Role of Medicare in LTC

Medicare does not cover LTC, though many Americans mistakenly believe it does. More than four in 10 baby boomers erroneously believe Medicare will cover long-term care costs.

Medicare is the federal health insurance program that provides individuals aged 65 and older and people with disabilities with support in paying for medical care services, such as hospitalizations, physician visits, home health care, and preventive benefits.

- Medicare will cover post-acute care (after deductible and coinsurance), such as a limited stay at an inpatient rehabilitation center. It will also cover part-time and intermittent skilled nursing care as long as a doctor determines it is medically necessary.

- The Creating High-Quality Results and Outcomes Necessary to Improve Chronic (CHRONIC) Care Act, signed into law February 9, 2018, updates the Medicare program by allowing Medicare Advantage plans to pay for services that are not primarily health-related and to target these services toward meeting individual needs. The CHRONIC Care Act is an incremental step towards Medicare covering some of the costs associated with LTC.

Sources: Medicare.gov, Insured Retirement Institute, LongTermCare.gov, Anne Tumlinson Innovations
The CHRONIC Care Act, and subsequent guidance by CMS, provides the opportunity for Medicare Advantage plans to offer benefits that are non-medical in nature. These “special supplemental benefits” can be delivered to chronically ill enrollees. This targeting of benefits to a particular subset of plan participants is a departure from the previous requirement that Medicare Advantage plans offer uniform benefits to all enrollees. It is yet unclear how many of these benefits will be adopted by health plans and how the value of these investments will be measured. Analysis of publicly available data from CMS indicates that 512 plans (16 percent of all MA plans) will be offering at least one of the new supplemental benefits in 2020.

Examples of special supplemental benefits

- Meal delivery
- Transportation for non-medical needs
- Indoor air quality equipment
- Minor home modification (e.g., ramps, grab bars)

Sources: The Commonwealth Fund, Long-Term Quality Alliance, and Anne Tumlinson Innovations
Role of Medicaid in LTC

Medicaid, a jointly funded federal/state program, is the primary payer across the nation for LTC services. States have discretion over eligibility criteria/benefits, but Medicaid is required to cover all nursing home room and stay costs for qualified beneficiaries.

Population Served

- In December 2019, over 64 million individuals were enrolled in Medicaid.
- Medicaid eligibility for LTSS is limited to impoverished people, often by having spent down their income and resources to pay for such care.
- Primarily because of their high use of LTSS and the high cost of this care, the elderly, who make up roughly 10 percent of all Medicaid beneficiaries, drive over 20 percent of Medicaid spending. LTSS accounts for over two-thirds of total Medicaid spending for the older adults.
- LTC support is limited to individuals who are assessed and determined to need an institutional level of care, which varies by state but typically includes a combination of medical, functional, and cognitive components.

Sources: Medicaid.gov, Policygenius.com, Kaiser Family Foundation
Role of Medicaid in LTC

According to the Congressional Research Service, in 2016:

- Combined public sources (Medicare, Medicaid, and other) paid for 70.3 percent of LTSS spending
- Medicaid paid for 42.2 percent
- LTSS accounted for 30.6 percent of all Medicaid spending

Source: Congressional Research Service
There are some Americans who qualify for both Medicare and Medicaid; these individuals are known as dual eligibles. Roughly 12 million people qualify, meaning they are enrolled in Medicare Part A (hospital insurance) and/or Medicare Part B (medical insurance) or Part C (Medicare Advantage), and they are also enrolled in either Medicaid or a Medicaid-administered Medicare Savings Plan (MSP). Dually eligible individuals comprise up to 15 percent of all Medicaid enrollees.

- Under this arrangement, Medicare is the primary payer of any expenses covered by Medicare, and Medicaid is the secondary payer for remaining costs that are covered by Medicaid (e.g., home- and community-based services).
- Dually eligible individuals have access to Medicaid benefits related to LTC (e.g., in-home personal care assistance and nursing home care).
- A longstanding barrier to coordinating care for Medicare-Medicaid enrollees has been the financial misalignment between Medicare and Medicaid.
- CMS has been testing a variety of dual-eligible demonstration models with states that better align the financing of these two programs and integrate primary, acute, behavioral health, and LTSS for their Medicare-Medicaid enrollees.

Sources: American Council on Aging, Medicaid.gov, Centers for Medicare & Medicaid Services (CMS)
Private LTC Insurance Market Has Contracted

- 7.5 million US residents held either traditional or hybrid LTCI policies in 2015.
- Payments from LTCI companies reached $9.2 billion in 2017, and it is estimated that they could expand to $34 billion by 2032.
- Adoption rates for LTCI have been limited because of a variety of factors, including the high cost of premiums and the concern over sharp premium increases in the future, lack of product understanding by the consumer, and misunderstanding of care coverage through health insurance or Medicare.

Sources: Marc A. Cohen, PhD/LeadingAge LTSS Center @Umass Boston, AARP
Private LTC Insurance Policy Sources

- **Individual plans**: Usually sold through an insurance agent or broker.

- **Employer-sponsored plans**: Group plans available at discounted rates through an employer. These plans often do not require underwriting, offer unisex rates, and usually policyholders can retain their policy if they continue to pay the premiums after leaving the company, or they stop offering the benefit. Similar group-rate plans may also be available through professional or service organizations.

- **State partnership programs**: LTCI policies that qualify for the State Partnership Program means policyholders can be eligible for Medicaid while still holding on to a certain level of assets. Most states have a State Partnership Program.

- **Joint policies**: These plans allow for the purchase of one policy that covers multiple people, which provides coverage for a married couple, two partners, or two related adults. These policies often have a total or maximum benefit that applies to everyone insured under the policy.

*Source: AARP*
In response to a declining market for traditional LTCI products, insurers have been experimenting with hybrid policies that integrate existing benefits into life insurance (whole or universal) or annuity products, often through an LTC rider. This enhancement allows the policyholder to access a portion, or the entirety, of a death benefit to pay for qualified LTC expenses.

**Pros**
- Provides insurance against LTC costs while allowing some or all of the death benefit to be passed on to heirs after death
- No risk of extreme premium increases

**Cons**
- A hybrid policy generally costs about 3 percent to 15 percent more than a standalone life insurance policy, depending on the insurance company
- Insurers not obligated to pay prevailing interest rates

Sources: National Organization of Life and Health Insurance Guaranty Associations (NOLHGA), ElderLawAnswers
Expected Months of LTC Costs Covered by Savings vs LTCI

Sources: National Association of Insurance Commissioners (NAIC) (original data source: LifePlans, Inc.)
Potential Solutions and Case Studies
Potential Solution Overview

- Improve Accessibility to Personal Savings and Assets
- Private Long-Term Care Insurance Solutions
- Public Long-Term Care Insurance Solutions
- Expand Medicare
- Cost-Efficient Delivery Model Solutions
- Technology Solutions
Improve Accessibility to Personal Savings and Assets
RECOMMENDATION: Modify Existing Insurance and Savings Products

**Existing Retirement Funds**

- Create better tax incentives that ensure LTCI (including all forms of hybrid policies) becomes an integral part of the retirement finance conversation, given that LTC costs are the most significant unmet retirement income security threat for most Americans.

