FINANCIAL INNOVATIONS LAB®

Innovative Financing and Care Models to Scale Affordable Housing Solutions for Middle-Income Older Adults

JANUARY 2024
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INTRODUCTION

A profound demographic shift is underway in the United States. The US Census Bureau projects that by 2034, Americans 65 and older will outnumber those under age 18 for the first time in history—reaching an astounding 80 million by 2040, up from 55.7 million in 2020.¹ Those aged 85 and older, the group most often requiring assistance with basic care, are expected to nearly double, up from 6.7 million in 2020 to 14.4 million in 2040, a figure that will have quadrupled since 2000.²

Although this trend is a testament to societal progress and medical advances, it also brings about a unique set of challenges, notably the issue of providing high-quality and affordable housing and care options that meet the needs of older adults.

As Americans age, their choices about where to spend the later stages of their lives are often governed by financial resources, health status, familial circumstances, and level of desire for community engagement. Older adults can pursue a variety of housing and care options—including in-home services and alternative housing arrangements—that offer a range of supports depending on health and functional needs. Over the last several decades, the senior housing sector has expanded to meet evolving consumer preferences of socialization and autonomy, while integrating care on a spectrum that considers older adults’ fluctuating needs over time.

The increasingly diverse senior housing landscape is marked by a persistent polarity in the cost of its offerings. A plethora of private-pay options cater to the upper end of the income distribution, and a safety net of government-subsidized housing and care is available for lower-income families and individuals, but there’s a dearth of choices between the two. Most impacted by the gap is the neglected "middle market": a rapidly growing segment of the aging population who have incomes above the threshold to qualify for government subsidies but lack the financial assets to afford the housing and care they may need.

This middle market is made up of households earning between 80 percent to 120 percent of their area’s median income (AMI). The Department of Housing and Urban Development (HUD) uses AMI to determine eligibility for housing assistance and tax credits, for example. It also uses median, not average, to eliminate skewing by outliers. This AMI-range definition differs from the affordability metric created by the National Opinion Research Center (NORC) in the landmark study, “The Forgotten Middle:
Housing & Care Options for Middle-Income Seniors in 2033.” Coined the “forgotten middle” by the nonprofit National Investment Center for Seniors Housing & Care (NIC), this group comprises older adults (75 years and older) who must either remain at home and rely on family assistance to meet their care needs or spend down their assets to qualify for public programs.

It is projected that nearly three-quarters of the estimated 16 million middle-income older adults age 75+ in 2033 will have insufficient resources to pay for private assisted living. Even with home equity, 39 percent of middle-income older adults will be unable to pay for assisted living. Yet in this same cohort, 67 percent are projected to experience three or more chronic conditions, and 60 percent will have limited mobility.

The population of middle-income older adults age 75+ is growing—this group will nearly double between 2018 and 2033—and is increasingly diverse. By 2033, Black, Latinx, and other racially and ethnically diverse older adults will make up 22 percent of the middle-income older adult population, a 10 percent increase from 2018. An expanding proportion of older adults will be unmarried in 2033; 40 percent do not live with or near their children. With spouses and adult children providing significant unpaid care, these demographic trends will drive an increased demand for paid caregiving.

The increasing shortage of home health aides, caregivers, and certified nurse assistants amplifies the challenge, as do the financial, emotional, and physical impacts on family caregivers. Exacerbating the urgency, the COVID-19 pandemic left a wake of economic impacts that have put pressure on senior housing owners and operators. According to the real estate services and investment firm CBRE, higher overall costs, including materials, labor, operations, and employee benefits, contributed to a rise in senior housing development costs of 17.8 percent for the period 2020–2022. Without a commensurate rise in revenues, rising costs often translate into lower profit margins. In June 2023, Fitch Ratings cited ongoing high inflation and the tight labor market as the “major credit risk” ahead for both high-end independent retirement facilities and skilled nursing facilities.

For less-endowed properties facing default and bankruptcy, residents may be left to live in neglected buildings or with the risk of eviction. Key opinion leaders have noted that the rapid rise in interest rates and challenges meeting debt-service payments could put a significant number of properties at risk. According to Gibbins Advisors, a health-care advisory firm with expertise in restructuring, 17 filings from senior care facilities accounted for nearly 30 percent of Q1 2023 US bankruptcies, with debts totaling $10 million or more.

Still, there’s optimism ahead for the industry. The hard-learned lessons of the pandemic—how to improve control of disease spread, strengthen supply chains, and implement tech-enabled care models, for example—have ushered in beneficial industry disruption, with developers and operators reimagining how to design and deliver housing and care to drive up the overall value proposition for investors and consumers. Several innovative solutions that address costs, efficiency, and overall quality have
emerged, although challenges to achieve scale remain. This suggests an unprecedented role for the private and public sectors to coordinate across industries, revitalizing a challenging market and increasing the housing stock to serve middle-income older adults.

**Project Methodology**

The Milken Institute applied extensive market research and interviews with more than 80 stakeholders to analyze the most significant barriers to affordable middle-income senior housing and care. The initiative identified several novel solutions to unlock and scale new opportunities for financing and delivery. In July and August 2023, in partnership with NIC and CVS Health, the Institute convened a series of Financial Innovations Lab® (Lab) sessions. These Lab sessions brought together experts from health care, senior housing, and long-term care delivery, as well as finance, technology, government, philanthropy, and academia.

The stakeholder interviews narrowed the barriers to two areas of primary concern:

1. **Managing the costs of housing**
   - Land requirements and development costs, together with scarce and expensive capital for acquisition of existing properties pose formidable challenges to creating scalable middle-market housing solutions.
   - Limited sources of low-cost equity and debt make financing challenging.
   - Ongoing maintenance challenges and the need for capital renovations that permit existing communities to serve the evolving needs of older adults drive demand for long-term capital.

2. **Managing the costs of care**
   - The diversity of health-related value-based care models, reimbursement policies, and provider incentives create inefficiencies.
   - Obstacles to leveraging data and technology hinder the realization of cost and quality improvements.
   - Difficulty recruiting and retaining workforce, together with rapid escalation in labor costs, constrains operational capacity.

Through the Lab process, the Milken Institute identified four potential solutions to address the cost barriers:

1. Establish a social enterprise along with an advisory council to refinance and rehabilitate existing distressed senior housing properties.
2. Design a revolving loan fund to provide a sustainable source of long-term capital.
3. Use a pay-for-performance model with the following aims: (1) to attract upfront
funding for housing and (2) to provide a new revenue stream to offset the ongoing costs of providing supportive services (care)—by delivering long-term cost savings for the payer.

4. Launch a regional pilot to generate data supporting partnerships between senior housing operators and payers in value-based care.
ISSUES AND PERSPECTIVES

Senior Housing Landscape

As baby boomers have aged, the senior housing market has evolved to meet their changing preferences for social engagement, autonomy, and integrated care offerings. Senior housing operators have recognized the potential value of their role at the epicenter of social determinants of health (SDOH), a term used to encompass social and environmental factors that impact health outcomes, with housing at the forefront of the discourse.12

A spectrum of senior housing options exists, depending on preferences and level of care need. Skilled nursing facilities, also referred to as nursing homes, serve two different populations. They include individuals requiring short-stay rehab (less than 30 days), as well as those requiring a longer-term stay, for whom Medicaid is usually the primary payer. Residential care communities, which may include assisted living and memory care, provide care to those with less complex health care needs than skilled nursing. Assisted living provides a social lifestyle for older adults who are generally active but require help completing activities of daily living (ADLs), such as medication management, personal hygiene, and dressing, while memory care addresses the unique needs of those living with cognitive disorders. Independent living communities and age 55+ active adult communities cater to those who need little to no help with activities of daily living but seek community living with social amenities. Still more options, continuing care retirement communities (CCRCs), also known as life-plan communities, provide a continuum of care under one roof (or campus), from independent living to assisted living to memory care and skilled nursing. Alternatively, many older adults prefer to stay in their homes, often relying on community-based programs (e.g., adult day care centers), private caregivers, or family to help with their care needs.
Among those options, some 81 percent of residential care communities operated as for-profit entities in 2020, according to the National Center for Health Statistics. Additionally, 71 percent of nursing homes in 2023 operate as for-profits, according to an analysis by KFF. On the other hand, the majority—about 80 percent—of CCRCs operated as nonprofits. Nonprofit communities, which can be run by faith-based, community, or charitable organizations, are allowed to raise funds and apply for government and private grants to offset operational costs. For-profit and nonprofit communities generate revenue in similar ways (e.g., from rent, entrance fees, ancillary fees, medical billing, and reimbursements from third-party payers such as Medicaid).

