

FINANCIAL COACHING AND MEDICATION ADHERENCE: THE POTENTIAL FOR A NEW MODEL

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J. Michael Collins, Collin O'Rourke, and Mia Nafziger

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Executive Summary

Prior studies, recent surveys, and a case study of credit counseling clients all suggest an association between household financial management and people's ability to pay out-of-pocket medical expenses, especially prescription medications. An inability to adhere to medical treatments has a direct relationship with health care outcomes and costs—skipping or delaying medications can result in higher-cost medical interventions, emergency room visits, and worsening health status.

Increasingly, health care coverage plans require policy holders to pay out-of-pocket costs before they can access medical treatments such as prescription drugs. Out-of-pocket costs vary dramatically, but for people with chronic illnesses they are typically \$500 or more each year. Budgeting for these costs may be especially difficult for people with a new diagnosis or a change in their costs. Covering new out-of-pocket costs, whether due to a new diagnosis or a change in coverage, can be a significant shock to household budgets, especially for people who are low income, have poorer credit, or show other signs of economic vulnerability.

Health behaviors, such as exercise and diet, are correlated with health outcomes and adherence to medical treatments. Household financial behaviors are another aspect of individual behavior that have a correlation with health outcomes. Yet, there are no well-designed financial management interventions targeted to people whose health is at risk due to out-of-pocket medical costs. Financial interventions are not integrated into health systems; health systems generally assume that patients can figure out how to pay out-of-pocket costs on their own.

FINMed is a new financial coaching intervention provided by telephone to patients with a recent change in relatively small out-of-pocket medical costs (\$20–\$100 per month) or a pattern of problems paying for ongoing health care needs. The intervention is brief, solution-focused coaching lasting **about 30 minutes** with **2–3 follow-up** sessions that may be conducted via SMS message or email. The coaching involves:

- Determining the patient's health goals and motivation
- Planning for the costs of health care
- Setting up a process to make sure the patient will have the funds needed when the next set of care (e.g., refill or therapy session) is due

- A majority of people take at least one prescription drug regularly, costing an average of \$283 per year.
- According to the Kaiser Family Foundation, out-of-pocket expenses in health coverage plans are increasing.
- For people with diabetes, cardiovascular disease, or hypertension, prescription drug costs can run to more than \$500 per year.
- 44% of people with less than a high school education and 53% of those earning less than \$25,000 per year report difficulties paying for prescriptions.
- People with diabetes who report problems affording prescriptions are about five times more likely to use an emergency room, compared to people with diabetes who do not report problems paying for medications.
- People who have problems paying for prescription medications report lower rates of being able to set financial goals.
- Problems paying for prescriptions are associated with decreasing credit scores and more difficulty getting by financially—issues that could be addressed by a financial management intervention.

Introduction

Managing health care is not often considered part of household financial management. Yet, trends toward consumer-driven health care and high-deductible health insurance and the growing use of copayments and deductibles in health care coverage—as a tactic to ensure that consumers have “skin in the game” in the drive to control health care costs—mean households of all income levels increasingly must budget for out-of-pocket medical costs. However, they have few resources to support that process. Budgeting for such costs is not a standard item in financial education programs, and health care providers are not trained to help patients manage the financial burdens created by ongoing therapies. There is no standardized counseling or other form of intervention in place to help people accommodate ongoing medical costs in household budgets.

Although the public health field has long recognized the role of economic factors as key determinants of health and access to health care, the link between financial management—holding economic resources, insurance, and other supports constant—and health has not been well established. There is, however, an extensive literature showing that patients who fail to adhere to treatment protocols—typically for medications—end up with worse health outcomes. A growing number of studies show that patients claim a major reason they are not able follow treatment plans is out-of-pocket costs. This suggests that financial counseling or coaching should be a part of the health care system. When patients are prescribed a new medication or therapy, part of the process should include an opportunity to participate in coaching to help the patient reallocate consumption toward the new expense. But solving this problem—by providing a financial intervention aimed at health outcomes—is complicated. The financial counseling system and health systems are not well aligned. Nor can such interventions be too highly standardized, as the care delivery process and the patient’s responsibility and ability to pay out-of-pocket costs on a regular basis are both highly varied.

