CFSi
Center for
Financial Services Innovation

Preparing for Tomorrow by Fixing Today

Helping Low- and Moderate-Income Americans Thrive in Retirement

August 2018

AUTHORS

Karen Andres, Vice President, CFSI
Katy Golvala, Associate, CFSI

Several staff members contributed to this report, including Jeanne Hogarth, Aliza Gutman, Rob Levy, Dan Miller, and John Thompson. The authors would especially like to thank Andrew Dunn for his help with data analysis.

This report also benefited from the external review of David Mitchell at the Financial Security Program at The Aspen Institute.

Prudential

CFSI
Center for
Financial Services Innovation

The Center for Financial Services Innovation (CFSI) is the nation's authority on consumer financial health. CFSI leads a network of financial services innovators committed to building a more robust financial services marketplace with higher quality products and services. Through its Compass Principles and a lineup of proprietary research, insights and events, CFSI informs, advises, and connects members of its network to seed the innovation that will transform the financial services landscape.

For more on CFSI, visit our website and join the conversation online:

- @CFSInnovation
- /CFSInnovation
- Center for Financial Services Innovation
- Center for Financial Services Innovation
- CFSInnovation

Center for Financial Services Innovation

135 S. LaSalle, Suite 2125, Chicago, IL 60603 | 312.881.5856

American workers used to count on employer-sponsored defined benefit plans to supply most of their income once they reached retirement, with additional income streams coming from Social Security and individual savings, usually in a defined contribution plan.

Today's retirees are far less likely to have access to a defined benefit plan,[1] and Social Security and defined contribution plans now constitute most of a retiree's income. This reduction in retirement income sources, combined with lower personal savings rates and rising costs, means that at least 50 percent of Americans across income levels are at risk of not having enough money to maintain their living standards in retirement.[2]

As with most trends in America, the situation is worse for people with low and moderate incomes (LMI). According to Census Bureau data, the typical household that earns less than $67,200 a year has no retirement savings.[3] While not having enough long-term savings is the greatest financial health pain point for LMI pre-retirees and retirees alike, the ways in which people spend, save, borrow, and plan throughout their lives are deeply interconnected. Ultimately, successful long-term savings can only take place if someone already exhibits a baseline level of financial health. Unfortunately, CFSI data show that only 13 percent of LMI pre-retirees and 20 percent of LMI retirees are financially healthy.

In order to spur innovation that can help LMI pre-retirees and retirees improve their financial health, we need a more sophisticated understanding of how these groups are struggling to spend, save, and borrow on a daily basis. In this report, we have applied CFSI's financial health measurement methodology to nationally representative data on Americans from 2017.

[1] https://www.ebri.org/publications/benfaq/index.cfm?fa=retfaq14

[2] http://crr.bc.edu/special-projects/national-retirement-risk-index/

[3] https://www.nirsonline.org/reports/issue-brief-improving-the-savers-credit-for-low-and-moderate-income-workers/

In addition to confirming that building sufficient long-term assets is the greatest financial health challenge for both LMI pre-retirees and LMI retirees, we found that:

1

Having sufficient emergency savings is a significant financial health challenge for LMI pre-retirees and LMI retirees

2

Nearly half of LMI pre-retirees struggle to pay their bills on time and in full

3

The majority of pre-retirees and retirees, both LMI and non-LMI, have debt, with 15 percent of all retirees reporting that their debt is "unmanageable"

In this report, CFSI digs deeper into the data behind these findings to better understand the causes and effects of these financial health challenges. In the Innovation Spotlight section, we also highlight promising fintech solutions that have the potential to help solve these challenges for LMI pre-retirees and retirees. While these existing solutions are currently targeted toward other customer segments, minor updates to user experience, customer support structures, marketing approaches, and distribution partnerships could enable these existing innovations to meet the needs of LMI pre-retirees and/or retirees.

Given how the retirement industry's business incentives align with customers' long-term interests, many asset managers and defined contribution recordkeepers are already thinking about the connections between day-to-day financial health and long-term savings rates, and they are working to help their customers achieve better outcomes in both areas. Employers, payroll processors, banks, credit unions, and others also have an opportunity to create business and societal value by understanding how LMI pre-retirees and retirees are struggling with their day-to-day finances. Armed with this knowledge, they can then adapt or design solutions to help these groups achieve financial health now and in the future.

If we can improve retirement savings rates for LMI pre-retirees by helping them improve their overall financial health, then we will have a powerful model that we can replicate with workers across many income and age demographics, helping to ensure that American workers have every chance to enjoy a financially healthy retirement.

With the decline of defined benefit plans, Social Security and long-term savings in defined contribution plans and Individual Retirement Accounts (IRAs) have become foundational sources of retirement income, instead of supplemental. Long-term savings reserves in America are notably insufficient across all age and income groups, however, putting our retirees' financial health at risk. The Center for Retirement Research at Boston College found that 50 percent of Americans are at risk of not having enough to maintain their living standards once they reach retirement,[4] while CFSI data shows that 27 percent of Americans report having less than $1,000 saved for retirement.[5] Collectively, our national retirement savings deficit is estimated at $6.8 to $14 trillion.[6]

Unfortunately, people with low and moderate incomes (LMI) are in a worse position than middle- and upper-income people when it comes to long-term savings. Only 12 percent of LMI consumers feel very confident that their household is taking the steps needed to ensure they have enough money saved for long-term financial goals, compared with 27 percent of the general population. This issue is widespread: 30 percent of the U.S. population, or approximately 97.7 million people, have household income under 200 percent of the federal poverty guideline, which is the definition of LMI in this analysis.[7]

Industry players are experimenting with a variety of tactics to combat this looming crisis. States like California and Oregon have expanded access to tax-advantaged plans that can maximize a worker's long-term savings.[8] Technology innovators have sought to democratize access to the stock market via fractional share investing and robo-advising. Personal finance experts, retirement plan recordkeepers, and employers have diligently encouraged those who already have access to a tax-advantaged plan to save more for their future. While all of these efforts are critically important, there is a growing realization among financial services providers and leading retirement thinkers that focusing only on retirement plan access or increasing savings rates may not be enough.

Increasingly, defined contribution plan administrators, asset managers, and employers are hearing from plan participants and clients that challenges in their daily financial lives are getting in the way of a long-term savings strategy, either by preventing them from saving or forcing early withdrawals from tax-advantaged plans. As a result, these companies are starting to consider how they can help solve other financial challenges in workers' lives, like income volatility, unmanageable debt loads, and the lack of short-term emergency savings, to simultaneously support holistic financial health and facilitate greater long-term savings. As they experiment with new solutions built to work alongside long-term savings vehicles, it is critical to understand more deeply which financial challenges matter the most, especially for LMI workers.

In this report, we focus on the financial health of two important groups: LMI pre-retirees and LMI retirees. LMI pre-retirees are usually past most of the work of raising families, and they are often primed for thinking and making decisions about their post-work years. They have complicated financial lives, however, as they juggle preparing for retirement, managing debt for themselves or their children, and managing day-to-day expenses.