**Consumer Payment Options**

Typical services provided in senior housing include room and board, security, socialization, activities, and care management. The cost of senior housing varies considerably based on personal care options, level of services needed, location, and availability of financial assistance. Categories requiring private payment include all independent living (as well as independent living phases embedded within CCRCs) and active adult (age 55+) communities. Private pay is also the primary form of payment for assisted living, memory care, and personal home care, with the average price for assisted living totaling around $60,000 annually.

Many CCRCs offer “life-care contracts” that offset the future price of care, much like long-term care insurance policies. As part of these contracts, CCRCs, which offer higher-end amenities and the full continuum of care, require an average entry fee of $427,000 and an average monthly service fee of $3,965 as of the third quarter of 2023, according to NIC MAP Vision. The less costly independent living communities operate under a traditional rental model without health-related services and average $3,170 per month, according to a 2022 survey of facilities nationwide. Figure 1 depicts the relative outlays associated with each level of care across the continuum of housing options.

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**What Is Senior Housing for the Middle Market?**

The term senior housing conjures up a variety of images ranging from assisted living to at-home care. NIC defines senior housing as a “combination of independent living, assisted living, and memory care units.” This definition incorporates communities that offer health care and supportive services within their properties. The general terminology can get tricky for consumers, as the industry’s lexicon may reflect state and federal definitions that dictate levels of regulation. In this report, we focus on senior housing meeting the NIC definition, while also highlighting emerging models bringing services out of the four walls of the property and into communities, multifamily housing, and individual homes.

As already noted, the definition used in this report for the middle market comprises households earning between 80 percent and 120 percent of their respective area’s median income, or AMI. Their earnings are too high to qualify for Medicaid long-term care services but not high enough to meet the rising costs of private pay senior housing options.
Based on eligibility and type of community, older adults in the lowest-income bracket may subsidize portions of the overall cost through Medicaid. Older adults with few to no assets can rely on Medicaid to cover the costs of room, board, and care in nursing homes, while coverage for assisted living depends on state requirements. Some states provide coverage only for personal care in assisted living, whereas others provide medication administration and homemaker services, depending on a waiver program.¹⁹ The Medicaid 1915(c) Waiver covers long-term services and supports in the home or community, including personal care or home-health aide services and home-delivered meals.²⁰

Certain home- and community-based services, such as the Program for All-Inclusive Care for the Elderly (PACE), offer services and supports for people 55 and older who are eligible for nursing home care but wish to remain in their community. Although PACE serves those eligible for both Medicare and Medicaid (i.e., dual-eligibles), for persons who do not qualify for Medicaid—those in the forgotten middle—the average monthly cost of PACE participation is many times higher than the average monthly cost for a dual-eligible individual, which therefore makes it untenable for the middle market.²¹

Medicare provides benefits only for short-term post-hospital rehab, home-health care based on strict eligibility requirements, and part-time or intermittent skilled nursing care—excluding the high costs of room and board.²² Medicare does not pay for non-medical home care, such as assistance with activities of daily living.²³
However, Medicare Advantage (MA) has emerged as an alternative to traditional fee-for-service (FFS) Medicare, with a variety of plans covering supplemental benefits like non-medical home care and adult day services. MA plans are Medicare-approved, private health insurance plans that combine Medicare Parts A (hospital), B (medical), and usually D (prescription drugs), as well as other benefits an enrollee selects. As of March 2023, 51 percent of Medicare beneficiaries were enrolled in an MA plan, a participation figure that has continued to rise since 2007. It is noteworthy that MA enrollees discharged from rehabilitation experience lower costs and greater well-being when compared to those enrolled in original Medicare.

Excluding Medicare and any pensions they may have, Americans fund their age-related housing and health-care needs privately through private long-term care insurance (LTCI), now exorbitantly expensive; retirement funds, such as 401(k) or 403(b); home equity; investments; savings; and help from family members. But 39 percent of Americans in the “forgotten middle” will still lack the financial resources, even if they count their home equity among their assets. Couples 65 and older are projected to require an estimated $315,000 to cover out-of-pocket health-care expenses during their retirement. Considering the average 401(k) account balance for an individual 65 and older was $185,858 in 2022, alternative sources of funding such as retirement funds and home equity are wholly inadequate to cover the rising costs of housing and care.

**Operations and Care Delivery across the Senior Housing Spectrum**

The price tag associated with senior housing is driven by owner/operator costs as well as location, size, property type, the type of on-site medical care and equipment provided, and the specific staffing, services, and amenities available. States regulate and license all senior housing other than independent living (housing that doesn't provide medical services). The operational costs associated with delivery, amenities, and oversight require efficient management and cost-control measures to drive high-quality care.

In general, staffing costs are the largest expense item and can account for up to two-thirds of overall owner/operator expenses. These costs have gone up significantly in recent years due to labor shortages across the US economy and were further exacerbated during the COVID-19 pandemic as the use of temporary agency workers was necessitated. Overall inflationary pressures and recent climate-related crises have also driven up insurance costs.

Given the high costs associated with this unique housing type, operators have focused on creating more affordable senior housing options through cost-saving programs. In some cases, residents can select from à la carte services rather than subscribe to a fixed package and tailor their living arrangements to their needs and preferences, allowing operators to reduce staffing and infrastructure costs. Florida-based Upside, for example, which now operates in 42 states, bills its offerings as “senior living without the facility.” Upside offers in-home à la carte services ranging from meal delivery and housekeeping to transportation and daily certified nursing assistant support. It also partners with
Operators have also established partnerships with external companies to manage expenses and outsource transportation, food service, and other amenities. 2Life Communities, advocating for “aging in community” since 1965, has a long history of offering affordable senior housing across the Boston area. 2Life Communities broke ground in March 2023 on its newest project, Opus Communities—seven years in the making and one of the first in the country designed specifically to house the “forgotten middle.”

To reduce operating and staff costs, Opus will, among other innovations, require 10 hours of resident volunteerism per month (e.g., teaching a class or hosting a coffee hour), offer meal service just three nights a week, and encourage memberships in nearby Jewish community centers to reduce in-house entertainment and activity costs. However, it is important to note that Opus is still working on plans to meet its residents’ preventive health and chronic disease management needs on site. This will involve working through licensed providers, as the property is not licensed to provide care services.

Meanwhile, Seattle-based Truewood, part of the family-owned Merrill Gardens and Merrill chain, switched to a universal employee model in late 2021 to save expenditure on temporary agency workers and reduce overtime costs for existing staff. This model allows staff, which it calls Resident Experience Partners, to cross-train in various departments to facilitate changing career paths inside the company. Truewood also reduced meal service and eliminated bus service, and instead covers residents’ use of Uber and other driver services. The model has proved successful enough that Merrill is planning 23 more Truewood buildings in 13 states.

Technology has revolutionized various sectors in recent years, and the senior housing industry is no exception. A significant shift has occurred in how care is delivered and managed, with technology playing an important role. Senior housing operators have begun to recognize advancements in technology as powerful tools to support workforce efficiencies, manage chronic care, and augment resident engagement programs. The implementation of “smart” devices, including lighting systems, movement detection sensors, and pill dispensers, helps support these outcomes.

In addition to its concierge one-on-one NaviGuide customer service program, the Marion, Ohio–based United Church Homes (UCH), which operates 80 communities across multiple states in the Midwest and South, has taken part in a pilot program to equip residents with Alexa-type tabletop devices and synchronized tablets (in an AI product called ElliQ) that present an “empathetic and proactive” response. UCH also uses robotic pets, telehealth, and digital assistants.

Electronic health records (EHRs) contain information and updates that can be accessed and maintained across various health providers. They are not the same as electronic medical records, or EMRs, which are generally in-house systems. EHRs allow operators to improve critical workflows and optimize time management, while increasing
compliance, quality, and revenue by capturing care costs for residents in real time. Yet many operators, especially those in smaller communities with tighter budgets, have been slow to adopt digital records because of costs, implementation standards, and workforce disruptions. According to a 2022 LeadingAge report, just 66 percent of large senior housing communities had implemented EHR software, which indicates a continued uphill battle for their smaller counterparts.  

**Integrated Value-Based Care Strategies to Manage Costs**

Operators are not only partnering with external service providers and technology companies but are also engaging with organizations that will pay for aspects of their residents’ care. Value-based care (VBC), unlike traditional FFS models, reimburses providers according to the quality, rather than the quantity, of care they deliver. The approach aligns with the three-part aim urged by the Centers for Medicare & Medicaid Services: reducing costs, targeting population health management, and improving overall experience.