The goal of this study is to demonstrate the links between financial management and health care adherence and propose a new coaching model—FINMed—to address this problem.

Background

A 2016 survey by the Federal Reserve found that nearly one in six households in the United States had failed to get medical care (medications, primary care, or follow-up care) due to out-of-pocket costs. Further, a new diagnosis, whether for a chronic condition or for one requiring extended treatment, can create large financial shocks, as the illness and its associated costs may disrupt earning potential, deplete assets, and create significant medical bills. Financial challenges associated with health care and out-of-pocket medical costs may take a variety of forms:

1. Large costs associated with care not covered by insurance.
2. Costs associated with acute care for intensive diagnoses, such as cancer.
3. Income disruptions due to being debilitated or losing work time to receive care.

4. A lack of insurance coverage, sometimes due to lapses in premium payments.
5. Behavioral problems that limit both health care adherence and financial management capability.

Any of these issues can create significant, ongoing financial problems. Remediating these problems may require debt forgiveness or restructuring (including bankruptcy) and challenging choices about the type and costs of care a patient receives.

There is also a set of patients for whom out-of-pocket medical costs are burdensome yet manageable. These patients have insurance coverage and a source of income, and they can generally make ends meet. But if the budget is tight, with no space to accommodate a long-term rise in out-of-pocket medical costs, these patients will often forgo some care to balance the budget. Changes in the amount and timing of payments for monthly prescription refills or periodic expenses such as physical therapy or mental health counseling may throw off a household budget. Without a liquid savings account or affordable credit, people will delay or defer getting the care they need. A \$20 copayment may appear small, but if it comes at a point in the month when the patient lacks liquid resources, its impact becomes large. Added to the other costs, in time and money, of getting to the doctor or pharmacy and other barriers, that \$20 payment may be enough to deter the patient from seeking care.

Thus, an intervention targeted at financial management can help support households' abilities to pay for burdensome, yet manageable, ongoing costs of treatment, such as prescription copayments. In this study, we propose an intervention aimed at these patients who simply need help managing such costs. The intervention we describe is not designed to address those with outstanding medical debt or major medical expenses; this emphasis is not meant to minimize the important issues related to the costs of care, potential flaws in insurance programs, and the effects of increasing costs—including copayments and deductibles—on households' ability to afford health care. Hence, the focus of the proposed intervention is patients who have:

- One or more chronic conditions (such as hypertension, diabetes, depression/anxiety)
- Regular income (including income from benefits)
- Health insurance that requires out-of-pocket copayments or deductibles that results in an ongoing household expense

Out-of-Pocket Medical Costs

Out-of-pocket medical spending refers to patient payments for health expenses not covered by third-party payers, typically private or public insurance plans. Patients with insurance still face copayments, deductibles, and coinsurance rates that they must pay to access medical treatment, including prescriptions. Importantly, many of these charges must be paid *before* the individual can access care or fill a prescription. These expenses are in addition to monthly premiums. The specific details vary by health plan; in general, higher monthly premiums are associated with lower out-of-pocket costs.

Out-of-pocket medical expenses, both for prescriptions and for other treatments, have increased over the last two decades.¹ Prescription drug copayments constitute the largest share of patient out-of-pocket spending.² The costs of prescription drugs may vary from nothing, or a few dollars, to thousands of dollars. Generic drugs, those that are out of patent protection, are generally relatively inexpensive, but some patients need drugs that are not available as generics. These patients must use the alternatives provided by the insurance plan formulary, or preferred drug list, which is generally organized by cost tiers—more common or cheaper drugs come with lower copayments; most employer-provided plans come with such tiered formularies.³ The average copayment for first-tier drugs is about \$11 per prescription, versus \$93 for fourth-tier drugs. Drugs that are not on the formulary—non-preferred drugs—come with even higher out-of-pocket costs.

Office visits, physical therapy, and other kinds of care may also incur out-of-pocket expenses, but these costs are generally more episodic, whereas prescription drug costs occur monthly. Thus, these are more like shocks to the budget than regularly recurring expenses that must be incorporated into monthly budgets.