- Allow early tax-free withdrawal of retirement funds (401k, 403b, and IRA) without penalties, beginning at age 45, to purchase LTCI.

**Health Savings Accounts**

- Increase HSA contribution limits and tax-advantaged withdrawal limits to accommodate LTCI premiums better, or create a new savings vehicle specifically for LTC modeled off of HSAs.
A Closer Look: Utilizing Health Savings Accounts for LTC

Pros

- Unmatched tax benefits
- Funds can be used for both LTCI premiums or direct care expenditures
- At 65, money can be used for any purpose without penalty, but income tax is applied to any withdrawals made for unqualified expenditures

Cons

- HSAs are available to only those with high-deductible health-care plans
- Contribution limits may mean insufficient funds if attempting to self-fund LTC solely through an HSA
- Limits to yearly withdrawal amount for LTCI
- Loss of long-term tax-free growth potential of investments when LTCI premiums are pulled from the account on an ongoing basis
- The premium structure of some hybrid policies makes them ineligible for tax-qualified HSA distributions

LESSONS LEARNED: HSAs are an effective tool for maximizing savings to pay for LTC needs or for paying LTCI premiums, but there are limitations. Some people view HSAs simply as a tax-advantaged investment vehicle for people who already may be financially well off, and the benefits offered by HSAs do not reach those most in need. Tweaks could be made so that these accounts are better positioned to fund LTC, or HSAs could act as a model for LTC-specific savings accounts.

Source: Morningstar
Private Long-Term Care Insurance Solutions
RECOMMENDATION: Facilitate New Private Insurance Product Design/Access

Facilitate New Product Design
- Establish a clearinghouse to speed the approval process for new products
- As explored by the Minnesota “LifeStage” Protection proposal, create state programs to help research and market test new models
- Explore similarities with the Catastrophic Risk Insurance Market and the Cat Bond market to improve predictive modeling but also provide a secondary market opportunity

Expand Hybrid Longevity Insurance Models
- Further develop and test models that convert life insurance to longevity insurance at age 65
- Allow more flexibility in the use of savings

Expand Employment-Based Plans
- Improve communication and outreach between insurance agents and employers, with a focus on the benefits to employers (e.g., tax-deductibility of any portion of tax-qualified LTCI premiums paid by the employer)
- Incentivize employers to auto-enroll employees with the ability to opt out
- Adjust section 125 of the Internal Revenue Code so that employers can offer LTCI benefits via cafeteria plans
Case Study: Minnesota “Life Stage” Protection Proposal

Mission: The Minnesota Department of Human Services, through the Own Your Future (OYF) initiative, has been exploring affordable LTC solutions for households with incomes between $50,000 and $125,000. The state's approach has been to encourage private market solutions that are affordably priced, actuarially sound, appealing to consumers, and acceptable from a risk and market perspective to insurance companies.

Organization: Minnesota Department of Human Services Own Your Future Initiative

Amount: $450,000 in federal SIM grant funding was used to complete the research study

Program Details:

- LifeStage Protection combines term life insurance protection during a person's working years with LTCI benefit during later years when that type of protection is most appropriate.

- There are three levels of lifetime coverage to choose from: $100,000, $200,000, and $300,000. This will be the level of term life insurance coverage during working years, then at retirement age, the life insurance will end, and the LTC coverage will begin. LTC coverage will be for the same amount originally chosen, and the premiums will remain constant.

- Premiums are designed to be affordable (e.g., a 45-year-old male would pay $63 per month for a $100,000 policy, $11 more than he would pay for a standalone term life policy, but $26 less costly than if he was paying for both a standalone term life policy and standalone LTCI).

- Target audience is adults 35-55 years old with income between $50,000 and $125,000.

Lessons Learned: Example of experimentation happening at the state level, testing an innovative approach to private LTCI that is both affordable and adapts to the changing needs of the insured. It should be noted that this proposal was put forth several years ago and has not gained traction. Additional experimentation and modeling of alternative models would be beneficial.

Sources: Minnesota Leadership Council on Aging, Minnesota Own Your Future
A Closer Look: Cat Bond Market

**Purpose:** The Catastrophic Risk Insurance market developed Cat Bonds to pass risk from insurance companies to investors. Cat Bonds are sold to help provide insurers with capital if/when a natural disaster is triggered.

**Program Details:**
- Catastrophic risk insurance helps to fund disaster relief and recovery for communities after events such as hurricanes.
- Given the estimated costs of disaster recovery, insurers and re-insurers needed a vehicle to help raise capital to pay for potential benefits.
- The Cat Bond market is a capital market financing vehicle that attracts investors looking for high-yield interest payments who are willing to put principal at risk.
- Cat Bonds are insurance-linked securities, usually triggered by certain types of natural disasters, with payouts also dependent on severity and overall costs of recovery.
- If the insurance company doesn’t need all of the use of proceeds to pay for a disaster, then investors are paid both interest and the principal is returned. If the triggering event requires all of the proceeds, investors lose their principal.
- Bonds can be traded, providing insurance companies access to the secondary debt market.

**Lessons Learned:** Given the high costs of providing LTC and the relative unknown in terms of actuarial updates on length of life and service-level need, creating a capital market product could help to provide capital should levels of benefits needed reach catastrophic levels. Providing additional forms of liquidity to insurance companies could, in turn, make the market more profitable and allow for better flexibility in policy construction. More research would be needed to truly model the risk and general underwriting issues around triggers that are not incident-specific (a disaster) but rather based on a pool of policyholders.

Source: Milken Institute
Public Long-Term Care Insurance Solutions
Encourage State-Level Experimentation

- Enhance LTCI program experimentation at the state level, exploring back-end “catastrophic” coverage options in addition to variations on the front-end approach currently being rolled out in Washington State.
State-Level Public Insurance Options

Modeling has been done around public LTCI programs that could take one of three approaches: full, front-end, or catastrophic “back-end” coverage. Many interviewees were eager to see the results of Washington State’s front-end program and the data it will generate. Interviewees also expressed interest in state experimentation around a catastrophic “back-end” model. Full coverage was seen as an admirable goal but financially unfeasible.

Full Coverage
- Provides benefits after a short waiting period, typically 90 days, with no lifetime claims limit

Front-End Coverage
- Provides benefits after a similarly short waiting period, with limited coverage of two years of benefits

Catastrophic (Back-End) Coverage
- Provides coverage after a lengthier waiting period (e.g., two years) with no lifetime claims limit
# State-Level Public Insurance Options

<table>
<thead>
<tr>
<th>Full Coverage Approach</th>
<th>Front End Approach</th>
<th>Catastrophic Approach</th>
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</thead>
<tbody>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
<td><strong>Benefits</strong></td>
</tr>
<tr>
<td>- Provides coverage without gaps</td>
<td>- Can complement existing coverage from Medicare and bridge existing service and support gaps</td>
<td>- Complements private LTC insurance because most policies do not cover more than three to five years worth of care</td>
</tr>
<tr>
<td><strong>Drawbacks</strong></td>
<td></td>
<td><strong>Drawbacks</strong></td>
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<tr>
<td>- High cost of program and lack of political will make this approach unlikely</td>
<td>- Given that most Americans will need less than two years of LTC, front-end approaches ensure more people can benefit from the coverage</td>
<td>- Because many Americans will not need more than two years of care, the catastrophic approach could cover fewer people than a front-end approach would, though income testing could boost the number of people covered.</td>
</tr>
<tr>
<td>- Estimated that a payroll tax increase of 1.35 percent would be needed to fund such a program, meaning a roughly $800 increase in taxes for an average middle-income worker</td>
<td>- Front-end costs are more predictable than back-end costs, better for modeling</td>
<td>- The costs associated with catastrophic coverage are more difficult to model.</td>
</tr>
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</table>

Source: ASPE, Forbes
Case Study: Washington State Long-Term Care Trust Act (Front-End Program)

Mission: Washington State’s Long-Term Care Trust Act aims to protect taxpayers and the state from the future cost of LTC for its residents.