Moreover, once workers reach retirement, there is more to financial life than Social Security payments or accumulated savings. LMI retirees' financial health depends not only on their accumulated assets, but on how well they can manage debt, navigate unexpected expenses, and possibly tap into illiquid assets to improve their cash flow. A wide variety of financial services providers, including asset managers, recordkeepers, banks, credit unions, insurers, nonprofits, and more, have an opportunity to help LMI retirees enjoy a financially healthier retirement.

4   http://crr.bc.edu/special-projects/national-retirement-risk-index/

5   Understanding and Improving Financial health in America, CFSI, 2015

6   https://www.nirsonline.org/reports/the-retirement-savings-crisis-is-it-worse-than-we-think/

7   https://www.kff.org/other/state-indicator/population-up-to-200-fpl/

8   https://cri.georgetown.edu/launching-oregonsaves-early-lessons-from-an-innovative-public-private-partnership/

Methodology and Definitions

This analysis relies on CFSI's Eight Indicators of Financial Health.[9] As the national authority on the financial services needs and behaviors of financially struggling Americans, CFSI developed these indicators in 2016 in response to the need we saw for a set of standard, objective, and quantitative measures of consumer financial health. We envision that this set of indicators can be used to objectively diagnose customer financial needs; influence the design of financial products, services, and experiences; and assess the ultimate impact on the financial health of customers. CFSI's Eight Indicators also serve as the basis for CFSI's Financial Health Score™, designed as a tool for financial services providers to understand and benchmark how well their customers are spending, saving, borrowing, and planning.

CFSI has created a survey tool that measures a consumer's financial health using eight questions, one for each indicator of financial health. These eight questions are grouped into four sub-score categories: Spend, Save, Borrow, and Plan. Consumers receive a score based on their response to each question, and the result can be expressed as a set of four sub-scores or as an aggregate financial health score, which results from the average of the answers from all eight questions.

In this report, we have applied our financial health measurement and scoring methodology to the detailed data we have on the financial lives of low- and moderate-income (LMI) pre-retirees and retirees, as compared with non-LMI pre-retirees and retirees, from our 2017 proprietary financial health score dataset and our Consumer Financial Health Study.[10] We have included analysis of the Spend, Save, and Borrow indicators in this report, as we are most interested in the degree to which the higher-frequency activities of spending, saving, and borrowing interact with one's long-term savings activities.

Spend
1. Spend less than income
2. Pay bills on time and in full

Save
3. Have sufficient living expenses in liquid savings
4. Have sufficient long-term savings or assets

Borrow
5. Have a sustainable debt load
6. Have a prime credit score

Plan
7. Have appropriate insurance
8. Plan ahead for expenses

---

[9] https://cfsinnovation.org/research/eight-ways-to-measure-financial-health/

[10] https://cfsinnovation.org/research/consumer-financial-health-study/

It is worth noting that having sufficient insurance coverage is a critical financial health need for LMI pre-retirees and LMI retirees. Given this report's focus on how day-to-day behaviors can support LMI Americans' ability to prepare for and enjoy a financially healthy retirement, we defer our analysis on insurance needs to our recently published report on the insurance needs of LMI Americans, "Insuring the Way to a Financially Resilient America: Developing Successful Products for LMI Consumers." The AARP Foundation is supporting forthcoming research that will reveal more about the financial services needs and experiences of LMI Americans over the age of 50. Using a combination of quantitative and qualitative research techniques, that work will offer a deeper understanding of how customers in a variety of age bands over 50 think about, purchase, and use specific kinds of financial products and services, including insurance.

For the purposes of our analysis, "retirees" are defined as anyone who reports that they are retired. While there is not a standard definition of "pre-retiree," our definition of pre-retiree includes anyone above the age of 55 who is still working. This allows us to look at consumers who are more than five years away from 63, which is the average retirement age in America,[11] and those who are a few years under 59.5, the age at which people can withdraw money penalty-free from a tax-advantaged retirement savings account. In this report, LMI (low or moderate income) is defined as anyone with household income under 200 percent of the 2017 Census Poverty threshold definition.

Since older people or households historically have had lower costs of living, thanks to Medicare coverage and paid-off mortgages, some question whether adjusting the definition of low- and moderate-income by age might be appropriate. We know that American household income and expense dynamics are changing, however, with rapid increases in the cost of housing in urban areas and skyrocketing out-of-pocket medical expenses, even for those with Medicare coverage. For the purposes of simplicity and comparability across age groups, we have opted to use the standard definition of poverty as the threshold in this analysis.

[11] https://smartasset.com/retirement/average-retirement-age-in-every-state

Top Day-to-Day Financial Health Pain Points

Both LMI pre-retirees' and LMI retirees' lowest financial health indicator score is their level of long-term savings, underscoring what we already know about low long-term savings rates in America. Looking beyond long-term savings, these populations exhibit different sets of needs. The table below demonstrates the top financial health pain points for each group, as compared with their non-LMI peers.

Improving the financial health of these two groups will require new solutions, new marketing strategies, new partnerships, and new customer engagement models. By analyzing financial health based on more granular indicators, strategists, product designers, plan designers, and benefits providers can understand more deeply which financial health needs are greatest for their customers, participants, or employees. This analysis can help provide a roadmap for further research and deeper understanding, allowing providers to design and deploy solutions tailored to meet the most salient financial health needs.

Average Financial Health Indicator Scores Per Group

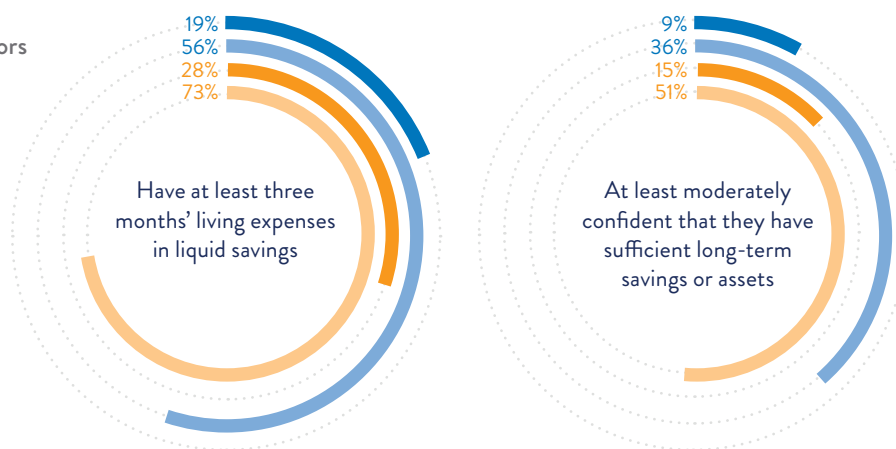|	Pre-Retirees		Retirees	
	LMI	**Non-LMI**	**LMI**	**Non-LMI**
Greatest Pain Point	Have sufficient long-term savings and assets	Have sufficient long-term savings and assets	Have sufficient long-term savings and assets	Spend less than income
	Have sufficient living expenses in liquid savings	Spend less than income	Spend less than income	Have sufficient long-term savings and assets
	Have a prime credit score	Have a sustainable debt load	Have sufficient living expenses in liquid savings	Have a sustainable debt load
	Spend less than income	Have a prime credit score	Have a prime credit score	Have a prime credit score
	Have a sustainable debt load	Have sufficient living expenses in liquid savings	Have a sustainable debt load	Have sufficient living expenses in liquid savings
Smallest Pain Point	Pay bills on time and in full	Pay bills on time and in full	Pay bills on time and in full	Pay bills on time and in full

■ SPEND (Spend less than income/Pay bills on time and in full)
■ SAVE (Have sufficient long-term savings and assets/Have sufficient living expenses in liquid savings)
■ BORROW (Have a prime credit score/Have a sustainable debt load)

1

Having sufficient emergency savings is a significant financial health challenge for both LMI pre-retirees and LMI retirees.