DEFINING TERMS

- A **copayment** (or copay) is a set amount that an insured individual must pay to access care. The copayment may be a flat fee or a tiered payment based on the type of service or specific medication.
- A **deductible** is a set amount an individual must pay for health care each year before the insurance company begins paying. For instance, a \$1,000 deductible means all costs are out of pocket until the insured individual spends \$1,000.
- **Coinsurance** is a percentage of treatment costs that the individual must pay after reaching the deductible. A coinsurance rate of 20% means the individual will pay 20% of medical expenses and insurance will pay 80%.
- **Out-of-pocket maximums** limit total annual out-of-pocket costs; once the maximum is reached, the insurance pays all costs. Some policies also have lifetime maximums.

¹ “Health Care Costs: A Primer,” Kaiser Family Foundation (2012).

² Kathrynne Anne Paez, Lan Zhao, and Wenke Hwang, “Rising Out-of-Pocket Spending for Chronic Conditions: A Ten-Year Trend,” *Health Affairs* 28.1 (January/February 2009): 15–25.

³ “2016 Employer Health Benefits Survey,” Kaiser Family Foundation, September (2016), <http://www.kff.org/health-costs/report/2016-employer-health-benefits-survey/>.

Table 1 shows average out-of-pocket costs based on a large national survey of health costs, the Medical Expenditure Panel Survey (MEPS), administered by the federal Agency for Healthcare Research and Quality.⁴ Overall, three-quarters of respondents to the survey reported out-of-pocket expenses in 2014. Excluding people with no health care expenditures, average out-of-pocket expenses was \$809. A majority (54%) reported having prescription drug costs, making this the most common out-of-pocket expenditure; among respondents with drug costs, those expenses averaged about \$283, or \$24 per month.

TABLE 1. AVERAGE OUT-OF-POCKET EXPENDITURES

	Have any out-of-pocket expenditures for service	Average out-of-pocket expenditure (excluding those with no expenditures)
All health care	72%	\$809
Prescriptions	54%	\$283
Office visits	52%	\$314
Physical therapy	2%	\$319

Source: Authors' tabulations of 2014 MEPS data

Insurance plans that expose people to greater out-of-pocket costs, such as high-deductible plans, are becoming more prevalent, both in individual insurance products and in employer benefit programs, the primary mechanism by which people access private health insurance.⁵ Deductibles for employer-provided plans have increase by 67% since 2010, driving total out-of-pocket spending for those insured by these health plans up substantially over the last decade.⁶ The average deductible for employer-sponsored plans reached \$1,077 in 2015.⁷ These trends appear to be entrenched, suggesting that the prevalence and amount of out-of-pocket costs will likely continue to increase.

Chronic conditions, which require regular treatment, may generate higher out-of-pocket costs. Table 2 shows that people with high blood pressure, diabetes, and heart disease are all very likely to have out-of-pocket expenses—nearly all patients in the MEPS survey with these diagnoses had such expenses. For example, 85% of individuals with high blood pressure have some out-of-pocket spending on prescriptions. Those costs can be substantial; Table 3 shows annual prescription drug costs reported in the MEPS survey by people with diagnoses of diabetes, heart disease (cardiovascular), and high blood pressure (hypertension); these data include both people who have had the diagnosis for more than 1 year and those who received the diagnosis in the year preceding the survey. As the table demonstrates, these diagnoses may present significant costs for patients; a new \$300–\$550 cost could be difficult for many households to manage.

⁴ Appendix A describes the datasets used throughout this report.

⁵ Bob Bryan, "Americans' Out-Of-Pocket Healthcare Costs Are Waiting," *Business Insider*, September 14, 2016; "Payments for Cost Sharing Increasing Rapidly Over Time" Kaiser Family Foundation, April 12, 2016, <http://www.kff.org/health-costs/issue-brief/payments-for-cost-sharing-increasing-rapidly-over-time/>.

⁶ Rachel Dolan, "High-Deductible Health Plans," Health Policy Briefs, February 4, 2016. *Health Affairs* and the Robert Wood Johnson Foundation, http://healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_152.pdf.