In response, some operators in the senior housing and care industry have shifted toward VBC integration across the care continuum to stabilize operations. This has attracted health plans, health systems, accountable care organizations (ACOs), and MA networks interested in participating in the potential financial upside of improved resident outcomes. For example, large insurers such as United Health Group are becoming “pay-viders,” partnering with senior housing communities both to deliver care and to pay for it. Offering integrated VBC through a partnership with a health plan can improve health outcomes of residents and extend lengths of stay in senior housing even as acuity changes. The result positively impacts operational and financial performance in the form of maximized occupancy rates and improved tenant retention.
Figure 2 demonstrates the range of payer and provider financial responsibility, from no-risk FFS to full-risk VBC arrangements. Risk refers to the unpredictability associated with potential financial losses or gains. Payers and providers bear little to no risk in FFS because reimbursement is based on volume of services, whereas shared or full financial risk for patients' care can be transferred to payers and providers in VBC arrangements.

**Figure 2: Payment and Delivery Shifts toward Value-Based Care**

![Diagram showing the range of risk and financial responsibility: No Risk, Shared Savings, Shared Risk, Full Risk.]

*Source: Milken Institute (2024) adapted from American Seniors Housing Association, Curana Health, Juniper, and Lifespark*

Historically, MA non-medical supplemental benefits (e.g., transportation and nutrition) have targeted beneficiaries aging at home, leaving senior housing operators and their residents largely ineligible. However, a growing number of MA plans that serve long-term nursing home residents now cover the cost of additional benefits via Institutional Special Needs Plans (I-SNPs). Partnerships linking senior housing operators, care providers, and SNPs can be beneficial, as SNPs pay for and supply additional non-medical well-being and nutritional services, thus bringing down operational costs. Senior housing operators can also create their own MA SNP or contract with one of the many SNPs established by health plans. To own an SNP, operators may partner with a large health system that can accommodate the financial risk and has the capital to meet reserve requirements.
According to the DC-based health consultancy ATI Advisory, operator-led SNPs increased 38 percent from 2020 to 2021, reaching 98 plans. Despite the increase, this figure is contextualized by considering the roughly 30,000 assisted living communities and 15,000 skilled nursing facilities operating in the US.

While widespread agreement exists that MA plans will continue to play a significant role in shaping the industry in the years ahead, some operators have already made notable strides into the MA space. For example, several owner-operators—Juniper Communities (29 communities in New Jersey, Texas, Pennsylvania, and Colorado), Christian Living Communities (9 communities in Colorado), and Ohio Living (12 communities)—joined forces in 2019 to form Perennial, their own MA network. More recent partners include the risk-management company AllyAlign and provider groups, including McGregor, Graceworks, Jennings, and Covenant Health. As an operator-owned MA plan, Perennial Advantage can tailor benefits uniquely to their resident populations. Tailored, proactive plans reduce cost sharing and premiums, ultimately allowing operators to reap the financial upsides.

These holistic partnerships, which link housing with clinical payers and providers to underwrite unique MA plans, can potentially enhance long-term value for investors in for-profit communities. Reducing financial risk may allow a higher valuation relative to a competitor lacking integrated care. Operators gain the opportunity to deploy new resources—including technology to aid operations, data management for reimbursement streams and effective monitoring, and greater purchasing power and strategic planning—thus expanding access and affordability.

### Funding Senior Housing Development

Building a senior housing community is a complex, expensive endeavor, with costs associated throughout its predevelopment and construction phases. According to a 2022 report by the commercial real estate company CBRE and based on a survey of 142 projects, the average size of a project was 129 units with an average cost of $42 million, equating to $317,400 per unit or $333 per square foot in 2022. This was up 17.8 percent since 2020.

Figure 3 shows cost breakdowns along various phases of the venture. In the *predevelopment phase*, even before construction, a developer incurs expenses related to feasibility studies, land acquisition, zoning and permitting, architectural and engineering designs, and legal consultations. At this stage, the developer assesses the project’s viability, identifies risks, and devises funding strategies. According to the survey results, predevelopment expenses make up 8.2 percent of total project costs on average.

Next comes the *construction phase*, which consumes the lion’s share of the budget. These *hard costs* include building materials, labor, equipment, and contractor fees. Given the specialized nature of senior housing, additional hard costs may include special amenities such as ramps, industrial kitchens, emergency call systems, wellness centers, rehab rooms, special showers, and lift apparatuses. This phase encompasses sitework,
foundation work, shell construction, roofing, interior finishes, landscaping, signage, and labor. Add to these the soft costs—inspection fees, construction loan costs, architectural and design costs, and project management—and almost 89 percent of the project's budget is spent, with the remainder to cover fixtures, equipment, and furnishings.

**Figure 3: Average Costs: Senior Housing Construction**

<table>
<thead>
<tr>
<th></th>
<th>Average of total development costs (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site acquisition costs</td>
<td>8.2</td>
</tr>
<tr>
<td>Hard costs (e.g., sitework, foundation, building shell construction, roofing, interior finishes, landscaping, signage, and labor)</td>
<td>70.2</td>
</tr>
<tr>
<td>Soft costs (e.g., inspection fees, construction loan costs, architectural and design costs, project management)</td>
<td>18.5</td>
</tr>
<tr>
<td>Furniture, fixtures, and equipment (FF&amp;E)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*Source: Milken Institute (2024) adapted from CBRE*

Developers who want to focus on new middle-income senior housing may be challenged with securing financing, especially in today's higher interest rate environment. Other factors are at play, as well. Traditionally, property deals start with a mix of equity and debt from multiple sources, as shown in Figure 4. But because property under development generates no revenue, a bank is less likely to underwrite a loan to cover the entire early costs.

Equity capital is often used to secure additional financing. Most new development deals have a mix of 25–35 percent equity with the remaining debt to be financed (65 percent to 75 percent loan-to-value [LTVs]). In today's challenging capital market environment, these figures are closer to 55 percent debt and 45 percent equity as of the release of this report. The challenge for middle-income housing developers is where to source this additional capital.
CCRC developers may charge a resident a prepaid entrance fee, a little over $427,000 on average in Q3 of 2023. They use this upfront capital as the equivalent of a down payment to help fund the construction of the property. In most instances, not-for-profit CCRCs will secure tax exempt bond financing, and in some instances, they will secure bank financing. Entrance fees for middle-income residents require that residents have equity in their homes from which they can use for the entry fee. This is the model that 2Life Communities has used for its Opus middle-market community.

And unlike developers of affordable housing, middle-income senior housing developers can’t access subsidies like federal grants, loan guarantees, or tax credits; HUD’s Low-Income Housing Tax Credit (LIHTC), for example, has become one of the most common ways to acquire equity for low-income affordable housing. In tax equity financing, the developers can sell and trade their tax credits, and the sale proceeds then acts as their equity. Again, middle-income senior housing developers must look for alternative forms of equity and long-term debt to fund development.

Using conventional senior housing development, staffing models, and program design approaches will not deliver a viable project at a price affordable to middle-income consumers and bring investment returns that can attract private investment. Given that middle-income senior housing has no public funding or financial support, developers have few viable financing options. The following section outlines who provides capital and financing incentives for senior housing across the various income and eligibility brackets to demonstrate the programs and policy changes that could benefit this market segment.
Emerging Real Estate Owned Properties Crisis

Senior housing communities were one of the hardest-hit real estate classes in the wake of the pandemic. Occupancy rates plummeted and operating costs continued to increase. As the market recovers, and higher-end communities are in greater demand, older buildings in need of updating and maintenance face competition from new-builds with improved amenities. With turbulent capital market conditions, including rising interest rates combined with a substantial amount of senior housing debt with floating interest rates coming due, the industry is likely to see an increase in the number of "real estate owned" (REO) properties by lenders after unsuccessful attempts at refinancing, sale, or ultimately foreclosure sale.

For years, Fannie Mae, Freddie Mac, and other government-sponsored enterprises (GSEs) have created liquidity in the mortgage market by purchasing mortgage loans originated and funded by banks, credit unions, and mortgage companies, and securitizing them to sell to investors. The financing has included senior housing properties offering independent living, assisted living, memory care, and some properties with skilled nursing units. Fannie Mae alone has financed more than $15 billion in senior housing since 2008. This financing, however, is only available for existing, stabilized, purpose-built senior housing properties and not for development or leased properties.