Organization: State of Washington

Amount: Lifetime maximum benefit: $36,500/person, indexed to inflation

Program Details:
- The required contribution for all Washington W-2 workers is 58 cents per $100 of income.
- The vesting period is three of the past six years or ten years without a break of more than five years.
- Starting in 2025, individuals who require assistance with three activities of daily living can access this benefit coverage of $100 per day for a maximum lifetime benefit of $36,500 per person.
- Professional caregiving, medical-related transportation costs, or home accessibility improvements are examples of eligible expenditures.
- Expected to save the state’s Medicaid program almost $470 million a year by 2052 ($4 billion in total).

Lessons Learned: First-of-its-kind state program will provide valuable data that can be utilized by other states when they design their programs. Modeling is already underway for programs within other states, experimenting with pricing, funding, and benefit levels.

Sources: agingwashington.org, LeadingAge
Mission: The Kupuna Caregivers Program is a pilot program launched in 2018 intended for employed Hawaiian residents who are also unpaid primary caregivers of a senior relative. This program helps to ease the financial burden of providing care for a loved one, while allowing the caregiver to continue their employment outside of the home. The program also helps to prevent the unnecessary institutionalization of seniors, saving the state money, as the cost of institutionalization is much greater than is support in the home and community.

Organization: Administered by the Hawaii Executive Office on Aging (EOA), implemented through local Aging and Disability Resource Centers (ARDCs)

Amount: Daily allowance of up to $70

Program Details:
- Up to $70/day is applied to the cost of long-term senior care and services: adult day care, in-home personal assistance, respite care, etc.
- Payments are made directly to the service providers, not through the caregivers.
- To qualify for the program, caregivers must administer care to individuals aged 60 years or older who are US citizens or qualified aliens. The caregiver must be employed outside the home (not self-employed), working a minimum of 30 hours per week. Cohabitating with the care recipient is not required.
- In addition to being at least 60 years old, care recipients must also be residents of Hawaii. They cannot live in a facility that provides long-term care and cannot be eligible for alternative programs that provide services in the home or community setting. They must need assistance with "a minimum of two Activities of Daily Living (ADLs), OR two Independent Activities of Daily Living (IADLs), OR one ADL and one IADL, OR have a considerable cognitive impairment that requires significant supervision."
- Seed funding for the program came from existing revenues in the state’s general fund, and additional private donations have also been solicited.

Lessons Learned: State-level program that aims to support the family caregiver, which in effect helps the care recipient. This front-end investment helps keep the caregiver within the workforce while also helping to delay or avoid the need for costly institutional-level care.

Sources: Paying for Senior Care, Quartz at Work
Expand Medicare
RECOMMENDATION: Expand Medicare to Cover LTSS

- Expand Medicare Advantage (MA) Supplemental Benefits
  - Continue to test the expansion MA supplemental benefits (e.g., home-delivered meals, transportation services) to measure the economic and health impacts
  - Implement a value-based insurance design (VBID) model for home- and community-based services

- Test and Expand the Value-Based Insurance Design Model
  - Expand the VBID model to test delivery of LTSS to targeted enrollees; measure savings, health outcomes, and impacts on plan enrollment trends

- Create Medicare Part E or New Medigap Plans
  - Create new Medicare Part E in traditional Medicare to cover LTSS or new Medigap plans to cover LTC costs
Enrollment in Medicare Advantage Has Nearly Doubled Over the Past Decade

Source: Kaiser Family Foundation
## Case Study: Medicare Advantage Value-Based Insurance Design Model

VBID model for 2020 and subsequent years, plans may propose:

### VBID by Condition and/or Socioeconomic Status
- Reduced cost-sharing and additional supplemental benefits, including "non-primary health-related" items, for beneficiaries based on chronic condition and/or socioeconomic status

### Rewards and Incentives
- Expanded MA and Part D rewards and incentives (RI) programs

### Telehealth Networks
- Telehealth may be utilized in lieu of in-person visits to satisfy network adequacy requirements, on the condition that the option for an in-person visit is maintained

### Wellness and Health-Care Planning
- All VBID-participating MA organizations must offer enrollees access to wellness and health-care planning, including advance care planning

Sources: CMS, Milliman
Medicare Advantage Value-Based Insurance Design Model

CMS began testing the MA VBID model in 2017. This model provided insurers with the ability to offer beneficiaries living with select chronic diseases different incentives (reduced cost-sharing and additional supplemental benefits) for utilization of services and providers considered to be of high clinical value. The model aims to “reduce Medicare program expenditures, enhance the quality of care for Medicare beneficiaries, including dual-eligible beneficiaries, and improve the coordination and efficiency of health care service delivery.” The model was initially made available to seven states and covered seven chronic diseases. It has since expanded so that plans in all 50 states and territories can apply. Beneficiary eligibility has also been expanded. The number of MA members enrolled in plans with value-based payment designs more than tripled from 2019 to 2020.

This model is noteworthy because it breaks with previous federal requirements dictating plan uniformity across all beneficiaries in a service area. The flexibility VBID offers can be quite desirable to MA plans.

Potential benefits to MA Plans:

- Possible savings due to avoidance of costly medical care
- Improved health outcomes
- Future increases in enrollment due to enhanced benefits or reduced cost-sharing
- Broadened networks due to telehealth services
- Model flexibility

LESSONS LEARNED: Value-based insurance design principles have been gaining traction in recent years. Employers like IBM are incorporating them into their employee health benefits program, doing away with the cost-sharing component of select services that they believe make a meaningful impact on health outcomes. The goal is to invest in lower-cost preventative measures that will save money in the long run.

Sources: CMS, Milliman, America’s Health Insurance Plans
Case Study: UnitedHealthcare Medicare Advantage Institutional Special Needs Plans

Mission: UnitedHealthcare’s Medicare Advantage Institutional Special Needs Plans (I-SNPs) utilize a coordinated care model for beneficiaries in nursing homes through the use of on-site advanced practice clinicians. These specialized MA plans improve care delivery by aligning the financial incentives of the nursing homes and Medicare.