⁷ "Payments for Cost Sharing Increasing Rapidly," Kaiser Family Foundation.

Patients with multiple chronic health conditions are exposed to especially large out-of-pocket costs, mostly attributable to prescription drugs.⁸

TABLE 2. PREVALENCE OF OUT-OF-POCKET (OOP) EXPENDITURES BY DIAGNOSIS

	Any Out-of-Pocket Medication Expenditures	Any Out-of-Pocket Medical Expenditures
Diabetes	91%	95%
High blood pressure	85%	91%
Heart disease	90%	95%

Source: MEPS 2014

TABLE 3. PRESCRIPTION DRUG EXPENDITURES BY DIAGNOSIS

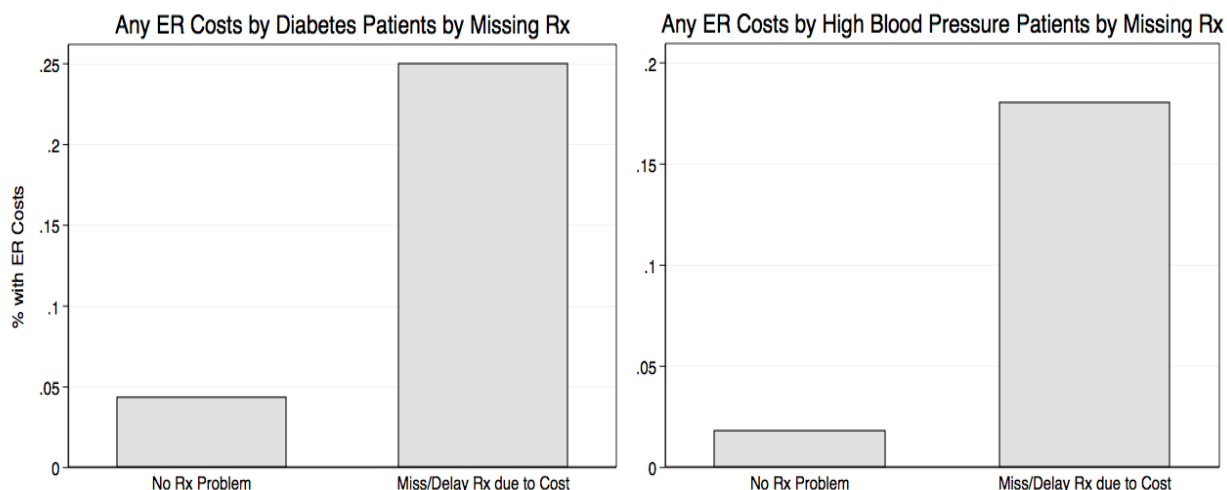
Rx Costs	Diabetes	Cardiovascular	Hypertension
Prior diagnosis	\$604	\$613	\$437
Diagnosed this year	\$433	\$547	\$314
Observations	2,336	1,093	6,367

Source: MEPS 2014

Of course, some patients will not be able to absorb these costs, and will decide to skip or delay filling their prescriptions. These decisions can ultimately lead to worsening health status and higher-cost medical interventions, such as emergency room visits. Figure 1 shows the percent of people with diabetes or high blood incurring emergency room costs by whether they reported delaying or not filling a prescription due to costs. Only 5% of individuals with diabetes who did not have problems affording prescriptions used an emergency room, compared to nearly 25% of those who did report cost problems. According to the 2014 MEPS data, emergency room visits typically cost about \$1,300, but they can also be an indicator of more costs to come—emergency room visits for hypertension, for example, can be signals of growing health care problems and worsening health status.⁹

⁸ Wenke Hwang, Wendy Weller, Henry Ireys, and Gerard Anderson, “Out-Of-Pocket Medical Spending For Care Of Chronic Conditions,” *Health Affairs* 20.6 (November 2001): 267–278; Steve Cohen and Namrata Uberoi, “Differentials in the Concentration in the Level of Out-of-Pocket Health Expenditures across Population Subgroups in the U.S., 2011,” Statistical Brief 423, MEPS, September 2013, https://meps.ahrq.gov/data_files/publications/st423/stat423.pdf.