Percentage of Financially Healthy People Based on "Save" Financial Health Indicators

- ■ LMI Pre-Retirees
- ■ Non-LMI Pre-Retirees
- ■ LMI Retirees
- ■ Non-LMI Retirees

19%
56%
28%
73%

Have at least three months' living expenses in liquid savings

9%
36%
15%
51%

At least moderately confident that they have sufficient long-term savings or assets

With 6.4 million seniors currently living below the poverty line, we know that Americans are struggling with severely insufficient long-term savings.[12] Indeed, our analysis shows that only 9 percent of LMI pre-retirees and 15 percent of LMI retirees score as financially healthy on this indicator. The reasons for this are multifaceted, as discussed in the introduction to this report.

CFSI's emergency savings indicator assesses how long a household could make ends meet after losing its primary source of income. Only 19 percent of LMI pre-retirees score as financially healthy on this indicator (meaning they could make ends meet for at least six months), as compared with 56 percent of non-LMI pre-retirees. LMI retirees fare only slightly better, with 28 percent scoring as financially healthy, while 73 percent of non-LMI retirees report having sufficient liquid savings. These financial health data points confirm a shocking statistic from the Federal Reserve: 40 percent of Americans across all income groups could not come up with $400 in the case of an emergency, or would have to sell something or borrow to cover the cost.[13]

Of course, for LMI Americans, including pre-retirees and retirees, the picture is bleaker. That same Federal Reserve study shows that 69 percent of Americans with less than $30,000 in household income cannot come up with $400 in an emergency.
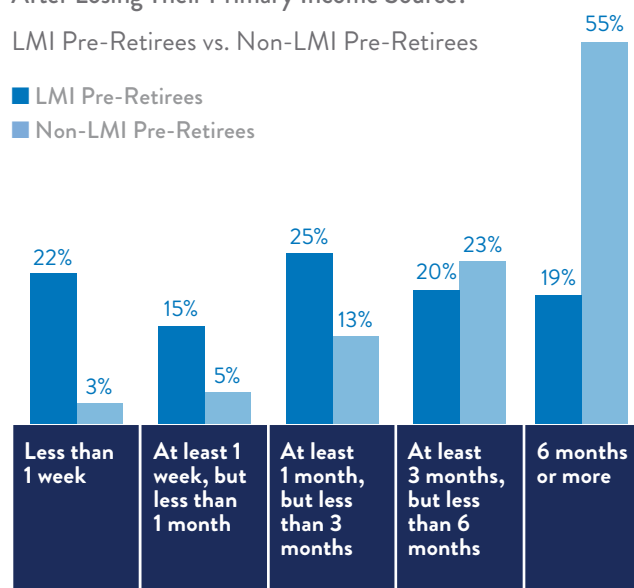
We know that an unexpected expense like a car repair or a medical bill can throw anyone's financial life off course, often leading to higher levels of debt. In the case of LMI Americans with lower credit scores and reduced access to high-quality credit options, this debt is more likely to carry a high interest rate. In the case of older retirees, who generally have a limited ability to generate additional income to cover the expense, unexpected expenses can also force suboptimal decisions that lead to compromised nutrition or substandard living conditions.

[12] AARP, 2016

[13] https://www.federalreserve.gov/publications/files/2016-report-economic-well-being-us-households-201705.pdf

9

How Long Can Households Make Ends Meet After Losing Their Primary Income Source?

LMI Pre-Retirees vs. Non-LMI Pre-Retirees

- ■ LMI Pre-Retirees
- ■ Non-LMI Pre-Retirees

	Less than 1 week	At least 1 week, but less than 1 month	At least 1 month, but less than 3 months	At least 3 months, but less than 6 months	6 months or more
LMI Pre-Retirees	22%	15%	25%	20%	19%
Non-LMI Pre-Retirees	3%	5%	13%	23%	55%

Liquid savings are also critical because of their relationship to long-term savings, especially for pre-retirees. The connection between the two often manifests in the form of retirement plan leakage. Pre-retirees take out loans from defined contribution plans or early IRA withdrawals, which often carry taxes and penalties in addition to limiting access to stock market growth. When faced with an unexpected expense, many Americans without sufficient liquid savings are forced to tap into their retirement assets, damaging their long-term financial health. Additionally, many potential short-term savers know that they need to build liquid savings, but do not have a convenient place to do that saving. As a result, the relatively illiquid retirement plans go permanently unused, despite the convenience they offer through payroll withdrawal.
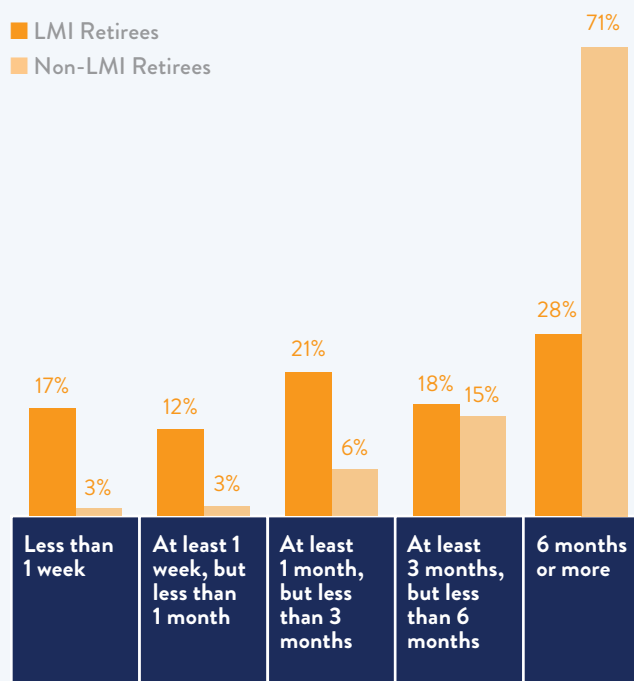
CFSI's data shows that, across income groups, people who have the ability to cover a $400 expense are 3.5 times more likely to be confident that they will have enough money saved for their long-term goals. While correlation is not causation, it appears that helping Americans prepare for unexpected expenses can free up the mental and financial resources to help them plan for the longer term as well.