Organization: UnitedHealthcare

Program Details:

- Eligible MA beneficiaries are individuals in a nursing home for 90 days or more or are certified as needing a nursing home level of care.
- There were 61,694 beneficiaries enrolled in 2017 in United’s program. In total, there are 734 Special Needs Plans across the country, including United, with 3,156,877 enrollees nationwide in 2019.
- Previously known as the “Evercare” model, plan participants benefit from care coordination via advanced practice clinicians (i.e., nurse practitioners or physician assistants). These clinicians oversee a plan of care and collaborate with primary care physicians, family members, and other care providers, ensuring that primary, acute, and preventive care needs are addressed.
- The nursing home or beneficiary does not incur any cost for the services of these clinicians.
- The typical three-day hospital stay qualification requirement for Medicare Part A benefits is waived, which allows prompt and more effective utilization of skilled nursing facility services.
- CMS pays for the plan on a capitated basis, meaning a set amount is paid for each enrollee regardless of how much care is delivered.

Lessons Learned: Compared to typical enrollees of fee-for-service Medicare residing in nursing homes, those enrolled in an I-SNP plan benefited from 51 percent lower emergency department use, 38 percent fewer hospitalizations, and 45 percent fewer readmissions. Also noteworthy was the 112 percent increase in the use of skilled nursing facility services. As of mid-October 2019, CMS had approved 321 MA contracts offering 734 SNPs with a total enrollment of 3,156,877 beneficiaries. Of these 734 SNPs, 129 are Chronic or Disabling Condition SNPs serving 363,260; 480 are Dual-Eligible SNPs serving 2,698,634 beneficiaries; and 125 Institutional SNPs are serving 94,983 beneficiaries.

Sources: The American Journal of Managed Care, Special Needs Plans Alliance
Cost-Efficient Delivery
Model Solutions
### RECOMMENDATION: Improve Cost-Efficient Delivery Models

<table>
<thead>
<tr>
<th>Partnership Funding Models</th>
<th>Innovative Funding for Housing</th>
<th>Support Caregivers</th>
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<tr>
<td>- Develop more innovative public-private partnership funding models to help scale existing and proven integrated care delivery programs, such as CAPABLE</td>
<td>- Identify alternative revenue generation opportunities, tax incentives, philanthropic, and impact capital and new financing structures for more affordable, service-focused housing</td>
<td>- Support family caregivers by providing paid leave, training, financial/tax incentives, Social Security benefits, and respite care</td>
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<tr>
<td></td>
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<td>- Address direct care workforce levels and training</td>
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<td>- Enact federal legislation mandating paid family leave</td>
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<td>- Utilize older workers to fill industry need for paid caregivers</td>
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Case Study: Community Aging in Place—Advancing Better Living for Elders (CAPABLE)

Mission: The CAPABLE (Community Aging in Place - Advancing Better Living for Elders) program brings together a nurse, an occupational therapist, and a maintenance professional to modify the home environments of older adults to improve safety and independence.

Organization: Johns Hopkins School of Nursing

Amount: Funding provided by National Institutes of Health and the Centers for Medicare & Medicaid Services, as well as a $3 million grant from Rita & Alex Hillman Foundation to scale program nationally in 2018

Program Details:

- The client-centric approach means each patient sets his or her personal goals that are functional, not medical, in nature (e.g., safe bathing or walking to the grocery store). The patient then receives home renovations, like ramp installation, that make this goal achievable.

- The five-year Hillman Foundation award totals $2,849,753, providing CAPABLE the funds to scale their operation to a national level. Health-care agencies will have access to on-demand CAPABLE training, and new Johns Hopkins School of Nursing staffing will further develop program reach.

- CMS has found that CAPABLE produces an impressive 6x ROI; intervention costs less than $3,000 per participant yielding at least $20,000 in Medicare savings per participant over two years. This program provides improved health outcomes and decreases in hospitalizations, re-hospitalizations, and nursing home admissions.

- It is conservatively estimated that Medicare could save $6.8 billion annually through national implementation of CAPABLE.

Lessons Learned: CAPABLE started as a pilot that proved successful enough (for every $1 spent on CAPABLE, $10 is saved by Medicaid and Medicare) to scale to over 24 different sites in 14 states. In July 2019, the Physician-Focused Payment Model Technical Advisory Committee voted to recommend for CMS to test the program on a broader scale, especially as it related to payment model development. Part of the expansion of the program was dependent on philanthropic funding from the Hillman Foundation. More could be done to explore better public-private partnership models to scale other pilot programs.

Sources: Johns Hopkins University, Rita & Alex Hillman Foundation, Home Healthcare News
Case Study: Meals on Wheels Social Impact Bond
(Pay For Success Model)

Mission: Meals on Wheels America, through its local member organization Meals on Wheels of Central Maryland (MOWCM), attempted to structure a Social Impact Bond (SIB) that would fund the scaling of the local services of MOWCM to 600 individuals over three years.

Organizations: Meals on Wheels America, MOWCM, Johns Hopkins Bayview Medical Center, Quantified Ventures

Program Details:

- MOWCM would provide each client with home-delivered meals each day, socialization, safety checks, and case management. The impact of these interventions on the target individuals would be independently measured and evaluated as to how they reduce the utilization of acute health-care services at Johns Hopkins Bayview Medical Center: emergency department visits, readmissions, and hospitalizations.

- The Urban Institute would design a Randomized Controlled Trial to measure the results of the project, analyzing claims and utilization data to determine the level of cost savings and improved health outcomes. Also to be measured would be the "weight maintenance, mental health, treatment and medication compliance and disease management, and increased social engagement and management of personal health."

- This project would build on Meals on Wheels America's efforts over the last 15 years to become a data-driven organization that prioritizes the measurement and quantification of its outcomes, resulting in improved ability to secure funding.

- The project would seek impact investors to invest for four years, covering costs of scaling, all aspects of interventions, and evaluation.

- Interventions would be administered over three years, with evaluation occurring in tandem. The evaluation would continue for a year after service delivery.

- If agreed-upon outcomes are achieved, the investors would be repaid both the principal and a return.

Lessons Learned: Social Impact Bonds are designed to attract upfront funding for programs that deliver long-term cost-savings but have trouble accessing capital. The contract is structured to have investors provide funding to service providers who deliver care that would ultimately lead to reduced spending by an "outcome payer," which could be a government, a philanthropic donor, or company. The outcome payer would return principal and interest to investors, based on agreed-upon social return metrics. This would translate to a cost savings for the payer and an attractive return for the investor. However, there is a significant hurdle to overcome in being able to measure successful care delivery and its direct causal link to the cost savings. SIBs are also relatively small amounts of money (usually $5-10 million) and therefore not often enough of a scale to make a demonstrable impact on funding gaps.

Sources: Meals on Wheels America, Pay For Success
Case Study: Kaiser Permanente Supports Affordable Housing in Oakland

Mission: In January 2019, Kaiser Permanente unveiled several major initiatives that aim to improve health outcomes by creating stable housing for vulnerable populations.

Organization: Kaiser Permanente

Amount: $100 million loan fund

Program Details:

- Enterprise Community Partners matched a $50 million commitment by Kaiser Permanente.
- The fund will finance the development and preservation of multifamily rental homes for low-income residents throughout Kaiser Permanente’s service areas.
- Kaiser Permanente has also committed $5.2 million from its $200 million Thriving Communities Fund (an impact investing fund) to acquire a 41-unit housing complex in East Oakland, near their national headquarters.
- In addition, working with a community partner, Kaiser Permanente identified 500 particularly vulnerable individuals and are now working with the city, Alameda County, and other community partners to secure housing and other vital services for the individuals on this list.