Now, the GSE and other traditional lenders, such as large and regional banks, are challenged with a growing number of distressed properties. In a functioning real estate market, pricing is a function of supply and demand, as evidenced by property valuations and appraisals that, in turn, are largely based on recent sales of comparable properties. But post-COVID-19, rapidly rising interest rate environment with few available debt sources, establishing a price acceptable to buyers and sellers alike has grown difficult. The result is that mortgage servicers, who want their loans repaid, and investors, who seek a fiduciary return for their investors, are challenged to keep funding these properties.

However, amid this crisis lies an opportunity: to buy and rehabilitate senior-housing REO properties, turning them into middle-market affordable, stable, healthy communities.

Government Funding and Financing Options

Select government programs exist to help secure debt financing for projects targeting middle-income residents. As noted, Fannie Mae and Freddie Mac (see sidebar) are already in the business of securitizing loans to sell to the capital markets. The loan securitization programs allow lenders to offer more attractive rates and terms because the GSEs guarantee the liquidity that comes with purchasing and selling the securities. These GSEs are the main public agencies in middle-income housing because most
traditional government capital and incentives are available only to developers of lower-income affordable housing. In addition, HUD and the Department of Agriculture offer some borrowing opportunities.

However, other federal programs exist for middle-income housing development but not specifically for senior housing, where the added costs of health-related services put the development outside the scope of the eligibility profile. For example, Freddie Mac has a Workforce Housing Preservation program that targets a more middle-income market. It encourages keeping at least 20 percent of a project’s units at or below 80 percent AMI, and in turn, provides flexible and cheap debt capital. It would need to be redesigned for senior housing developments and then marketed to attract builders to take advantage of this more patient capital.

At the state and municipal levels, there are also government programs designed to spur development, and while these could be helpful to senior housing owners, they aren’t yet designed for this use. For example, inclusionary zoning ordinances encourage increased housing access, mixed-income, and transit-oriented developments by allowing for fewer parking requirements and high-density residential incentives for multifamily development. Reductions of 50 percent or more in automobile parking requirements can save developers $20,000 or more per space in construction costs. Minneapolis is a case in point. For increased housing access, Minneapolis instituted its Minneapolis 2024 Plan, making it the first major US city to eliminate zoning regulations for specific lot sizes that would otherwise prohibit the construction of duplexes and triplexes, allowing for accessory dwelling units (ADUs), also known as granny flats, mother-in-law flats, and backyard cottages, which benefit older adults.

The New York City New Housing Opportunities Program helps developers subsidize costs through a few financial instruments combined into one program. The city’s Housing Development Corporation (HDC) provides below-market mortgages to developers for the construction of moderate-income rental housing (i.e., for households earning up to 130 percent of AMI). To provide below-market rates, funds are made available through the proceeds of taxable bonds, as well as through HDC’s corporate reserves, which are used to make second mortgages at a 1 percent interest rate. If it is new construction, there must be at least 50 affordable units in the building; otherwise, rehabilitation and conversion are acceptable. While all these tools support housing development, they don’t focus on senior housing and wouldn’t be enough to fulfill the current middle-market demand for public-sector funding and financing.

**Private-Sector Funding and Financing**

Senior housing also benefits from private investment, although different types of capital providers target different market segments. As noted, higher-end communities attract private investment and conventional bank debt to finance their projects. Lower-income markets, those below 80 percent of AMI, have access to government programs for equity, as well as certain financial institutions and investors interested in impact
investing. For example, a traditional affordable-housing developer can take advantage of HUD’s LIHTC for equity and then go to a community development finance institution that offers loans with concessional financing.

Philanthropic capital uses grant funding as low-interest loans or as a type of insurance (known as a credit enhancement) for repayment. Among these are private equity firms such as Santa Monica–based Turner Impact Capital and New York-based Jonathan Rose Companies, which provide affordable housing financing for income-restricted properties. Cobbling together financing for affordable housing is not a simple process, and limited financing programs exist across the income spectrum, making for stiff competition. However, very little of that capital is available for the majority of middle-income developers because, like the government, most impact-focused investors have an income limit for eligibility. Some of the more mission-driven organizations could still support some developments, depending on the AMI requirements, but these organizations are few in number.

Consumers aren’t alone in their interest in senior housing. Given its historically strong rental and occupancy rates, even during economic downturns (COVID-19 was an early outlier, but perhaps a sign of things to come), the capital markets have been interested in senior housing for the past few decades. Investor interest generally focuses on higher-end senior housing communities (e.g., independent living, assisted living, memory care and, more recently, active adult communities). In 2020, one large institutional investor raised $1 billion for a senior housing fund. Many other large private equity investors are also active in the space.

Large health-care corporations and insurance companies have increased their investments. Some, like Humana and CVS Health, recognize the bottom-line benefits of addressing their aging members’ social determinants of health, which include the need for affordable housing and integrated care, and have started to use their philanthropic arms to invest in affordable housing projects that provide support services. Although this kind of private-sector momentum is a positive development, it doesn't address the burgeoning housing crisis ahead for the aging middle class.

The challenges to funding and financing senior housing construction are substantial, but they represent only one dimension of development. In addition to brick-and-mortar considerations, owners and operators must contend with the steep costs of care, which many Lab participants noted was the principal hurdle to making the business case of these projects appealing.
BARRIERS

The Lab process identified several critical barriers in scaling senior housing and care options for middle-income older adults. Interviews and engagement with stakeholders narrowed the barriers to two areas of primary concern:

(1) managing the costs of housing and
(2) managing the costs of care.

Managing the Costs of Housing

This section begins with the obstacles that inflate the costs of capital on the real estate side and follows with barriers to care, before addressing innovations that should help integrate and scale middle-income housing with health-care and SDOH offerings.

Land Requirements and Development Costs Together with Scarce and Expensive Capital for Acquisition of Existing Properties Pose Formidable Challenges to Creating Scalable Middle-Market Housing Solutions

Whether it’s an independent-living, assisted-living, or memory-care property, a site will require significant space for housing and the facilities necessary for dining, common areas, parking, and other features. Developers may find it difficult to compete for larger land parcels and property while they pursue funding in a timely and cost-competitive manner. Site acquisition costs for fully permitted projects represented a significant component of the total development cost—for 2022, an average of $30.80 per square foot of the gross building area, or 8.2 percent of the total, as noted earlier (see Figure 3). Site acquisition costs, including area density, the regulatory climate, and demographic trends, generally range from $12,100 to $33,500 per revenue unit (i.e., each income-producing residential unit).\

Again, traditional lenders tend to see predevelopment and acquisition loans as high-risk—because there is no revenue yet generated from the project—and thus set higher interest rates. Smaller community-based and nonprofit organizations without reserves or lines of credit may find themselves excluded from the process. And small, lesser-known developers with no track record may find that they can’t access the finite supply of grants or other equity.
Limited Sources of Low-Cost Equity and Debt Make Financing Challenging

The middle-income senior housing consumer has also grown to expect certain amenities and standards. Without significant changes to the operating model that still deliver on customer expectations, developers are likely to face the prospect of slimmer profit margins, which would also discourage traditional equity investors, hedge funds, and venture capitalists, despite the growing size of the market, its near guarantee of unlimited demand, and its viability as an investment option.

The expectation of reduced profit margins may deter traditional banks and lending institutions, as well. They may be more prone to view these developments as less resilient to market fluctuations or downturns. Even when debt financing is available, it may come with higher interest rates or less favorable repayment terms, reflecting the lender’s perception of risk and uncertainty.

Ongoing Maintenance Challenges and the Need for Capital Renovations That Permit Existing Communities to Serve the Evolving Needs of Older Adults Continuously Drive Demand for Long-Term Capital

Housing requires long-term capital flows, and access to sustainable sources of capital whose backers can accept longer horizons for returns or payoffs. No doubt, many of the properties now labeled or at risk of becoming REOs faced a sudden, dramatic financing crisis when lower property valuations due to industry occupancy challenges, combined with a sudden surge in interest rates, wiped out the original equity and refinancing was prohibitively expensive. The lack of access to capital that understands and supports longer time horizons affects how owners will continue to manage property improvements. Without options for low-cost and more flexible permanent capital, middle-income senior housing developments will struggle to scale.

Managing the Costs of Care

Operating costs present their own barriers, particularly when a property also offers supportive services (care), and medical provision.