More granular analysis of this indicator reveals the extent of the liquid savings deficit that LMI pre-retirees and retirees face. While over 80 percent of non-LMI pre-retirees say that their household could make ends meet for three months or more after the loss of their primary source of income, over 60 percent of LMI pre-retiree households could only last for three months or less. Over 20 percent of LMI pre-retirees report that they could survive for less than one week if they lost their primary income source. These numbers are particularly troubling for pre-retirees, as this group has the shortest runway to rebuild their long-term savings if they need to use these funds for short-term emergencies.

While 73 percent of non-LMI retirees report that they can survive six months or more after losing their primary income source, the picture is very different for LMI retirees. Only 28 percent of LMI retirees could last for six months or more, with 31 percent of LMI retirees reporting that their household could make ends meet for one month or less.

How Long Can Households Make Ends Meet After Losing Their Primary Income Source?

LMI Retirees vs. Non-LMI Retirees

■ LMI Retirees
■ Non-LMI Retirees

	Less than 1 week	At least 1 week, but less than 1 month	At least 1 month, but less than 3 months	At least 3 months, but less than 6 months	6 months or more
LMI Retirees	17%	12%	21%	18%	28%
Non-LMI Retirees	3%	3%	6%	15%	71%

The significant difference between LMI retirees' and non-LMI retirees' scores on this indicator raises important questions that require further research. Namely, how do retirees from all income groups define what constitutes their "income"? By definition, this group has stopped working, and if they have any assets saved, they have entered some kind of decumulation phase to produce income. A reasonable hypothesis is that withdrawals from accumulated savings and Social Security payments are the most common forms of "income" for American retirees. Given the disparity in accumulated savings between LMI and non-LMI retirees, the poor financial health of LMI retirees on the liquid savings indicator seems to underscore the importance of Social Security payments for this group.

**This data raises additional important questions about retirees and liquid savings:** Specifically, how do they think about liquid savings versus any accumulated savings they may have in a retirement plan? Do they mentally – and perhaps physically – separate these funds, and for what kind of expense do they tap into each category of funds? In addition, how do LMI Americans differ from non-LMI Americans on all of these questions? The answers to these questions may help us uncover hidden opportunities to help current retirees develop short-term, liquid savings reserves and weather financial emergencies better, while preserving any invested assets they may need in later years.

2

Nearly half of LMI pre-retirees struggle to pay their bills on time and in full.[14]

Percentage of Financially Healthy People Based on "Spend" Financial Health Indicators

- ■ LMI Pre-Retirees
- ■ Non-LMI Pre-Retirees
- ■ LMI Retirees
- ■ Non-LMI Retirees

14%
28%
9%
20%

Having income that exceeds expenses

55%
84%
75%
94%

Paying bills on time and in full
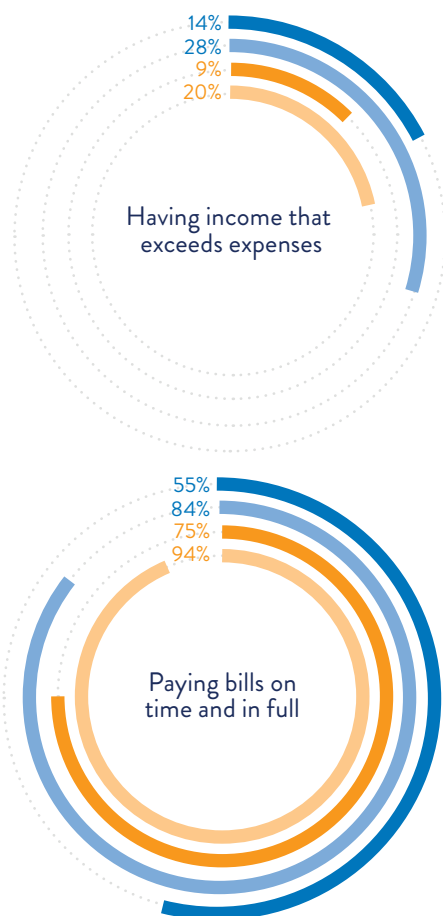
The average LMI pre-retiree and the average LMI retiree reports that their spending is roughly equal to their income. Given the importance of having enough surplus income to save for an emergency and for the long term, spending one's entire income on current expenses puts one in a financially unhealthy position. Only 14 percent of LMI pre-retirees and 9 percent of LMI retirees are financially healthy when it comes to having income that exceeds expenses. Given that this indicator is, by definition, about income levels, this result for LMI groups is to be expected. It is worth noting, however, that after the need for sufficient long-term savings, this indicator represents the second-worst average indicator score for non-LMI pre-retirees and non-LMI retirees alike.

It is worth examining how these scores change for LMI and non-LMI populations as pre-retirees decide to become retirees. As the table below shows, in the case of both LMI and non-LMI populations, a much higher percentage of retiree respondents report being able to pay their bills on time and in full, as compared with pre-retirees in their same income group. In part, this may reflect the increase in income – or the steadiness of the income – that people may experience once they begin receiving Social Security monthly payments, and drawing upon any accumulated retirement savings. There is also reason to think that many people put off retirement until they eliminate a significant expense, such as paying off a mortgage. It could also be that, within both LMI and non-LMI populations, people who are financially healthier as pre-retirees are more likely to retire, thus resulting in both pools of retirees being naturally financially healthier. Without longitudinal data to illuminate further, we must be aware of the potential bias in each group of retirees when we compare them with pre-retirees. Determining the factors that influence someone to retire requires further research.

[14] Interestingly, across LMI and non-LMI pre-retirees and retirees, a minority of people report having income that exceeds expenses, but the majority in each group also report that they are able to pay their bills on time and in full. A likely explanation for this phenomenon is that people across groups – but especially LMI groups – are tapping into sources of debt to cover the difference between their income and their expenses. Another explanation may have to do with survey respondents' interpretation of the Financial Health survey instrument. It may be that the word "bills" has a connotation in survey respondents' minds that "expenses" does not have. In other words, when people answer questions about their "expenses," and whether their income exceeds those expenses, they may be thinking of financial outlays that go beyond the "bills" that they pay each month.

While it seems positive that the majority of LMI pre-retirees and LMI retirees report that they are able to pay their bills on time and in full, it is important to note that 45 percent of LMI pre-retirees and nearly 25 percent of LMI retirees report that they are unable to do so. While bill payment represents one of the healthiest areas in the financial lives of LMI pre-retirees and LMI retirees, relatively speaking, they are still much less likely than their non-LMI counterparts to be able to pay their bills on time, as the graphs below illustrate.