Lessons Learned: Private-sector investment is critical to plug funding gaps for affordable housing. The Kaiser fund was vital because it showed a company’s belief and commitment to a double or triple bottom line: taking potentially slightly less commercial financial returns to enable more long-term social and health outcomes. The concept that access to affordable housing with integrated health services has long-term cost-savings for the communities will require additional study, but early data suggest a positive correlation. Further experimentation can be done to scale up developments and diversify the types of services included in the housing programs.

Source: Kaiser Permanente
Case Study: Senior Housing, 990 Polk, San Francisco

Overview: 990 Polk is a 110-unit new construction project housing formerly homeless and low-income senior renters. It overcomes the marketing and management challenge of integrating a formerly homeless population in a low-income rental property through good design, attractive amenities, and extensive on-site services.

Organizations: Co-Developed by Citizens Housing Corporation and Tenderloin Neighborhood Development Corporation

Total Development Cost: $36,600,000 ($309,112 per unit)

Permanent financing sources: City and County of San Francisco-Mayor’s Office of Housing, LIHTC equity through Enterprise, Federal Home Loan Bank AHP Loan through Mechanics Bank, Mental Health Services Act Housing Program

Details:
- Target residents are seniors age 55+, including formerly homeless seniors
- 50 units reserved for households earning under 45 percent of Area Median Income (AMI); 60 units reserved for households earning under 50 percent of AMI; 50 units reserved for formerly homeless seniors
- Key features include attractive and efficient design/natural light, roof gardens, courtyard, common spaces, ground-floor commercial space, on-site program coordination, case management, cooking and nutrition classes, new home orientation, basic life skills classes, multilingual outreach, and computer training. A full-time nurse and rotating doctor provide medical support.

Lessons Learned: The project successfully mixes low-income senior housing with permanent supportive housing for formerly homeless seniors. This model provided access to capital and operating subsidy sources. Amenities and services allow seniors to live independently as they age in place. Every aspect of the design of the building is intended to promote ease and interactivity, and prevent social isolation. There are questions as to the scalability of the project, and how philanthropic funding through program-related investments or other low-cost financing could help to reach a bigger portion of the senior population. Additionally, it’s worth noting the difficulty in gaining the right community support for these types of projects, which often face criticism with NIMBYism (Not In My Back Yard) being a driving force of push-back.

Sources: Enterprise/MetLife Foundation
Case Study: Senior Housing, Ewing Independent Living, Ewing, New Jersey

Overview: Ewing Independent Living is a 72-unit, newly constructed, accessible, sustainable apartment building. It combines design features and à la carte personal services to offer maximum opportunities for seniors and adults with disabilities to age in place safely and with dignity.

Organizations: Rely Properties LLC is the project sponsor. The developer is Lynn Developers LLC, a unique development entity created by a passionate geriatric nurse to advance her vision for aging in place.

Total Development Cost: $14,717,067 ($204,404 per unit)

Details:

- Target residents are seniors, age 55 and over. Twelve units are reserved for adults with developmental disabilities.
- Two apartments are reserved for households earning up to 30 percent AMI; 42 earning up to 50 percent AMI; 28 earning up to 60 percent AMI.
- Key features include large units; accessible showers with grab-bars; adaptable kitchens; green building features, including solar panels; catered meals; personal care services; barbershop/beauty salon; spa; library; wellness office; and dining room.
- Trained and certified staff members are available to provide companionship, supervision, and help with tasks. Supportive services are offered on-site by Assisted Living, Inc., a 501(c)(3) nonprofit corporation. Services include assistance with bathing, dressing, grooming, medication administration, meal preparation, and housekeeping, as well as an emergency call system. All on-site services are offered in conjunction with visiting nurses; physical, speech, and occupational therapists; and other care professionals to help residents remain independent and safe as individual needs change.

Lessons Learned: Ewing Independent Living represents an alignment of accessible design, green building, specialized financing, and flexible service provision, organized to allow seniors and adults with disabilities maximum ability to age in place with dignity and independence. It’s important to note that many design details were driven by the leadership team of the project, which included a nurse. Often, real estate developers do not have existing staff with expertise in health and therefore require partnerships. The skill and dedication needed to work through these transactions and design the right type of housing needed for seniors takes a multi-disciplinary team, which is often a challenge to assemble.

Sources: Enterprise/MetLife Foundation
Case Study: Allina Health Attracts and Retains Older Workers

Mission: Amidst a tight labor market and a large amount of workers from the baby boomer generation on the cusp of retirement, Allina Health is proactively taking steps to attract and retain older workers.

Organization: Allina Health, Minneapolis, Minnesota

Program Details:

- Allina provides opportunities for phased retirement, flexible work schedules, and other accommodations like telecommuting and job sharing.
- Individuals who have already retired are also being brought on as contract workers.
- These efforts are essential for retaining skilled workers whose talents and experience are needed by employers, and they allow workers to boost or supplement their retirement incomes while staying engaged in work they enjoy.
- Allina benefits from lower turnover costs and is able to utilize the older workers by putting them in mentorship roles with less experienced staff members.

Lessons Learned: Allina is an outlier in American business as most employers do not prioritize the needs of older workers. Allina can act as a model for other employers, especially in the care field at large. To build broader buy-in, it would be beneficial if Allina shared data and metrics on the success of its effort in terms of retention rates and lowered turnover costs.

Source: Next Avenue
Technology Solutions
Technology: Role in LTC

Potential benefits:

- Data generated by new technologies may allow service providers or insurers to intervene earlier and with more specificity to lower costs and improve quality.
- The LCTI industry can utilize technology for better risk management of its pool of policyholders with better predictive analytics, providing a more rigorous assessment of benefit utilization.
- Insurance companies, as well as Medicare and Medicaid, will play essential roles in adoption rates because many of these products can be given to policyholders through their plans to encourage usage, as potentially a more effective distribution channel than a purely direct-to-consumer model.

Virtual visits
- Effective to pick up problems and improve responsiveness
- But hard to build relationships

Remote care
- For example, for patients with diabetes who might need complicated medication reminders

Scheduling
- Usually very expensive due to high administration costs
- Utilize technology to reduce costs and use important staff most efficiently

Communication
- Share problems, patterns, concerns, alerts with caregiver instantly
- Facilitate communication with the patient’s family
## Promising Technological Approaches

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<th>Predictive Analytics</th>
<th>Telehealth</th>
<th>Remote Monitoring</th>
<th>Assisted Mobility</th>
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<tbody>
<tr>
<td>Application of statistical techniques from data mining, predictive modeling, and machine learning that analyze current and historical data to make predictions about the future and allow service providers or insurers to intervene earlier to improve quality and lower costs.</td>
<td>Increased accessibility to primary and specialty care for individuals who live far away from their providers and for those who have transportation or mobility issues</td>
<td>Usage of digital tools to monitor patients' health and activity beyond the clinical setting to track health status and intervene before emergency medical care is required</td>
<td>Expansion of transportation and delivery services to increase independence and reduce cost burden</td>
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RECOMMENDATION: Improve Integration of Technology with Care Delivery

Increase Pilot Testing
- Pilot test technology that has worked in the health-care sector (e.g., predictive analytics, telehealth, remote monitoring, and assisted mobility) in multiple locations across different settings of long-term care

Interoperability
- Improve interoperability to support transitions of care across acute, post-acute, and long-term care settings, including care providing in home- and community-based settings

Close the Funding Gap
- Close the funding gap for technology to support LTC by establishing a federal-level small business seed fund targeting aging-related technology companies, modeled after the State Grant for Assistive Technology program; creating an impact investment fund supporting the development of emerging technologies; and scaling public/private subsidy programs for insurers and care providers to offer the technology at low/no cost to users
Trends in Telemedicine Use

Expansion of Telehealth under COVID-19

HHS Secretary Alex Azar waived certain restrictions on Medicare coverage of telehealth services for traditional Medicare beneficiaries during the coronavirus public health emergency.