⁹ Alexander T. Janke, Candace D. McNaughton, Aaron M. Brody, Robert D. Welch, and Phillip D. Levy, “Trends in the Incidence of Hypertensive Emergencies in US Emergency Departments From 2006 to 2013,” *Journal of the American Heart Association* 5.12 (December 2016).



Source: MEPS 2014

FIGURE 1. ANY EMERGENCY ROOM EXPENDITURE BY DIAGNOSIS AND MISSING PRESCRIPTIONS

Out-of-Pocket Costs and Medication Adherence

Prescriptions often entail ongoing costs, costs that can be sizeable. As a result, more patients may find adherence to medication regimens demanding, and more will fail to adhere. One large-scale meta-analysis found nonadherence to medication recommendations averaged 25%.¹⁰ Lack of adherence to medication, while it may avoid the immediate prescription costs, leads to other costs that may be substantial. Non-adherence, whether to medications or to other therapies, increases health care costs and mortality rates.¹¹ Improving medication adherence does increase pharmacy costs, but it makes up for these costs by reducing the use of

POSSIBLE BIASES IN SELF-REPORTED SURVEY RESPONSES

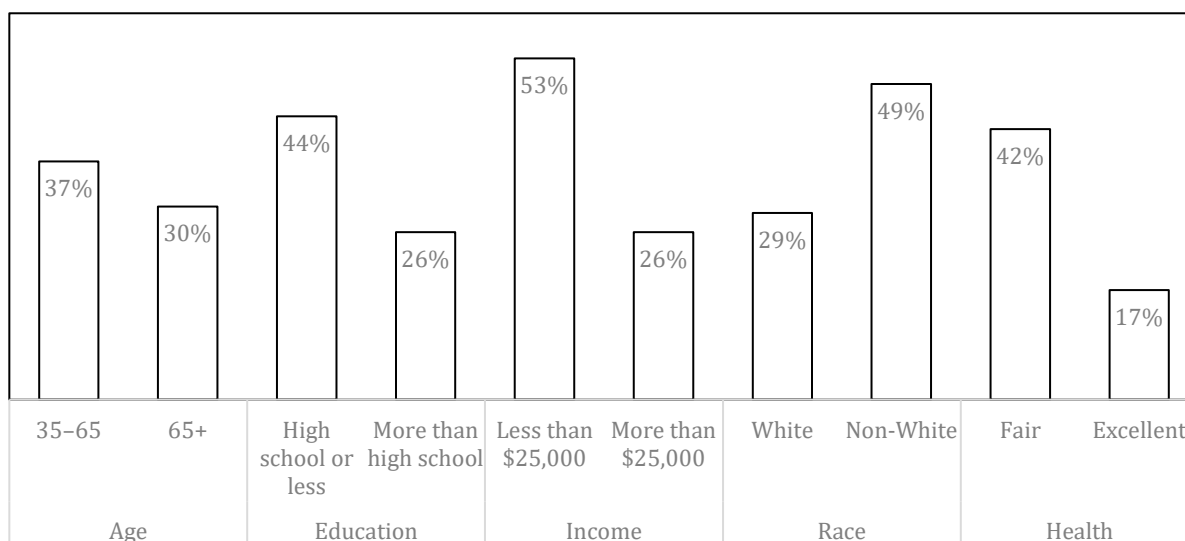
Surveys require that people self report not filling prescriptions. Respondents may indicate that they filled prescriptions even if they did not because that response seems more socially acceptable. Those who do admit not adhering to prescribed therapy may be more likely to blame finances over behavioral failings (e.g., forgetting or procrastinating). We cannot quantify the effects of this potential self-report bias, but we acknowledge this bias may affect our findings.

¹⁰ A. M. Peterson, L. Takiya, and R. Finley, "Meta-analysis of Trials of Interventions to Improve Medication Adherence," *American Journal of Healthy-System Pharmacy* 60.7 (April 2003): 657–665.