Paying Bills On Time and In Full:
LMI Pre-Retirees vs. Non-LMI Pre-Retirees

■ LMI Pre-Retirees
■ Non-LMI Pre-Retirees
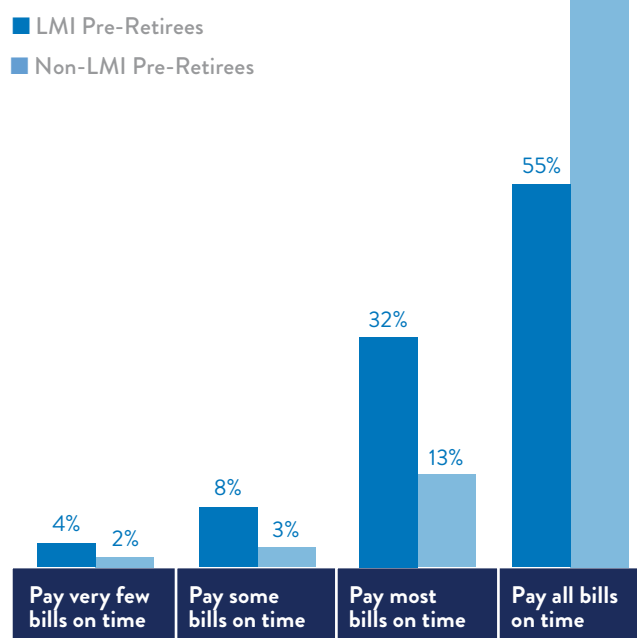
Paying Bills On Time and In Full:
LMI Retirees vs. Non-LMI Retirees

■ LMI Retirees
■ Non-LMI Retirees
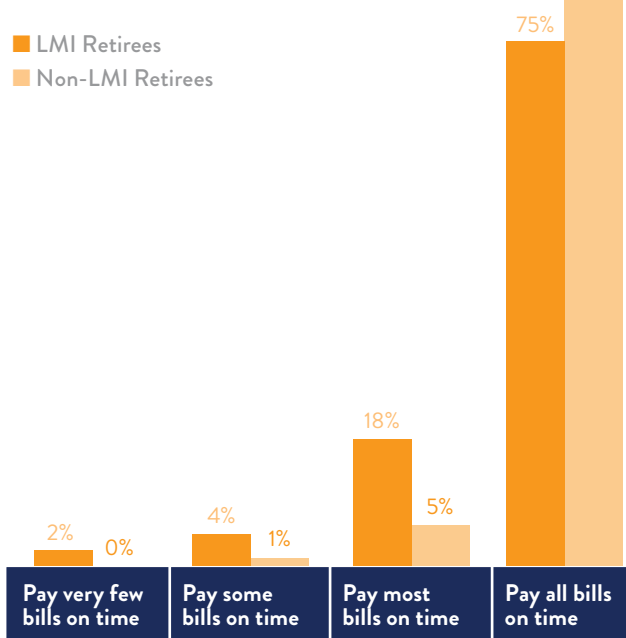
There is another, potentially concerning dynamic at play. As people age, their ability to generate additional income usually decreases for a variety of reasons, which means reducing expenses is the primary way they can control their financial lives. As people age and reach deeper into any accumulated savings, there is a concern that older Americans with low and moderate incomes will reduce their spending so much that their standard of living may dip below what we, as a society, find acceptable, for reasons of health, safety, or dignity. Recognizing this risk, the National Council on Aging maintains the Elder Economic Security Standard Index, which measures the income that older adults need to meet their basic needs

and age in place with dignity.[15] This index makes it clear that living at, or even right above, the poverty line, does not guarantee that America's seniors can live safely and with dignity, given the rising costs of healthcare and other life essentials. As we consider how to develop the products, services, and engagement models that can help LMI pre-retirees prepare for retirement, and LMI retirees to enjoy their retirement years in a way that is consistent with our norms and values, we should be using benchmarks like the Elder Index to think more expansively about the minimum asset or income thresholds these populations require.

[15]   https://www.ncoa.org/economic-security/money-management/elder-index/

3

The majority of pre-retirees and retirees, both LMI and non-LMI, have debt, with 15 percent of all retirees reporting that their debt is "unmanageable."

Percentage of Financially Healthy People Based on "Borrow" Financial Health Indicators

- ■ LMI Pre-Retirees
- ■ Non-LMI Pre-Retirees
- ■ LMI Retirees
- ■ Non-LMI Retirees

66%
82%
71%
90%

Having a sustainable debt load

21%
61%
33%
70%

Having a prime credit score
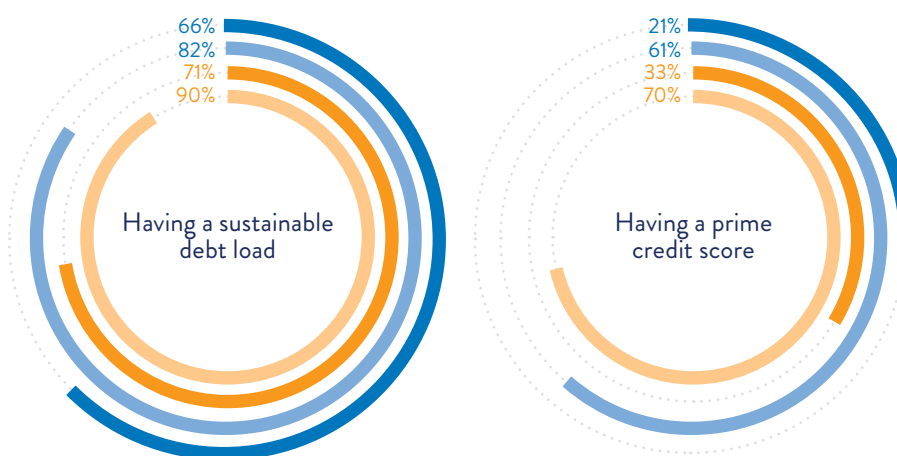
Historically, retirement planning has relied on the assumption that retirees will be nearly debt-free when they stop working. The mortgage will be paid off, the cars are paid off, and any credit card debt has long since been retired. This assumption has underpinned various "income replacement ratios" that financial advisers have used to calculate the amount of annual income a retiree will require in their retirement years to maintain the standard of living they enjoyed during their working years. Usually set at or around 70 percent, the establishment of the desired income replacement ratio leads to the calculation of a target "withdrawal rate," which is the percent of any accumulated assets that should be withdrawn each year during retirement to balance preserving principal with earning the desired annual income level.

Unfortunately, this traditional assumption about arriving at retirement debt-free does not hold true for many pre-retirees and retirees. Data from the University of Michigan Retirement Research Center Health and

Retirement Study shows that 42 percent of Americans between the ages of 56 and 61 carry debt, with an average debt load of $17,623. But this isn't all mortgage debt: 32 percent of older Americans carry non-mortgage debt, averaging $12,490. Of that amount, $4,786, on average, is credit card debt.[16]
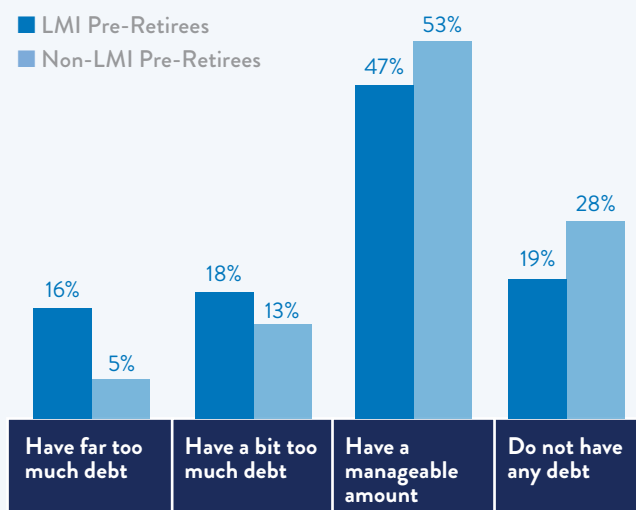
The majority of LMI and non-LMI pre-retirees report having debt that is either "manageable," "a bit too much," or "far too much". LMI pre-retirees skew worse, with 34 percent having "a bit too much" or "far too much" debt.