Changes include:

- Lifting the requirement that beneficiaries in traditional Medicare must live in rural areas in order to receive telehealth services, meaning beneficiaries in any geographic area can receive telehealth services
- Lifting the requirement that beneficiaries in traditional Medicare travel to an “originating site” in order to get coverage of a full telehealth visit, which allows beneficiaries to remain in their homes
- Allowing telehealth visits to be delivered via smartphone
- Expanding services not limited to COVID-19, including regular office visits, mental health counseling, and preventive health screenings

Source: CMS
Data Exchange Challenges for Long-Term and Post-Acute Care (LTPAC) Providers

**Exchanging Health-Care Data**

- LTPAC providers include home care, hospice, assisted living facilities, Skilled Nursing Facilities (SNFs), inpatient rehabilitation facilities (IRFs), LTC hospitals, Program of All-Inclusive Care for the Elderly (PACE) programs, and others.

- The 2009 Health Information Technology for Economic and Clinical Health (HITECH) Act Meaningful Use incentive program only provided funding to acute care providers. As a result, LTPAC providers have had trouble accessing electronic data from a referring facility, such as progress notes, care plans, medication lists, and discharge summaries.

- The Medicare Post-Acute Transformation Act of 2014 (IMPACT Act) requires that assessment data in all LTPAC settings – home health agencies, IRFs, SNFs, LTC hospitals – be standardized and interoperable.

- Patients have limited or complicated access to their own information, inhibiting the ability to share their medical information with all of their health and LTC providers.

Source: Office of the National Coordinator of Health Information Technology (ONC)
HHS Issues Final Interoperability Rules

On March 9, 2020, the Office of the National Coordinator for Health Information Technology (ONC) released its final rule on interoperability standards, coupled with CMS regulations, largely focused on patient access to health information.

Payer Requirements

- **Implement API** (application program interface) services that allow patients to easily access claims and health interaction information on cost and some clinical information
- **Exchange** patient clinical data so that patients can take their health information to any payer seamlessly and build a cumulative record of their health care

Provider Requirements

- **Admission, Discharge, and Transfer Event Notifications:** CMS updated its rules to require hospitals to send notifications of a change in patient status (admission, discharge, transfer) to other care providers

Federal and State Requirements

- **Dually Eligible Data Exchanges:** State enrollee data for Medicare- and Medicaid-eligible individuals will now be exchanged daily, to ensure access to appropriately covered services
- **Public Reporting and Information Blocking:** CMS will publicly report which health-care providers are allegedly participating in information blocking so that beneficiaries will be aware of the interoperability participation of care providers in their area

Sources: ONC, CMS
RECOMMENDATION: Improve Utilization of Technology and Data

Technology Integration

- Establish a federal-level small business seed fund targeting aging-related technology companies, modeled after the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

- Create an impact investing fund to support the development of new technologies (could provide low-cost loans or equity from $100,000 to $1 million).

- Work with insurers and/or care providers to create a market pull mechanism, similar to an advance market commitment.

Data Integration

- Explore new partnerships with existing consumer channels to allow for better access to data, similar to the CVS/Aetna merger.
Case Study: Small Business Innovation Research and Small Business Technology Transfer Programs

**Mission:** Small Business Administration
SBIR and STTR programs support scientific excellence and technological innovation through the investment of federal research funds in critical American priorities to build a robust national economy

**Amount:** Combined ~$2.5 billion annually set aside by 11 participating federal agencies

**Overview:**
- **SBIR** is designed to encourage American small businesses to engage in federal research/research and development (R/R&D) with commercialization as the ultimate goal. The opportunity for commercialization provides added incentive for these businesses to take part in this competitive awards-based program.
- **Phase I:** Establish the "technical merit, feasibility, and commercial potential" of the awardee, as well as evaluate the small business' performance before allocating additional funding in Phase II. Awards are typically up to $150,000 for six months.
- **Phase II:** Proceed with the R/R&D efforts begun in Phase I. Available only to Phase I awardees, funding is contingent upon the outcome of Phase I and the scientific and technical merit and commercial potential of the project planned in Phase II. Awards are typically up to $1,000,000 for two years.
- **Phase III:** The small business will advance commercialization objectives stemming from the Phase I/II R/R&D activities. The SBIR program does not fund Phase III.
- The STTR program is an additional avenue for funding in the federal innovation R&D arena. Still, it includes the requirement for the small business to formally collaborate with a research institution in Phase I and Phase II. The STTR program aims to "bridge the gap between the performance of basic science and commercialization of resulting innovations."
- **Lessons Learned:** Current R&D funding for new assistive technologies, including the State Grant for Assistive Technology Program run by the Administration for Community Living, is limited. The SBIR program is unique in that it is geared to help drive new research and technology innovation but also support small businesses to grow and scale these new potential products. Some type of SBIR program or technology fund could be useful to encourage new technology development and move from proof-of-concept to real-market application.

Source: Small Business Innovation Research Program (SBIR.gov)
Case Study: Clean Energy Trust Impact Fund

**Purpose:** The Clean Energy Trust's impact fund provides seed funding, as well as more patient long-term capital, to promising tech companies in clean energy that need help to move from pilot to commercialization.

**Program Details:**

- The fund invests through an evergreen revolving fund (a mix of low-cost debt and equity stakes).
- Structured as a "501vc" or venture philanthropy, the impact fund provides funding that can take on more risk and be more "patient" because it is less driven by commercial rates of return.
- The fund also includes mentorship and facilitates partnerships between portfolio companies and more significant industry stakeholders that could provide strategic resources as the company grows.
- The funds are seen as complementary to funding that could be acquired through an SBIR grant or other, potentially more expensive, types of capital, including more market-rate VC investment.

**Lessons Learned:** Funds like the Clean Energy Trust allow for companies that have promising technologies to a) access cheaper, more patient capital and b) create the necessary relationships with market players to drive toward commercialization of their technologies. Parallels can be drawn from untested clean tech companies and those in the LTC space, as both have high costs to move past pilot to scale and both need customers, both individual and strategic, to allow for adoption. Many clean tech companies have to rely on uptake from agencies like utilities, much like LTC tech products may need to be integrated into government or nonprofit service providers. Navigating public-private partnerships and gaining low-cost capital could be a critical solution to get new tech in LTC to scale.