¹¹ *Adherence to Long-Term Therapies: Evidence for Action* (Geneva: World Health Organization, 2003); P. Michael Ho, David J. Magid, Frederick A. Masoudi, David L. McClure, and John S. Rumsfeld, "Adherence to Cardioprotective Medications and Mortality among Patients with Diabetes and Ischemic Heart Disease," *BMC Cardiovascular Disorders* 6.48 (December 15, 2006), <https://bmccardiovascdisord.biomedcentral.com/articles/10.1186/1471-2261-6-48>; J. Vestbo, J. A. Anderson, P. M. Claverley, B. Celli, G. T. Ferguson, C. Jenkins, K. Knobil, L. R. Willits, J. C. Yates, and P. W. Jones, "Adherence to Inhaled Therapy, Mortality and Admission in COPD," *Thorax* 64.11 (November 2009): 934–943; New England Healthcare Institute, "Thinking Outside the Pillbox," Research Brief, August 2009, http://www.nehi.net/writable/publication_files/file/pa_issue_brief_final.pdf.

general health services, hospitalizations, and emergency room visits.¹²

A variety of demographic characteristics may affect the likelihood of a person having difficulty paying for prescriptions. Figure 2 shows data from the Medication Adherence Survey, broken out by demographic characteristics. In this survey, middle-aged adults were more likely to have difficulties affording prescriptions than people age 65 or older, in part because older people have access to Medicare coverage, which provides more thorough benefits. Education and income are also correlated with prescription payment difficulties, with 44% of respondents having less than a high school education and 53% of those earning less than \$25,000 reporting difficulties affording prescriptions. About half of non-White respondents had difficulty affording prescriptions. In addition, people in poorer health had greater difficulty paying for prescriptions. Appendix B presents demographic data on medical treatment payment problems from the National Financial Capability Study.



Source: Medication Adherence Survey

FIGURE 2. NOT FILLING PRESCRIPTIONS BY DEMOGRAPHIC FACTORS

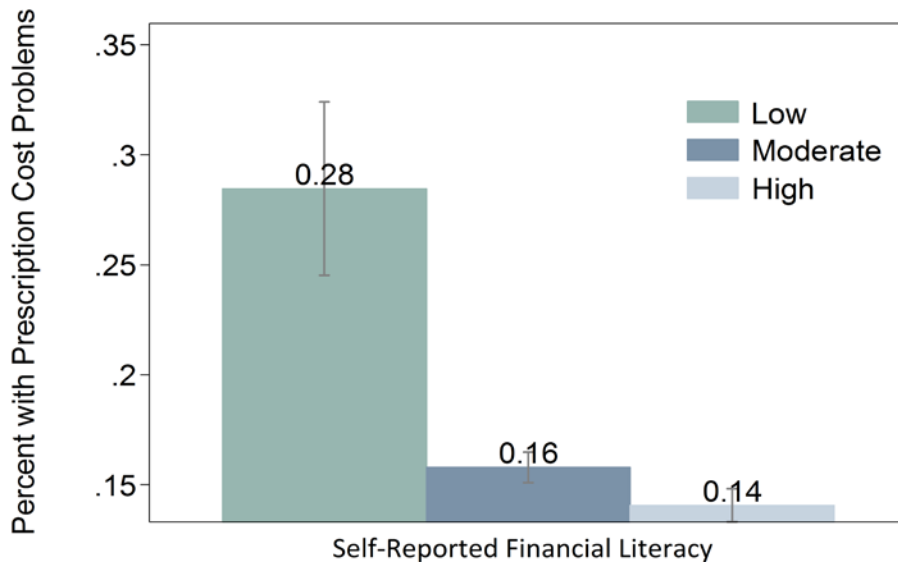
These patterns are relevant to the discussion, but they should not be viewed as definitive. Viewing cost problems in terms of static categories such as income, educational attainment, or diagnosis points to factors that individuals may have little immediate ability to change. These patterns may be useful for targeting interventions, but they are much less helpful for informing the design of interventions.