The Diversity of Health-Related Value-Based Care Models, Reimbursement Policies, and Provider Incentives Creates Inefficiencies

Senior housing operators may work with both public and private payers, including Medicare, Medicaid, private insurers, and accountable care organizations. Each of these payers has its own set of rules, regulations, and payment structures. Each has unique quality measures and reporting requirements, which can be complex and time-consuming for operators—ultimately hindering efforts to improve care quality. This fragmented payment landscape leads to inefficiencies, administrative complexity, and disparities in VBC delivery.
Additionally, payers and operators are guided by their own incentives, which lead to fragmented, siloed relationships. Only when these incentives are aligned can joint ventures share data more freely and coordinate more effectively.

**Obstacles to Leveraging Data and Technology Hinder Care Quality and Cost Savings**

Data-driven operations strategies that leverage technology innovations are crucial to the positioning of senior housing as a valuable hub for coordinating services. They are also essential to propelling health progress and realizing the benefits of VBC models. Yet many senior housing operators are early in this transition.

Barriers pertain to initial and optimal investment, particularly in the context of data sharing and interoperability. Data capability issues include the need to establish uniform data formats, lexicons, and standards to enable data sharing and needed infrastructure. For example, operators employ a number of technologies in collecting various data points to manage the overall health of their residents, but translation of these insights to demonstrate the health and cost benefits of their services to health payers often falls short. Additionally, payers and providers may use different codes, terminology, and data structures, making it challenging to reconcile and integrate information.

**Difficulty in Recruiting and Retaining Workforce Together with Rapid Escalation in Labor Costs Constrains Operational Capacity**

Staffing constitutes the largest portion of operational costs in the senior housing and care industry. This includes salaries, wages, benefits, and training for nurses, nursing assistants, frontline workers, administrative staff, and technicians. It’s expensive to offer high-quality training, competitive wages, and opportunities for career advancement, but these are essential for attracting and retaining a skilled workforce. According to the Bureau of Labor Statistics, the cost of labor in the senior housing and care industry has increased by 11.2 percent just since 2021, leading to higher costs for residents. This is a chronic issue, reflecting both the unique demands of the industry and highly competitive labor markets. Hospitals and other health-care providers frequently offer more competitive wages and benefits, which makes it difficult to attract and retain talent in senior-care settings. Additionally, limited career advancement, low pay, and lack of incentives contribute to high turnover and shortages. Although the use of temporary agency labor has fallen sharply in 2023, shortages attributed to COVID-19 have forced operators to rely on overtime and agencies to augment staffing, resulting in higher labor expenses. Recruitment and retention of staff are likely to remain ongoing challenges as the population ages and the demand for care rises.
INNOVATIVE SOLUTIONS

Lab discussions revolved around opportunities to improve the financing and delivery of affordable senior housing. Through the Lab process, the Milken Institute identified four potential solutions to address the barriers cited earlier:

1. Establish a social enterprise along with an advisory council to refinance and rehabilitate existing distressed senior housing properties.
2. Design a revolving loan fund to provide a sustainable source of long-term capital.
3. Use a pay-for-performance model with the following aims: (1) to attract upfront funding for housing and (2) to provide a new revenue stream to offset the ongoing costs of providing supportive services (care)—by delivering long-term cost savings for the payer.
4. Launch a regional pilot to generate data supporting partnerships between senior housing operators and payers in value-based care.

Establish a Social Enterprise along with an Advisory Council to Refinance and Rehabilitate Distressed Senior Housing Properties

Driven by the impact of COVID-19, inflationary expense pressures, and the current dislocated debt markets, some senior housing properties need major rehabilitation, while others are on the verge of foreclosure. Some independent-living, assisted-living, and memory-care properties are already REOs and are back with the lenders, including the GSEs of Fannie Mae and Freddie Mac and their partner banks, while others are in levels of distress. However, the lenders often have no means of stabilizing the properties and face heavy financial losses. Thus, residents risk losing care and housing if the buildings are left to inattentive or transitional management companies.

This presents a historic but critically time-sensitive opportunity to use properties like these to protect older residents from dislocation: leveraging the troubled assets through innovative financing into housing for the forgotten middle. Lab participants identified a significant inventory of properties that will be financially underwater over the next 12–24 months. These properties could benefit from debt restructuring and repurposing to address housing scarcity for the burgeoning market of middle-income older adults.
The Lab proposed a two-phase pilot program involving the establishment of an advisory council and a senior housing social enterprise that would act as the leveraging intermediary between lenders and buyers. A social enterprise (SE) is defined as an organization that applies business strategies for financial, environmental, and social good. The SE targets one or more social, financial, or environmental goals; aims to generate revenue from its goods and services rather than rely solely on grants or donations; and incorporates nonprofit and for-profit business structures.

The advisory council would be vetted and established by key stakeholders—lenders, operators, investors—who are aligned by a shared purpose to serve middle-income older adults. The advisory council itself would comprise best-in-class middle-income senior housing operators and senior housing-focused financial experts. They would advise lenders of REOs and distressed properties on the financial “workout” (next steps) and operating strategies to transition and stabilize these properties for the middle market.

Phase I of the proposal, as shown in Figure 5, would establish the advisory council. Traditionally, a defaulting property works with the servicer of its debt, the company hired by the lender to manage the loan process, as well as a special servicer who is brought in during times of financial stress. Servicers have experience in REO properties, but the senior housing market has the additional nuance of the health-care component, which can introduce greater challenges. The council of owners, operators, and industry financial experts would likely be of great assistance.
The advisory council, therefore, would serve three important functions: (1) examine the portfolios of distressed assets, (2) design market-driven recommendations to help stabilize selected properties, and (3) work with loan servicers to provide financial and physical insights during each property’s "workout" phase—the time required for working out the next steps necessary to achieve financial stability. The properties, for example, may have been built to serve the upper-middle or lower-higher income brackets but are now older, outdated, and with small unit configurations that can’t compete with newer properties and their suites of amenities. Aligned operators and capital, along with the advisory council, could create a series of workouts (next steps) for restructuring these properties to serve the middle market and maximize value.
Social Enterprise Structure

The structure of an endeavor could borrow characteristics from several forms. Land banks and land trusts, as shown in Figure 6, are both vehicles for aggregating land for community development. Land banks and land trusts can be versatile, with each structure having unique characteristics. Some land banks are public authorities or nonprofit organizations devised to acquire, hold, manage, and occasionally redevelop properties to return the land to good, productive use. Some land trusts are private nonprofits that acquire and hold land permanently for the public good.

Key Phase II Structural Considerations:

- Is a social enterprise the most effective structure? What are the important characteristics of a land bank, a land trust, and a social enterprise that should be included?
- Should it be not-for-profit, for-profit, or hybrid B-corp?
- What classifies a distressed senior housing property as suitable for this aggregating entity?
- What lenders should be involved and entitled to participate?
- Which operators and investors would be the capital partners most aligned to the social enterprise as it seeks a more proactive Phase II preservation program?
- What restrictions should be placed on operators to keep the properties middle-market?
- How much working capital would the senior housing vehicle need?
- Where does the investment capital come from?
A senior housing social enterprise would need its own characteristics. The entity could be employed in the short term to acquire the asset to facilitate a financial restructuring; it could also be empowered to hold properties for a longer term to stabilize and rehabilitate them. The National Community Stabilization Trust (NCST) is the model example of a transfer entity, serving as an intermediary between the lender on foreclosed or sold property and the community partner buyer.

Established in 2008 during the mortgage crisis, NCST is a nonprofit organization that restores vacant and abandoned properties to productive use and protects neighborhoods from blight. NCST doesn't take title to the properties; it acts as the intermediary to transfer the title to local responsible buyers and developers who buy and rehab the homes, and then sell them as affordable housing. The organization states that 80 percent of its properties are owner-occupied, not sold to cash buyers. NCST's First Look REO acquisition program allows local housing and community development organizations to obtain properties before they are marketed more broadly. NCST also partners with Fannie Mae and Freddie Mac’s Neighborhood Stabilization Initiative, offering Fannie and Freddie REO properties to local housing and community development organizations in 18 strategic markets.