*Source: Clean Energy Trust*
Case Study: Meals on Wheels America Mobile App-Based Health and Safety Monitoring Program

**Mission:** Meals on Wheels (MOW) research program where meal delivery drivers utilize a mobile app to alert care coordinators when they observe adverse changes in medical and mental health, social abilities, or physical environment.

**Organization:** Meals On Wheels, developed in conjunction with West Health Institute and Brown University Center of Gerontology and Healthcare Research.

**Program Details:**

- MOW’s staff and delivery drivers get to know the clients with whom they regularly visit, giving them a unique opportunity to observe any changes in the person or the environment that may be of concern and could result in a health event if left unchecked.

- Drivers have access to an easy-to-use app-based monitoring program that will send real-time alerts to a care coordinator when something with a client is amiss. The care coordinator can quickly follow up with the client and connect them with any needed services and supports.

- The program started as a pilot in two communities, San Diego, California, and Guernsey County, Ohio, where 20 routes serving 850 clients were studied for one year. The results were encouraging, with 425 alerts sent for roughly 200 clients over the course of the year. It is now expanding to 26 communities across 16 states.

- The expansion will allow for greater data collection that could subsequently justify further investment for expansion of the program, potentially being implemented by all 5,000 Meals on Wheels-affiliated organizations.

**Lessons Learned:** Innovative utilization of an existing access point to also facilitate care coordination. The positive results from the initial pilot are promising, but more substantial testing of the model is needed to show ROI and develop a scalable operational model.

Sources: EMS1.com, Meals on Wheels America
Advance Market Commitment

**Purpose:** An advance market commitment (AMC) is a “market pull mechanism” through which an entity with a product that does not have mass-market application and thus has trouble accessing capital from investors who may be concerned about revenue potential, structures a partnership with a buyer of the products at agreed-upon prices and timing to ensure long-term revenue potential.

**Program Details:**
- The first AMC was designed in 2009 by the Global Alliance for Vaccines and Immunization (GAVI) and a consortium of donors, governments, and pharmaceutical partners.
- The concept was to have pharma partners develop and sell vaccines to countries that would traditionally not be able to pay market rates and thus were unattractive from a revenue perspective. GAVI, through funding from the consortium of donors and governments, agreed to purchase the vaccines from the pharma partners, at agreed-upon tiered pricing levels and timing over 10 years, to ensure that the pharma companies would receive enough revenue to make the investment in the vaccines attractive.
- The AMC ensured that vaccines were created and delivered to countries with the most need.
- The AMC guaranteed 30 million doses of vaccines each year for 10 years, backed by pledges from the donor consortium of roughly $1.5 billion.

**Lessons Learned:** The AMC is a tool through which the public sector and donors can help to create more of a market opportunity for companies, encouraging them to develop and distribute products in markets that would otherwise be deemed unattractive. This tool could potentially serve the LTC market when technology companies are scoping the adoption of their products but are unable to attract investment capital because of the perceived challenges or scale of the market. If governments, donors, or insurance companies could create a pool of funding to allow for the scaled-up purchase of new technologies that have a demonstrable impact on care delivery, then technology companies could utilize the purchase commitments backed by the funds to prove their business case to investors. However, questions remain about the scale and types of potential partnerships that could benefit from such a model. The vaccine AMC was quite successful but did face criticism about public and philanthropic funding “subsidizing returns” for pharma. More work would need to be done to understand market need and nuisance to avoid these issues.

**Source:** Gavi
Case Study: State Grant for Assistive Technology and Assistive Technology National Activities Program

Mission: The State Grant for Assistive Technology Program supports state efforts to improve the provision of assistive technology to individuals with disabilities of all ages through comprehensive, statewide programs that are consumer-responsive. The State Grant for Assistive Technology Program makes assistive technology devices and services more available and accessible to individuals with disabilities and their families.

The Assistive Technology National Activities Program provides information and technical assistance through grants, contracts, or cooperative agreements, on a competitive basis, to individuals, service providers, states, protection and advocacy entities, and others to support and improve the implementation of the AT Act of 2004.

Organization: Office of Interagency Innovation within the Administration for Community Living’s Center for Innovation, HHS

Amount: ~$28.1 million in grants awarded in mandatory funding to states and territories in 2019

Program Details:

- The State Grant for Assistive Technology Program provides a single grant to each state, the District of Columbia, Puerto Rico, and the outlying areas (American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the US Virgin Islands). A formula mostly dependent on population calculates grant size.

- The Assistive Technology National Activities Program provides grants to both public and private entities via a competitive process.

Lessons Learned: These programs are examples of federal grant-making that supports new technologies that aim to assist people living with disabilities. The programs exemplify how to structure government support for integration of new technology, including the ability to use not only grants but also contracts and cooperative agreements to provide a menu of funding options for stakeholders in the LTC marketplace. This includes helping to support direct-to-consumer, but also providing capital for state-level agencies and general service providers. Many times, private companies are reluctant to take government funding because of the perceived bureaucratic challenges, but having a menu of funding options can help alleviate some of the paperwork and time delays that are often associated with "one-size-fits-all" programs.
Case Study: Data Integration and Utilization in New Partnerships

Overview:

- Drug and grocery stores have begun setting up mini-clinics so consumers can get basic medical care like a flu shot or a blood test while shopping. For example, Humana and Walgreens have joined forces to create "care centers" oriented to older adults and offering primary-care services and representatives answering Medicare questions.

- With the acquisition of Aetna in November 2018, CVS took a big step in transforming itself from a pharmacy to a more complete health-care provider. The $70 billion deal made CVS the world's largest publicly traded health-care company. The vast physical reach of CVS provides an opportunity to reach patients in a community setting while leveraging Aetna's claims data and analytics on their 22 million members. CVS aims to use the data at its disposal to identify at-risk members/patients and direct them to testing and treatment early (available in-store), avoiding costly medical care down the road and ultimately saving Aetna in claims costs.

- Currently, CVS has about 1,100 MinuteClinics that provide services like immunizations and treatment of minor illnesses.

- CVS plans to open 1,500 HealthHub locations by the end of 2021 after piloting the concept in three stores in Houston. These new HealthHubs will be located in the Tampa, Atlanta, and Philadelphia areas.

- HealthHub will offer expanded health-care services and clinics with a focus on chronic conditions, with the ability to provide roughly 80 percent of the services of an average primary-care practice.

Lessons Learned: The CVS Aetna Merger and the partnership with Humana and Walgreens demonstrate how new collaborations can lead to better data integration and utilization, addressing the fragmentation usually found in the health-care system. The data capabilities of a combined CVS and AETNA provides the opportunity to identify needs/risks and execute on early interventions. It is also an example of how investing in early interventions can provide savings on costly care down the road.

Sources: Washington Post, Milken Institute Center for the Future of Aging
Next Steps
A Call to Action

- How can each market stakeholder come to the table to participate in this discovery phase? It’s clear there are new models for funding and service delivery that warrant more testing and design.

- The Institute is interested in continuing the work, through our Financial Innovations Labs series, in-depth solution-specific research, or web-based convening opportunities, to market-test these models and help to build consensus and interest in moving towards implementation.