¹² M. C. Roebuck, J. N. Liberman, M. Gemmill-Toyama, and Troyen A. Brennan, “Medication Adherence Leads to Lower Health Care Use and Costs Despite Increased Drug Spending” *Health Affairs* 30.1 (January 2011): 91–99; T. E. Delea, R. H. Stanford, M. Hagiwara, and D. A. Stempel, “Association Between Adherence with Fixed Dose Combination Fluticasone Propionate/Salmeterol on Asthma Outcomes and Costs,” *Current Medical Research and Opinion* 24.12 (December 2008): 3435–3442.

Financial Management and Financial Capability

Behavioral determinants of health are behaviors that affect the risk of becoming unhealthy, such as smoking, diet, exercise, or management of personal finances. Interventions that focus on affecting these behavioral determinants—in other words, changing individual behaviors—can have large effects on improving health outcomes. One of these determinants is adherence to medically recommended treatments—and adherence is often affected by a patient’s ability to pay for treatment. Struggling to manage finances, thus, may have a direct relationship to poorer health outcomes, as financial obstacles can prevent adherence to treatment. Therefore, addressing the role of cost as a barrier to care may increase adherence, and thus improve overall health outcomes.

There is a correlation between financial capability—possession of the knowledge, skills, and ability needed to manage finances effectively—and lack of medical adherence due to cost. Figure 3 uses data from the 2015 National Financial Capability Study and breaks people into three groups based on their financial knowledge: low, moderate, and high self-reported financial knowledge. The figure shows that people who report low levels of understanding of their finances are more likely to report problems paying for their medications than those who rated themselves at moderate or high levels. Individuals who said they were not good at dealing with day-to-day financial matters and who rated themselves as having low levels of financial knowledge were more likely to have prescription cost problems.

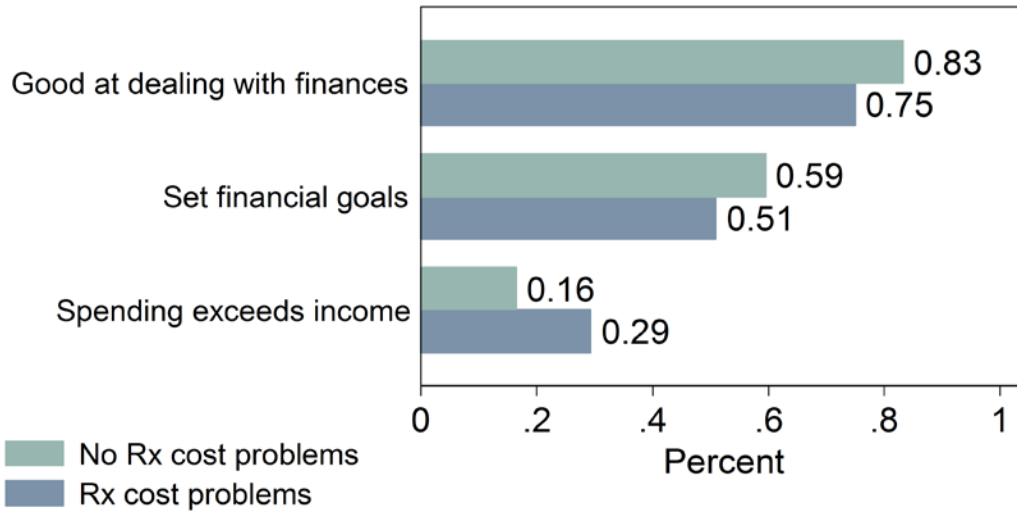


Source: National Financial Capability Study (2015)

FIGURE 3. SELF-REPORTED FINANCIAL KNOWLEDGE AND NON-ADHERENCE TO PRESCRIPTION MEDICATIONS

Figure 4, also from the 2015 National Financial Capability Study, illustrates how people who report problems paying for medications differ from those who do not report such problems. People who had trouble keeping up with the cost of prescription medications rated themselves