There is greater variation between LMI and non-LMI retirees when it comes to their debt levels, but the distribution of each group's debt levels mirrors that of their pre-retiree counterparts. The majority of both groups of retirees indicate that they do have debt, with 29 percent of LMI retirees reporting that they have "a bit too much" or "far too much" debt.

[16] https://www.forbes.com/sites/nextavenue/2017/09/20/how-debt-is-threatening-retirement-dreams/#4a3ec90fadd5

While self-reported data carry the risk of inconsistent interpretation, at some level it may not matter. If someone believes their debt level is too much, and it causes stress or leads to other suboptimal financial behavior, then their perception of their debt level is effectively reality. Of course, understanding the specific nature, the structure, and the cost of the debt that pre-retirees and retirees face is critical for designing the best advice and solutions.
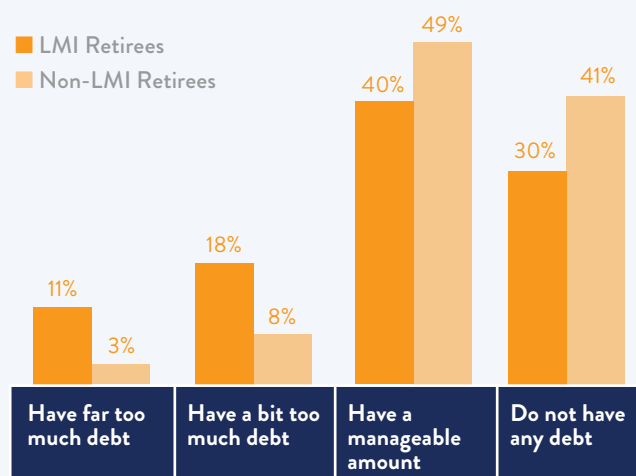
Whether the debt is mortgage debt, home equity debt, medical debt, auto loans, credit card debt, or even co-signed student loans for a family member (as is increasingly common), the financial health ramifications are the same: Debt in retirement means a reduced ability to pay for other life expenses, and likely forces a faster spend-down of any accumulated assets, which can have a detrimental effect that continues throughout retirement, even if the debt is paid off. Nearly 40 percent of federal student loan borrowers over the age of 65 are in default, which is the highest default rate of any age group, showing the disproportionately large burden that debt places on retirees.[17]

The second financial health indicator in the "Borrow" category assesses whether a respondent has a prime credit score. At first blush, it may seem relatively unimportant for someone on the brink of retirement, or who is already retired, to have a prime credit score, as older age is not typically the time when most people take on new debt. Given the rising debt levels that many people are bringing with them into retirement, however, and depending on the type and cost of debt they are carrying, having a prime credit score can be an asset in terms of refinancing at affordable interest rates, or restructuring existing debt to better match cash flow levels.

While there is significant room for improvement in the credit scores of all pre-retirees and retirees, there is a particular need to help LMI populations improve their credit. Only 21 percent of LMI pre-retirees and 33 percent of LMI retirees have a prime credit score. Given that these groups are more likely than their non-LMI counterparts to be carrying debt, and they are less likely to have sufficient income or accumulated assets to pay that debt, access to tools to help refinance that debt is that much more critical. Given the low levels of liquid savings among LMI pre-retirees and LMI retirees, a prime credit score also enables them to borrow if unexpected financial shock happens, despite not being the ideal solution.

How Households Describe Their Current Level of Debt: LMI Pre-Retirees vs. Non-LMI Pre-Retirees

■ LMI Pre-Retirees
■ Non-LMI Pre-Retirees

	Have far too much debt	Have a bit too much debt	Have a manageable amount	Do not have any debt
LMI Pre-Retirees	16%	18%	47%	19%
Non-LMI Pre-Retirees	5%	13%	53%	28%

How Households Describe Their Current Level of Debt: LMI Retirees vs. Non-LMI Retirees

■ LMI Retirees
■ Non-LMI Retirees

	Have far too much debt	Have a bit too much debt	Have a manageable amount	Do not have any debt
LMI Retirees	11%	18%	40%	30%
Non-LMI Retirees	3%	8%	49%	41%

17 https://files.consumerfinance.gov/f/documents/201701_cfpb_OA-Student-Loan-Snapshot.pdf

Financial Health Innovation for LMI Pre-Retirees and Retirees: Tweaking, Not Inventing

The daily financial health challenges that LMI pre-retirees and retirees face are not unique; Americans across age groups struggle in many of the same ways. Many solutions already exist to meet these needs, and the financial technology explosion in recent years has led to the continued development of innovative, technology-enabled tools. Most of these fintech solutions have been designed with millennials in mind, however, rather than older people with lower incomes.

But we do not need to start with a blank slate. There is an enormous opportunity for financial services providers to rethink aspects of their existing solutions to better serve older, lower-income customers. As the innovations highlighted below demonstrate, marketing, distribution, user experience, and customer service models may require innovative thinking and investment to meet these customers' needs. For example, most LMI pre-retirees are highly focused on building their retirement savings. Having access to financial health tools via their employer or their defined contribution plan recordkeeper might increase uptake, as these providers are already embedded in the workplace, increasing trust and engagement with employees preparing for their retirement.

Customer support, especially during the setup process, will also likely be key for older populations. Given the lean cost structures of these new fintech companies, partnerships with larger financial institutions may help provide the customer service support that will be critical to the success of older customers. These are the kinds of tweaks and changes that may make all the difference in helping LMI pre-retirees and LMI retirees use some of the most promising financial health solutions in the market successfully.

It may seem counterintuitive to consider fintech solutions for older consumers, who may be less comfortable with technology than younger people. Recent Federal Reserve data shows, however, that 77 percent of today's LMI pre-retirees and retirees own a mobile phone.

Of those who own a mobile phone, 42 percent own a smartphone.[18] As baby boomers age, we can anticipate that these levels of digital technology ownership and usage will continue to increase.

In an initial scan of the marketplace, we identified several promising innovations with the potential to meet the most pressing financial health challenges facing LMI pre-retirees and LMI retirees. Those innovations are outlined here, as well as thoughts on the specific tweaks that could help these innovations serve these populations effectively.