- We will continue to vet the questions we are asking with relevant stakeholders to ensure we clarify what we know and what we don’t know.

- We will continue to enlist stakeholders who need to be engaged to round out a fully integrated system solution.

- We seek to find solutions that can move in the next year, three years, and/or five years. We seek solutions that can be politically palatable to both sides of the aisle. We also seek to mobilize the private sector to help support innovations.
The Financial Innovations Labs

Financial Innovations Labs are miniature think tanks in action, designed to devise new business models, policy recommendations, capital structures, and financial technologies that can achieve concrete goals. By bringing together a diverse group of stakeholders, Labs encourage collaboration between parties who may not normally interact.
Previous Financial Innovations Labs

Prior Lab Topics

- Renewable energy development
- Transportation infrastructure
- Water revitalization
- Vaccine propagation
- Industrial diversification
- Conservation
- Global health R&D
- Nutrition
Appendix
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<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Organization</th>
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<tr>
<td><strong>ACADEMIC</strong></td>
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<tr>
<td>Alice Bonner</td>
<td>Director of Strategic Partnerships</td>
<td>Johns Hopkins School of Nursing</td>
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<tr>
<td>Richard Frank</td>
<td>Margaret T. Morris Professor of Health Economics</td>
<td>Department of Health Care Policy, Harvard Medical School</td>
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<tr>
<td>Seth Harris</td>
<td>Distinguished Scholar</td>
<td>Cornell University and Seth Harris Law</td>
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<td><strong>GOVERNMENT</strong></td>
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<tr>
<td>Kelly Cronin</td>
<td>Deputy Administrator, Center for Innovation and Partnership</td>
<td>Administration for Community Living</td>
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<tr>
<td>Kathy Greenlee</td>
<td>Former Assistant Secretary for Aging</td>
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<tr>
<td>Elizabeth Halverson</td>
<td>Long-Term and Post-Acute Care Coordinator</td>
<td>Office of the National Coordinator for Health IT, HHS</td>
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<tr>
<td>Vijeth Vengat</td>
<td>Brain Health Lead and Technical Advisor to the Deputy Assistant Secretary for Aging</td>
<td>Administration on Aging/Administration for Community Living</td>
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<tr>
<td>Helen Lament</td>
<td>LTC Policy Analyst</td>
<td>ASPE</td>
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<tr>
<td>Erin Long</td>
<td>Aging Services Program Specialist</td>
<td>Administration on Aging</td>
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<td><strong>HEALTH AND LONG-TERM CARE EXPERTS</strong></td>
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<tr>
<td>G. Lawrence Atkins</td>
<td>Research Director</td>
<td>Long-Term Quality Alliance</td>
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<tr>
<td>Kelly Freedman</td>
<td>Vice President, Marketing</td>
<td>Assured Allies</td>
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<tr>
<td>Ronnie Hansen</td>
<td>Chair</td>
<td>SCAN Foundation</td>
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<tr>
<td>Caryn Hederman</td>
<td>Director, Health Reform</td>
<td>Convergence Center for Policy Resolution</td>
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<tr>
<td>Mike Hoff</td>
<td>CEO</td>
<td>Global Coalition on Aging</td>
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<tr>
<td>Freda C. Lewis-Hall</td>
<td>Chief Patient Officer and Executive Vice President</td>
<td>Piller</td>
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<tr>
<td>Mark Parkinson</td>
<td>President &amp; CEO (Former Governor of Kansas)</td>
<td>American Health Care Association</td>
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<tr>
<td>Carol Raphael</td>
<td>Senior Advisor</td>
<td>Marcell Health</td>
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<tr>
<td>Max Schmitz</td>
<td>Principal</td>
<td>Consulting Actuary</td>
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<tr>
<td>Rose Stone</td>
<td>Executive Director</td>
<td>American Association for Long-Term Care Insurance</td>
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<tr>
<td>Anne Tumlinson</td>
<td>CEO</td>
<td>Anne Tumlinson Innovations</td>
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<td><strong>INSURANCE</strong></td>
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<tr>
<td>Aaron Ball</td>
<td>Senior Vice President, New York Life Long-Term Care</td>
<td>New York Life</td>
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<tr>
<td>William Burton</td>
<td>Managing Principal, Retirement Income &amp; Risk Management - Long-Term Care &amp; Health Care Specialist</td>
<td>W. R. Burton &amp; Associates</td>
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<tr>
<td>Steve Cain</td>
<td>Director, Sales &amp; Business Development Leader</td>
<td>LTC Partners</td>
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<tr>
<td>Marc Ackerman</td>
<td>Vice President, Investments and Chief Sales Officer</td>
<td>UnCare Assurance</td>
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<tr>
<td>Timothy Bernard</td>
<td>Head of Innovation</td>
<td>Transamerica</td>
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<tr>
<td>Brad Roshen</td>
<td>Director, Actuarial, LTC Margin Analytics</td>
<td>Transamerica</td>
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<tr>
<td>Ben Weishvay</td>
<td>Head of Proposition &amp; Solution Development</td>
<td>Transamerica</td>
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# Interview List

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<tr>
<td>Linda Elam</td>
<td>CEO</td>
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<tr>
<td>Efrem Castillo</td>
<td>Chief Medical Officer</td>
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<tr>
<td>Merrill Friedman</td>
<td>Sr. Director, Disability Policy Engagement</td>
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<td>Jean Accius</td>
<td>SVP, Thought Leadership</td>
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<tr>
<td>Bruce Chernof</td>
<td>President &amp; CEO</td>
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<td>Jim Firman</td>
<td>President and CEO</td>
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<td>Terry Fulmer</td>
<td>President</td>
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<td>Howard Geckman</td>
<td>Senior Fellow</td>
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<td>Katherine Hayes</td>
<td>Director of Health Policy</td>
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<td>Kathy Hempstead</td>
<td>Senior Policy Advisor</td>
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<tr>
<td>Ellen (Eli) Hollander</td>
<td>President and CEO</td>
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<tr>
<td>Ruth Katz</td>
<td>Senior Vice President of Public Policy/Advocacy</td>
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<tr>
<td>Kathleen Kennedy-Townsend</td>
<td>Director of Retirement Security</td>
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<tr>
<td>Christopher Koller</td>
<td>President</td>
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<tr>
<td>Bob Kramer</td>
<td>Founder &amp; Strategic Advisor</td>
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<td>Shelle Leibold</td>
<td>President &amp; CEO</td>
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<td>Ariel Mir</td>
<td>Vice President</td>
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<tr>
<td>Kate Sloan</td>
<td>President &amp; CEO</td>
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<td>C. Grace Whiting</td>
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<tr>
<td>Jisella Dolan</td>
<td>Global Chief Advocacy Officer</td>
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<td>Peter Leibold</td>
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<td>Randy Lindner</td>
<td>President &amp; CEO</td>
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<td>Anne Pohnert</td>
<td>Director of Clinical Quality</td>
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<td>Bonnie Washington</td>
<td>Vice President, Head of Public Policy</td>
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<tr>
<td>Freddy Abnosi</td>
<td>Head of Healthcare - Research</td>
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<td>Rob Blatt</td>
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<td>David Fainberg</td>
<td>VP</td>
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<td>Eric Friedman</td>
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