### Figure 6: Land Banks and Community Land Trusts

<table>
<thead>
<tr>
<th>Land Bank</th>
<th>Community Land Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legal Structure</strong></td>
<td>Public entity (may be a nonprofit or public authority)</td>
</tr>
<tr>
<td><strong>Governance</strong></td>
<td>Board/governance defined by state statute/intergovernmental agreement (mix of public/private/community)</td>
</tr>
<tr>
<td><strong>Mission</strong></td>
<td>Acquire tax-delinquent, vacant, abandoned properties and connect to responsible end use/user</td>
</tr>
<tr>
<td><strong>Acquisition</strong></td>
<td>Special acquisition powers or preferred access to property (e.g., tax or lien foreclosure)</td>
</tr>
<tr>
<td><strong>Management/Maintenance</strong></td>
<td>Manage/maintain vacant and abandoned property, hold land tax exempt</td>
</tr>
<tr>
<td><strong>Disposition/End Use</strong></td>
<td>Dispose of property to responsible transferee according to community goals</td>
</tr>
</tbody>
</table>

Source: Grounded Solutions Network and Center for Community Progress (2023)
The senior housing industry could emulate this kind of entity and act as the intermediary in identifying and aggregating distressed properties, and then transfer the title temporarily to owners and operators for stabilization. This intermediary entity could help lenders move their claims on the properties to the entity, and then vetted owners and operators could temporarily hold and rehabilitate the assets. The entity could either transition the property back to the lender (providing maximum repayment) and its original owners, or the temporary owners could buy the property outright.

Figure 7: Phase II: Social Enterprise Structure

Source: Milken Institute (2023)

Types of Properties

During the Phase I 25-property “test run,” the advisory council would likely look at properties that could most easily be shifted to serve middle-market demographics (i.e., those that could be repurposed before being sold at auction or repositioned). There should be a narrow focus on housing with coordinated care services, meaning assisted living and memory care facilities that have already been zoned and licensed to perform
those services. These properties, which would need financial restructuring but minimal investments in infrastructure, could serve the middle market quickly.

These properties would have overall lower costs for the new owners and operators. The property values would have depreciated during the market turmoil, and their limited amenities and/or smaller units would make them less desirable to consumers at higher ends of the market. Restructuring and repurposing such a property could take rents from $4,000–$5,000 down to a more manageable $3,000 because of the cost savings established during the workout process.

Building on momentum from initial properties in Phase I, the property list could expand to include those in greater need of physical infrastructure rehabilitation or greater capital expenditures such as for equipment and technology advances.

Types of Owners and Operators as Partners

Financial and operational alignment is key to facilitating successful outcomes for these Phase II distressed assets, with, ideally, a mix of for-profit and not-for-profit senior housing providers vetted to repurpose these properties, preserve middle-market affordability, and limit fallout to institutional lenders. These owners and operators must demonstrate commitment to the lower- and middle-income senior housing market and have the financial capacity to take on these projects. A process could be developed for appropriate matching of owners and properties based on market, asset type, and other factors.

- Lab participants acknowledged that to keep this effort focused on middle-market older adults, operators would need to abide by some income restrictions. These could include:
  - Committing to a 5- to 10-year income restriction term (after which the rate terms could be negotiated) serving 80–120 percent AMI.
  - Requiring participating operators to use a standard chart of accounts and establishing goals to ensure consistent, uniform reporting and monitoring.
  - Requiring standardized clinical data reporting to align with health-care outcomes and potential subsidies.

Capitalization

The social enterprise pilot would need a capitalization plan to raise funds for debt restructuring and paydown as well as working capital for minor physical rehabilitation, and to fund short-term operating losses. However, participants expressed an interest in seeing the implementation of the social enterprise in the near term and didn’t want a specific fundraising goal to stall the effort before it started. Ideally, the target size would be around $100 million and include capital raised from investors as well as equity contributed by the vetted operators (who would be re-evaluated every few years to continually open access for additional operators) in exchange for their access to the properties.
Land trusts traditionally use a mix of philanthropic, public, and impact-focused funding. However, given that this social enterprise will target middle income, it may not qualify for foundations or other donors that have low-income mandates. Lab participants discussed how to engage corporate partners as well as philanthropic organizations that focus on aging and older adults.

The creation of a loan-loss reserve could provide funding to help lower the property risk profiles for the new or retained owners/operators. They could tap into the fund, which would act as insurance to cover the building’s debt service, if they needed additional time to regain financial stability and make payments. This would open the pool of applicants to include smaller owners/operators by helping them obtain loans or more favorable financing terms from banks and financial institutions that may not otherwise finance these projects.

Data
As discussed, Lab participants believe that many senior housing owners and operators possess valuable clinical data about their residents that could contribute to a standardized dataset. Such information would help articulate health assessments that would translate into cost savings and operational efficiencies for providers, payers, and the overall health-care system. This data would help strategic partnerships between payers and senior housing providers so that both could reduce financial risk and provide higher-quality care.

**Next Steps:**

- Convene a meeting with lenders to discuss a proposed social enterprise structure, financials, and operating activities.
- Form a Phase II coalition of expert, experienced for-profit and not-for-profit senior housing providers and developers to repurpose these properties, preserve affordability, and limit fallout to institutional lenders.
- Create a standardized health data accounting chart required for properties to participate in rehabilitating the distressed assets.
- Develop a pilot (largely based on NCST), acquiring approximately 100 distressed senior housing properties and giving ownership and rehabilitation means to 10 vetted middle market senior housing operators to each manage 10 of the properties.
Design a Revolving Loan Fund to Provide a Sustainable Source of Long-Term Capital

Creating housing for middle-income older adults at a scale that meets market demand will require new forms of capital to lower the borrowing costs for developers, which in turn will allow a lower price point for the units themselves. As discussed, these projects don't have rapid revenue streams—or even strong revenue streams. Obtaining equity for early costs will not produce a 20 percent rate of return. And banks will not lend 100 percent of the cost. As such, Lab participants discussed an alternative financing model that could lower the cost of capital for the initial development and potentially for later stages of operations and maintenance as well.

As seen in Figure 8, this could include a subordinated type of financing whose repayment would follow the senior tranche. In case of default, the “senior” debt lender would be repaid before the “junior” lender. Assuming a traditional 75 percent loan-to-value senior debt piece (meaning 75 percent of the property's value is owed, with 25 percent ownership or equity invested into the property), the fund could potentially cover a significant portion of the remaining debt, even if the developer can only contribute a small amount of equity.

Figure 8: A New Tranche of Lender Capital

<table>
<thead>
<tr>
<th>Market Rate</th>
<th>Share</th>
<th>Investors and Rate of Return</th>
<th>Examples of Designated Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Equity Raise</td>
<td>5%</td>
<td>Developer, investment firm 13–14%</td>
<td>Predevelopment (including land acquisition), entitlements</td>
</tr>
<tr>
<td>Senior Debt</td>
<td>65–75%</td>
<td>Lenders 5–6%</td>
<td>Ongoing mortgage</td>
</tr>
<tr>
<td>Mezzanine Debt</td>
<td>20–30%</td>
<td>Revolving fund 8–10%</td>
<td>Construction</td>
</tr>
</tbody>
</table>

Source: Milken Institute (2024) adapted from AECOM

A revolving loan fund offers this type of concessionary financing. As initial loans are repaid, that money is lent to new borrowers. The Clean Water Act's State Revolving Fund (SRF) is a notable example of this mechanism in action. The federal government provides grants to states, which in turn can match a portion of these funds. These combined funds create a pool of money, which is then loaned to municipalities or other entities for wastewater treatment, stormwater management, pollution control, or other water-related projects. As these entities repay their loans, the money flows back into the SRF, allowing the state to
finance additional projects. The continuous cycle of lending, repayment, and re-lending keeps the fund replenished to support projects over the long term—even as the initial federal capitalization grants might decrease—and establishes the pool of funds as a robust asset, as shown in Figure 9.

Lab participants discussed the value of a model, learning lessons from the state revolving funds to understand the most effective structure, size, and capitalization for a new model.

**Figure 9: Revolving Loan Fund Model**

Source: Milken Institute (2023)

**Capitalization**

Philanthropic capital and government capital were suggested as potential partners to provide the initial capitalization through mission- or program-related investments or grants (i.e., when the investment’s primary purpose is to accomplish one or more of the granting foundation’s exempt purposes). After one or two anchor investors are established, more impact-focused investors may also be willing to allocate capital to the fund. If the assumptions of reaching an acceptable investment benchmark meet the risk/return profile of an investor, then this fund could see additional capitalization from a wide variety of private investment firms. For perspective, in today’s capital market...
environment, a 13–14 percent internal rate of return is what investors are typically seeking.

Project Profile

Lab participants debated two potential stages in the development process where an owner could benefit from low-cost debt: to pay for upfront construction costs, or later-stage financing for operations and maintenance. On one hand, construction debt typically encompasses a higher risk profile due to potential challenges of regulatory hurdles, supply chain disruptions, unforeseen ground conditions, and other logistical issues. Lenders involved at this stage may demand higher interest rates or more significant collateral to offset the inherent risks. On the other hand, once the project has navigated through the primary construction challenges and is in operation, the risk profile changes. Later-stage debt would likely concern itself more with the asset's ability to generate consistent revenue, its operational metrics, and its longer-term market viability. This stage may appeal to more risk-averse lenders.