[18]   https://www.federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201603.pdf

Innovation Opportunity: Helping LMI Pre-retirees Build a Liquid Savings Reserve

Much of the recent technological innovation in the savings space has focused on helping consumers, especially millennials, both automate and optimize their their long-term savings investing strategy, whether in a retirement plan account or not. These "robo-advising" solutions, like Betterment, Wealthfront, and others, use sophisticated, automated algorithms to maximize both returns and tax efficiency within a portfolio for the minimum amount of risk. While this technology significantly lowers the cost of portfolio management, making customized investing advice available to many more Americans, these solutions are not likely to help move the needle for LMI pre-retirees and LMI retirees who struggle with more fundamental financial health needs.

There has been innovation in the long-term savings space targeted toward lower income consumers, however. Fractional share investing aims to help people of all income and savings levels participate in the stock market by purchasing small fractions of shares of stock, rather than full shares. This allows for low, or no, account or purchase minimums, opening up access to the market's growth for low-balance savers. From an LMI consumer's perspective, though, the most pressing issue is more likely building up the portfolio's principal balance, as opposed to its rate of return. By increasing the overall portfolio balance, the rate of return can be more meaningful. Similarly, even if an account is designed to be liquid in tax terms, investing short-term savings in the stock market is not always wise, given the potential fluctuations and loss of principal.

Acorns has recognized these dynamics and has built a modular solution that can be configured in a number of ways, from tax treatment to investment options to contribution mechanisms, to meet the short- and long-term needs of low-income savers.

While services like Acorns make savings automatic for people whose financial lives are relatively predictable, those savers who experience income and/or expense volatility may be challenged to set an automatic "round-

acorns
### Acorns (and Acorns Later)

What It Is

Acorns offers fractional share investing across a widely diversified stock portfolio, with robust, behaviorally informed tools to drive savings rates. It includes "cash forward" rewards contributions from a network of retail brand partners like Nike, Zappos, and Airbnb. Acorns Later provides access to the same features, but using an Individual Retirement Account structure for tax advantages.

Keys to Success for LMI Pre-Retirees and Retirees

Distribution: Finding partners, like employers, payroll providers, or defined contribution recordkeepers, to get Acorns into the hands of low-income savers

Default options: Low-income savers seeking to build an emergency account would benefit from a set of account default options, including a taxable design and cash or a money market investment vehicle for maximum liquidity

LEARN MORE: www.acorns.com
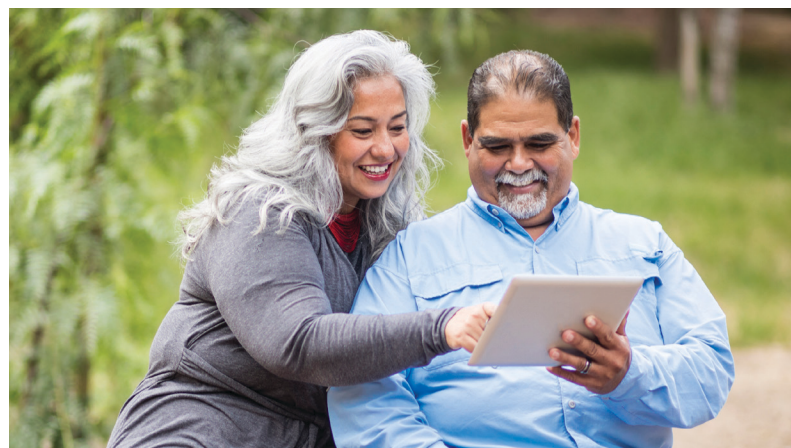
up" or recurring contribution. One startup working to solve for that is Digit, a 2015 winner of the Financial Solutions Lab, a program managed by CFSI with founding partner JPMorgan Chase to scale promising financial health innovations in America. Digit automates short-term, liquid savings, despite income and expense volatility challenges, by calculating and setting aside the perfect daily amount of money for a person to save, while preserving their ability to meet other financial obligations.

Concept: "Sidecar" Savings Account	
What It Is	While not currently in market, a "sidecar" account would leverage the automatic withdrawal functionality of a defined contribution plan in order to build a short-term, liquid savings cushion. Savers would see one amount withdrawn from their paycheck for both their sidecar account and their 401(k), but be able to tap into their liquid funds in case of an emergency. Once funds in the sidecar account are replenished, withdrawals would continue, funneling funds into the 401(k).
Keys to Success for LMI Pre-Retirees	Success definition: Provider (whether a defined contribution plan recordkeeper, payroll provider, or employer) defines success of sidecar account in terms of size, growth, and fewer withdrawals or loans from the linked defined contribution plan, instead of average balance in sidecar account Prioritize liquidity: Keeping the sidecar account balance liquid and accessible, as opposed to tax-advantaged Behavioral design: Sidecar savings should be opt-out
Learn more	https://assets.aspeninstitute.org/content/uploads/2017/06/FSP-Sidecar-Accounts-Brief.pdf https://scholar.harvard.edu/files/laibson/files/2017-10-25_rainy_day_paper_final_2.pdf

Solutions like Acorns and Digit seem to have all of the critical elements to help LMI savers build a liquid savings cushion painlessly, and maybe even build longer-term savings that can benefit from both tax advantages and market growth, in the case of Acorns Later. There is still work to be done, though, to get these tools into the hands of LMI savers.

While defined contribution plan participation rates are not as high as we would like, the workplace-distributed retirement plan has been extraordinarily successful, thanks to 401(k) paycheck withdrawal and automatic enrollment. The success of the 401(k) has led many to consider whether and how we might leverage that same distribution channel and behavioral mechanism to design a short-term, liquid savings account, called the "sidecar" savings account.

While there are several different variations on this idea, the heart of the concept is that both short-term, liquid savings outcomes and long-term retirement savings outcomes can be improved by leveraging one single payroll withdrawal for both purposes. Some variations of the concept would require regulatory change at scale, while others may require technological or process innovation from either recordkeepers or payroll processors. There remains significant opportunity for

a progressive employer and a forward-thinking defined contribution plan recordkeeper to test pieces of this idea, however, to understand how customers interact with this product structure and whether payroll withdrawal for short-term savings can ultimately improve long-term retirement savings rates.

Innovation Opportunity: Helping LMI Pre-Retirees and LMI Retirees Pay Their Bills

As we have noted, all pre-retirees and retirees, regardless of income, struggle with generating income sufficient to exceed their expenses. Clearly, there are many macroeconomic and structural forces contributing to this critical financial health challenge, and there is a role for innovative policies and practices from the federal government, state governments, and employers that can help more Americans achieve the income levels they need to cover their expenses. In particular, there is an opportunity for innovation in both program design and messaging to encourage eligible Americans to delay claiming their Social Security benefit payments, as this is one of the most powerful ways for older Americans to increase income.[19]

In recent years, the advent of "gig economy" tech platforms, like Uber and Instacart, has been critical for helping some older Americans generate income. These services have made it easier for Americans to retire from full-time work while maintaining a source of earned income on a schedule that they can control and adapt to their changing needs and preferences. In fact, in 2017, 35 percent of those engaged in gig economy work were 53 or older.[20] As the baby boomers retire and continue to participate in these platforms, the way we think about financial health and income generation in "retirement" may change significantly.