A third option would be to design a loan fund whose structure supports both upfront and later-stage debt, providing an opportunity to diversify risk by distributing it across different development stages. Those investors with a higher risk tolerance may be more inclined to engage in the construction phase, lured by potentially higher returns, while more conservative investors may find the later stages, with more predictable cash flows and established operational metrics, more appealing. However, it is worth noting that some investors may prefer a fund that targets a specific development time frame because the loans would then be standard across the whole portfolio, making it easier to use in a securitization process. It also ensures that the fund’s managers would have expertise assessing the nuanced risk of a particular phase, making it easier to attract interested investors who want to see a track record and experience.

Fund Size and Structure

Participants noted that the fund’s size must be considerable to offer loans at interest rates of 8–10 percent and still maintain an acceptable level of risk. Given that a typical project may cost $43 million according to a CBRE survey in 2022, a 20 percent slice for this loan fund could total $9 million. To truly change the landscape and make a sizable impact in this housing crisis, the fund would ideally hold a few hundred million dollars. Reaching that size should be possible since participants noted that the fund would be in high demand by middle-income developers over the next decade and because there are no other existing mechanisms that bridge this financing gap, which higher-end communities can fund with entrance fees.

The key feature of the revolving loan fund is the type of financing it provides to subordinated, or “junior,” debt. But how this debt is packaged with the senior loan was a topic of discussion among Lab participants. For example, the revolving fund could become a part of a syndicate of banks to create one unified offering of both the senior and junior tranches. This facilitates the application and implementation of the loan financing and could allow for easier replicability over time. The fund would still offer the subordinated tranche of capital, but it would be in one “uni-tranche” structure.
Another structural element for debate was the repayment term. Participants discussed a realistic horizon of five to seven years at the asset level. This window not only allows for the construction of the project but also grants a buffer—for example, a 36-month period—to allow for unforeseen delays or challenges, guiding the project to a stage where it is ready for permanent financing from traditional lenders.

Project challenges could also be mitigated through a feature called a loan-loss reserve fund, as discussed earlier. Some state revolving funds have a loan-loss reserve created from excess capital that is recycled into the fund. They set aside this capital specifically for insurance against default and to help lower the overall entity’s risk profile and thus its cost of capital. The revolving fund for senior housing could eventually feature a similar reserve, especially because smaller, less credit-worthy developers need the funding as they transition to a new middle-market product.

Finally, participants discussed how to create additional avenues to recycle more capital into the fund by adding a securitization feature. This is also based on the state revolving fund model. If the fund were to support only the earlier construction phase, and therefore have a uniform risk profile, then once cycles of repayment had been established, the market could repackage the pooled funds into interest-bearing securities to be sold to investors. By issuing bonds using its assets, the revolving fund can access larger pools of capital, which can then be “revolved” to provide more loans to developers. Considering that Fannie Mae and Freddie Mac already handle securitization transactions, the revolving fund could work with them to package the loans into their securities, depending on eligibility requirements.

**Next Steps:**

- Identify potential partners, both philanthropic and governmental, that have a geographical interest in a specific location to help consolidate and leverage the capital effectively.
- Establish the amount for the first loss and identify potential guarantors who would be willing to back it.
- Define a practical timeline for returns, considering the expected project durations and market conditions.
- Design a framework for how assets within the fund will be securitized to enhance liquidity and creditworthiness.
Use a Pay-for-Performance Model with the Following Aims: (1) to Attract Upfront Funding for Housing and (2) to Provide a New Revenue Stream to Offset the Ongoing Costs of Providing Supportive Services (Care)—by Delivering Long-Term Cost Savings for the Payer

When senior housing succeeds in providing excellent health care for its residents, insurance companies see a benefit in the form of fewer claims. As discussed previously, some payers and operators have already partnered to measure risk better in their populations and try to reduce costs associated with falls, hospitalizations, and other incidents. There are also financing models that can achieve similar partnerships where projected long-term cost savings are paid for with upfront capital from investors.

Lab participants explored the idea of a social impact bond (SIB), a pay-for-performance contract in which a commitment is made to pay for designated improvements in social outcomes that result in public-sector savings. In this model, private investors provide the initial capital, and if the social outcomes improve (based on predetermined metrics), the outcome payer repays the investors with interest. If the outcomes are not achieved, the investors lose their principal. Given the challenges in accessing low-cost equity capital for construction, an SIB is an alternative strategy to obtain required capital in a more streamlined manner and provides an opportunity not only to involve insurers in a new way but also to appeal to a wider pool of philanthropic or impact-aligned capital.

The social outcomes that owners and operators of affordable senior housing communities generate by providing safe and healthy residential environments can translate into significant cost savings for insurance payers. More frequent touch points and trained staff who are familiar with the day-to-day habits and recognize changes in mobility among residents, for instance, are huge advantages for senior housing. To bolster care further, operators also leverage telemedicine and other technology tools to “help predict patient probability of certain health conditions, including predicting the probability of sepsis.”

With advanced technologies, for example, operators can monitor residents and help prevent or quickly respond to falls, which are the most common causes of injury and in-hospital stays among the older adult population. Corporations, such as CVS Health, benefit from preventive interventions that reduce their medical claims, especially if one insurer (in the case of CVS Health, Aetna, its health insurance arm) is responsible for the medical coverage of many or all the older adults living in the communities. Due to budget constraints, however, operators may lack the capital needed to integrate new technologies that would allow continuous monitoring of residents’ safety. With a pay-for-performance contract in place, private investors would pool their
capital for disbursement to various middle-market owners and operators, providing the upfront funding needed for technology upgrades. This agreement would be based on the premise that fewer falls, for example, translate into reduced hospitalizations and, consequently, lower claims costs for the insurer. Over an agreed-upon duration—for example, five years—data concerning fall rates and subsequent hospitalizations would be tracked. If the metrics revealed that the technology and workflows used by the senior housing community successfully reduced falls and hospital visits, the insurer, realizing the claims savings, would repay the investors.

Lab participants acknowledged the potential challenges to implementing the aforementioned SIB (Figure 10). It is not likely that all residents of the senior housing units would be using the same insurer, which could introduce variability in measuring the direct impacts of fall reductions on claim expenses. And while the technology might be effective, falls among older adults can be attributable to a multitude of factors. Distinguishing between technology-prevented falls and enhanced safety from other interventions, or even random chance, can be complex. Additionally, the costs of implementing the technology in the first place may outweigh the savings realized from reduced hospitalizations, especially for communities with fewer residents. Despite these challenges, this is a promising opportunity to expand the pool of existing investors and involve payers who, by investing in affordable senior housing upfront, could reduce their future expenses and keep their members safe and healthy in these communities.

Figure 10: Social Impact Bond Structure

Source: Milken Institute (2023)
Launch a Regional Pilot to Generate Data Supporting Partnerships between Senior Housing Operators and Payers in Value-Based Care

Developing value-based care for senior housing can improve care quality and reduce both housing and health-care costs. Partnerships and acquisitions are increasing among health plans, technology companies, and senior housing communities. As a result, the market urgently needs strategies to accelerate data aggregation, interoperability, and analysis to demonstrate health and economic benefits. Yet many senior housing operators are early in their transition to data-driven strategies and face significant cost barriers.

Lab participants noted that operators are rich with resident health and social data, but translation of this data into insights demonstrating the bottom-line impacts of their services lags. For example, several tech-savvy operators have embraced a new level of patient monitoring through implementing technology such as TrueLoo® “smart” toilet seats. This technology can detect potential health issues such as urinary tract infections (UTIs) while tracking trends and insights, feeding information directly into residents’ medical records. Smart seats have been associated with an 11 percent reduction in resident falls, likely due to the relation between acute illnesses such as UTIs and delirium or instability.62 While safety and well-being are the primary benefits of monitoring technology, early illness detection and fall reduction lower health care costs—saving residents and operators from financial burden.

Next Steps:

- Identify potential stakeholders, including owners and operators, insurance payers, potential investors, and technology providers.
- Define the performance metrics and desired outcomes for the population served.
- Collaborate with relevant data providers (hospitals, health clinics, community centers, etc.) to ensure accessibility and interoperability of required data.

Lab Participants noted that operators are rich with resident health and social data, but translation of this data into insights demonstrating the bottom-line impacts of their services lags. For example, several tech-savvy operators have embraced a new level of patient monitoring through implementing technology such as TrueLoo® “smart” toilet seats. This technology can detect potential health issues such as urinary tract infections (UTIs) while tracking trends and insights, feeding information directly into residents’ medical records. Smart seats have been associated with an 11 percent reduction in resident falls, likely due to the relation between acute illnesses such as UTIs and delirium or instability. While safety and well-being are the primary benefits of monitoring technology, early illness detection and fall reduction lower health care costs—saving residents and operators from financial burden.
However, data that capture and quantify such positive outcomes are not yet standardized in ways that allow operators to demonstrate the cost benefits for insurers. Lab participants raised a broad data standardization project as an accelerator for building relationships and the overall ecosystem. Such a project would combine data from various sources and in differing arrangements into a centralized system with a common format. This would enable analysis of data across sites and regions, yielding information relevant to care coordination, decision-making, and ultimately, the impacts of senior housing on health-care outcomes and costs. Collaboration among operators, insurers, and providers, along with EHR vendors and policymakers, would support the movement of conclusions produced by the project into practice and systems change.

Other efforts already underway provide a potential roadmap. For example, to support public health data standardization, the Centers for Disease Control and Prevention is leading the Data Modernization Initiative "to modernize data across the federal and state public health landscape."63 Public health data have historically been fragmented, with local, state, and federal agencies using differing systems and platforms, hindering efforts to share information across jurisdictions and with the broader health system. While much larger in scope, it nonetheless provides a robust example and touchstone for bringing together previously separate data sources to translate data into action.

A regional pilot program is a feasible next step that Lab participants raised as having the most potential for immediate influence. A pilot program among a group of senior housing operators, technology companies, and an MA plan could identify data collection priorities, build pathways to overcome data exchange challenges, and demonstrate early insights that provide health to residents and economic value to all participants. Because data aren’t always useful outside the places where they are collected, due to differing lexicons, such a pilot is essential to creating a shared lexicon, where information collected by one system about an activity, status, or outcome can be understood and acted upon in another.

As suggested in Figure 11, the pilot could start in a specific region, such as California. It would be ideal to have an MA plan that has at least 100,000 enrollees, to ensure a large enough, yet manageable, sample size. As a first step, the MA plan would work with a select group of housing operators to assess the types of data they currently gather and, from that input, design a “playbook” for each operator to achieve a standardized set of information. The data could include metrics around social isolation and cognitive function, alongside specific reporting of medication adherence and hospitalizations. After the initial assessment, the playbook would include potential tools to meet the required levels of aggregation and actionable dashboards, including funding for new technology and staffing to monitor the project.
Lab participants agreed that the governance of a pilot would have to be run through a neutral, ideally nonprofit organization. This could include an academic institution or senior housing association, with funding from philanthropic or corporate donors. After the first region is underway in its data assessment, subsequent regions and MA partners could be identified.

**Next Steps:**

- Locate a promising region, a group of senior housing operators who serve a Medicare Advantage population, and a candidate Medicare Advantage plan.
- Identify interested philanthropic or private donors to fund the operation of the pilot program.
- Determine a neutral oversight organization to drive project management.
- Convene a group of supportive partners to structure the pilot program, provide technical assistance, and participate in efforts to amplify findings and guide future directions.
CONCLUSION

As the US witnesses a significant rise in its older adult population, demand for affordable senior housing and care will continue to grow. Middle-income older adults will bear the brunt of the consequences amid the current shortage of housing and care options in their price bracket.

Through the Milken Institute's Financial Innovations Lab process, several promising areas of opportunity for further action emerged. In light of the likely influx of distressed senior housing properties needing repositioning and capital expenditures ahead of a potential foreclosure crisis, it is a critical time to consider repurposing these properties into middle-market housing. Establishing a social enterprise committed to serving this unmet need using lower-cost-basis distressed properties from lenders can help lower financing and development costs, preserve assets that are already equipped to serve older adults, and potentially scale middle-market options efficiently and successfully. Debt financing tools such as a revolving loan fund and pay-for-performance models could help owners and operators access cheaper upfront and later-stage, longer-term sustainable capital sources according to their project needs and incentivize payers to invest in building middle-market communities for the benefit of both their members and their balance sheets. Additionally, a pilot program pioneering a centralized data strategy would enable operators to demonstrate the value of senior housing and care in the health-care continuum, unlocking a potential new revenue source to offset the costs of supportive services (care) for residents.

The strategies outlined in this report work to accelerate progress for the “forgotten middle” and establish the necessary housing and care infrastructure to serve today’s and tomorrow’s older adults.
ENDNOTES


14. “Distribution of Certified Nursing Facilities by Ownership Type,” KFF, accessed August 16, 2023, https://www.kff.org/other/state-indicator/nursing-facilities-by-ownership-type/?currentTimeframe=0&sortModel=%7B%22colId%22:%22%22Location%22,%22%22sort%22:%22asc%22%7D.


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49. "New Housing Opportunities Program (New HOP)," NYU Furman Center, accessed October 1, 2023, https://furmancenter.org/coredata/directory/entry/new-housing-opportunities-program#:--text=New%20Housing%20Opportunities%20%28New%20HOP%29%20provides%20below-market%20mortgages%20to%20developers%20for%20construction%20of%20moderate-income%20rental%20housing.


58. Ibid.


PARTICIPANT LIST

This list includes key opinion leader interviewees, participants from the Financial Innovations Lab in Chicago, and follow-up working group sessions.

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<td>Jon</td>
<td>Zifferblatt</td>
<td>Chief Strategy Officer &amp; EVP</td>
<td>West Health</td>
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We thank our Milken Institute Future of Aging Advisory Board members for their ongoing partnership and are grateful for the sustaining support of our Leadership Council.
ABOUT THE AUTHORS

Ashley Campany is a senior associate on the Innovative Finance team at the Milken Institute. She is responsible for research, development, execution, and follow-up for the Institute's Financial Innovations Labs. Campany has experience in marketing, fundraising, business development, and investor relations, working within financial institutions and start-up ecosystems.

Most recently, she was responsible for strategic business initiatives, partnerships, and project management at a start-up nonprofit organization, The ELLA Works Foundation. Before ELLA, she was an investor services associate at Centerbridge Partners, where she worked across private equity, real estate, and credit, providing servicing to Centerbridge's institutional client base, responding to ad hoc investor inquiries and due diligence questionnaires, and reviewing capital fund activity. Previously, she was an investor relations associate at Foundation Credit, a boutique asset management firm focused on municipal credit, where she serviced its existing client base and cultivated relationships with prospective investors. Prior to Foundation Credit, she focused on business development and partnerships at Loeb Enterprises, a New York-based private investment and venture collective. Campany graduated from Union College with a BA in political science.

Lauren Dunning is a director focused on the Future of Aging at the Milken Institute, where she develops initiatives and strategic partnerships that advance healthy longevity and financial security across the life course. In her role, Dunning oversees the Future of Aging Advisory Board, a group of global leaders across sectors that provides advisement, expertise, and collaboration to maximize the impact of the Institute's work on aging. Before joining the Milken Institute, Dunning served in key policy leadership roles over 10 years at the Los Angeles County Department of Public Health, most recently as the director of Government Affairs. She has written and presented on a variety of issues spanning health and aging, and is an adjunct professor of law at Georgetown University Law Center. Dunning holds a JD from Georgetown University Law Center, a Master of Public Health from Johns Hopkins Bloomberg School of Public Health, and a bachelor's degree from George Washington University. She works at the Milken Institute's Santa Monica office.

Ivy Hsu is an associate of Innovative Finance at the Milken Institute. During Hsu’s time at the Institute, she has worked on projects around structuring sustainable funding models for new antibiotics to help curb antimicrobial resistance and streamlining the sustainable bond market for municipal issuers. Before joining the Milken Institute, Hsu conducted research addressing the social determinants of health in clinical and lab settings at the University of Southern California (USC). Hsu graduated from USC with a BS in health promotion and disease prevention and an MS in finance.
Avery Wallace is a senior associate, Future of Aging, at the Milken Institute, where she leads the senior housing portfolio and supports the Advisory Board and global programming. Prior to joining the Institute, Wallace worked at High Lantern Group, a strategic consulting firm that focuses on the intersection of business, public policy, and thought leadership. She contributed to the development of strategic engagements and deliverables for clients in health care, pharmaceuticals, and aging. She has also previously worked in several roles within the long-term care industry, including as an assistant geriatric care manager for Aging Life Care Charleston, LLC. Wallace graduated from the University of Pennsylvania with a master's degree in public health and from the College of Charleston with a BS in public health.