In addition to generating additional income via gig or other work, we see providers innovating in the insurance space to help customers annuitize their savings, generating predictable, steady lifetime income once they choose to retire. The opportunity will be to find ways to get these apps and tools embedded into the channels and accounts already used by LMI pre-retirees and retirees.

One such company, Blueprint Income, a 2017 winner of the Financial Solutions Lab, offers pre-retirees an opportunity to purchase a "personal pension" incrementally that can provide a smooth, guaranteed source of income once they choose to retire.

BLUEPRINT INCOME ⌐

What It Is

A service that allows customers to make small monthly contributions that become an insurer-guaranteed annuity, offering a predictable and reliable source of income for life. It allows workers to save for retirement without worrying about market ups and downs.

Keys to Success for LMI Pre-Retirees

Communication: Lifetime income is not a complicated concept, but insurance and annuities fundamentally are. Communicating clearly, especially about the sometimes-fraught topic of annuities, is key.

Holistic advice to aid decision-making: Like all consumers, LMI pre-retirees will need help understanding the role that this solution can play in their financial life, versus a defined contribution plan.

Customer support: While a digital distribution model keeps costs down, LMI customers may also want to access live customer service support.

LEARN MORE: www.blueprintincome.com

---

[19] https://www.aarp.org/content/dam/aarp/ppi/2018/supplemental-transition-accounts-for-retirement.pdf

[20] https://www.aarp.org/work/working-at-50-plus/info-2018/older-gig-workers-fd.html

There also remains a significant opportunity for financial services providers to help LMI pre-retirees and LMI retirees increase their "Spend" score by helping them to pay their bills on time and in full. SilverBills® reduces the stress and risk of paper bill payment for seniors via automation.

While SilverBills® helps users manage the mechanics of bill payment, services like Dave, another 2017 Financial Solutions Lab winner, and Handle Financial's Prism, a 2015 Financial Solutions Lab winner, help users plan for upcoming bills in the context of the rest of their expenses.

Services like SilverBills® and Dave could be powerful for pre-retirees and retirees, but considering alternative distribution approaches – such as partnering with the banks and credit unions these customers already use for their core transactional accounts – and providing hands-on support for automating bill payment may help facilitate uptake.

Dave.com

What It Is

Dave helps users budget for upcoming bills and expenses, communicating when bills are coming due and balances are getting low, to help them avoid overdraft.

Keys to Success for LMI Pre-Retirees

UX considerations: Digital interface is intuitive but with millennials as target market, does require a base level of tech savviness and all bills to be paid online

Distribution: Getting Dave, and similar tools, into the hands of older Americans may require innovative distribution partnerships

LEARN MORE: www.dave.com

Silver Bills™

What It Is

SilverBills® centralizes bill payment on a senior's behalf, leveraging technology to detect errors and fraud while reducing paperwork and potential mistakes by the bill payer, with the goal of preventing late fees and missed payments

Keys to Success for LMI Pre-Retirees

Thoughtful design: Combines a "high touch" customer interface with a "high tech" back office

Multipurpose: Solves for a variety of use cases: physical limitation, cognitive decline, or simply managing a complex number of billers with different due dates and payment methods

LEARN MORE: www.silverbills.com

Pefin

What It Is

A monthly online subscription service that leverages artificial intelligence to deliver a comprehensive, customized long-term financial plan with continuous, tailored updates and advice as your financial situation changes

Keys to Success for LMI Pre-Retirees and Retirees

Clarity: Comprehensive, all-in-one plan with clear recommendations makes complicated decisions seem easy

Making it doable: It will be important to provide LMI customers with achievable next steps, so they can feel that they are making progress in the face of challenging financial circumstances

Support: Pre-retirees and retirees may need higher-touch support to input the initial data, especially if they are going to enter their data manually

LEARN MORE: www.pefin.com

cinch

What It Is

A digital financial manager that generates recommendations around savings, debt, insurance, and spending, with the goal of saving users thousands of dollars annually

Keys to Success for LMI Pre-Retirees and Retirees

Action-oriented daily view: Beautiful graphical interface designed for daily use is easy to understand, providing users with a clear assessment and prioritized actions across their entire financial lives

Helpful alerts: Proactively suggests places users can save money by spending less for expenses like auto insurance, or by consolidating or restructuring debt

Data aggregation: Requires users to be comfortable with Cinch aggregating their data from a variety of providers

LEARN MORE: www.cinchfinancial.com

Innovation Opportunity: Helping Pre-Retirees and Retirees Make "Next-Dollar" Decisions About Debt

Data from CFSI and other researchers shows that the lives of American pre-retirees and retirees, especially those with low and moderate incomes, are more complex than ever before. With more competing demands on financial resources – daily expenses, retirement savings, nagging consumer or mortgage debt, or even co-signed student loan debt for grown children – deciding where to put that "next dollar" is critical yet confusing. For these groups, decisions about debt repayment are made in a different context than people who are earlier in their career. For pre-retirees, which is more important: repaying debt or putting every extra dollar into growing the retirement nest egg? How can retirees with limited income fit debt payments into their fixed cash flow while minimizing long-term debt payments to preserve any accumulated assets?

For those in a debt management crisis, nonprofit credit counseling solutions like GreenPath Financial Wellness and Money Management International are an excellent resource. For those not in crisis but still looking for advice on sequencing and structuring debt repayment, there is a bumper crop of new "CFO-in-your-pocket" solutions that leverage data aggregation, artificial intelligence, and old-fashioned human oversight to deliver comprehensive, customized, detailed financial advice for a much lower price. These include Pefin and Cinch, which are both powered by artificial intelligence.

CONCLUSION

Retirement is a long life stage, and with life expectancy increasing in the United States, it is getting longer.

As the government and employers shift risk to individuals, workplace pensions decline, and wages stagnate, most Americans are underprepared for retirement. They simply cannot save everything they will need to thrive after they stop working. Nonetheless, individual savings remain critically important, and we must do everything we can to support and encourage long-term savings activity.

As we have discussed in this analysis, saving for the long term doesn't happen in a vacuum. LMI pre-retirees, who are actively working to prepare for retirement while juggling complex financial lives, and LMI retirees, who are making financial decisions based on their reduced ability to generate income, need help improving other aspects of their financial health. They need help building liquid emergency savings, paying their bills on time and in full, and managing debt. Shoring up their financial health in these ways supports their ability to save or to better manage their limited resources if retired. Helping them improve financial health today can help them enjoy a financially healthier tomorrow.

Fortunately, there has been an explosion of financial health innovation in recent years, with financial technology startups, policymakers and thinkers, and incumbents alike developing ideas and building solutions. While most of this innovation is not explicitly targeted toward older Americans with low and moderate incomes, many of these solutions are only a few tweaks away from being viable, marketable approaches. Rethinking the user experience, customer service, marketing, and distribution from the older consumer's point of view can open up new and growing markets.

Ultimately, helping Americans save more for retirement, and better manage saved assets during retirement, is a win-win. Financial services providers of multiple kinds can succeed when there are more assets under management, and when customers are financially healthy and can use a broader range of beneficial products and services. And Americans will succeed when they are financially healthy and able to not only survive retirement, but to enjoy it.