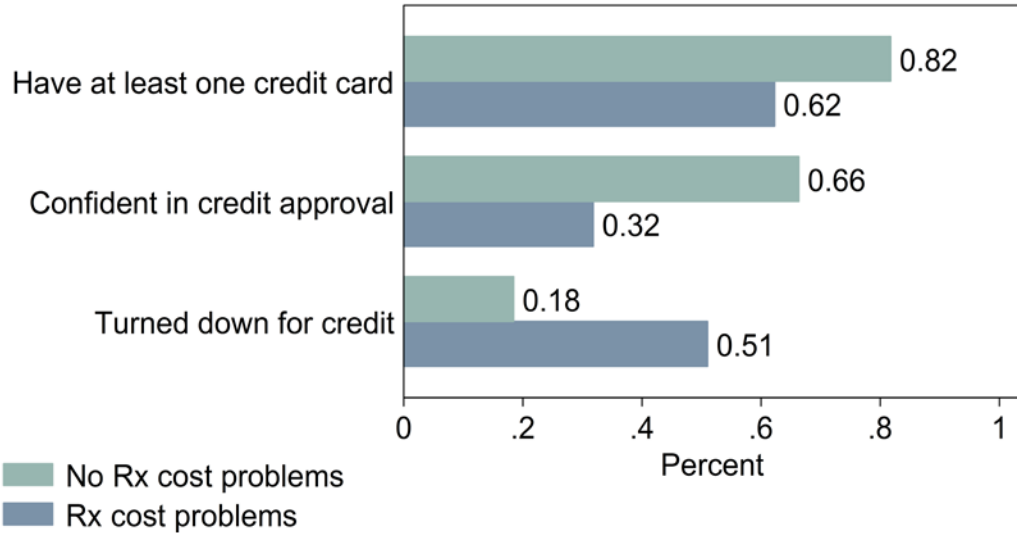
about 8 percentage points lower at being good at dealing with finances than those who did not report problems affording medications. People with prescription medication payment problems also reported lower rates of being able to set financial goals and much higher rates of overall spending exceeding income.



Source: National Financial Capability Study (2015)

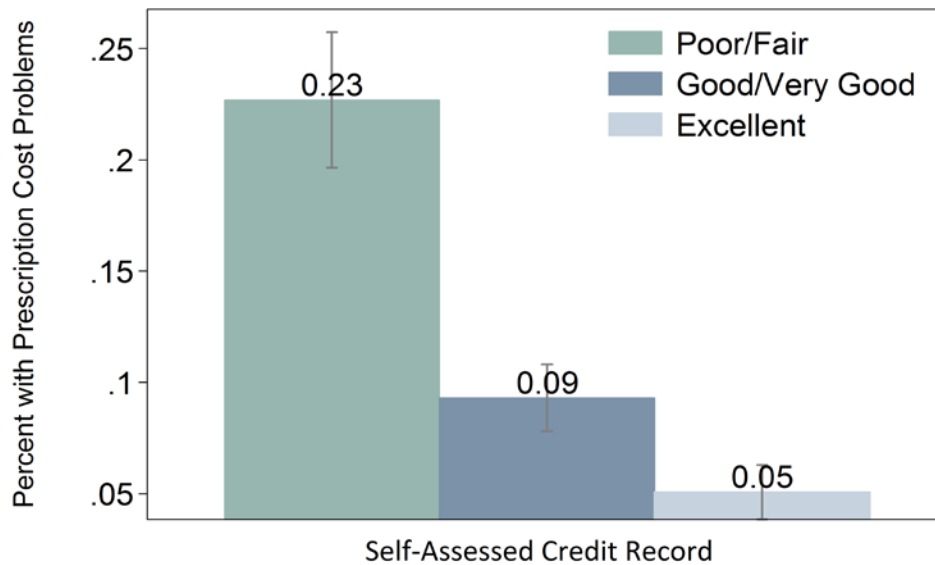
FIGURE 4. PRESCRIPTION COST PROBLEMS BY FINANCIAL MANAGEMENT SKILLS

The 2016 Survey of Household Economics and Decisionmaking (SHED), administered by the Federal Reserve Board, includes several questions about consumer credit, offering a different perspective on the relationship between financial capability and problems with prescription costs. In this survey, shown in Figure 5, people with prescription medication problems were less likely to have a credit card and less confident they could be approved for credit. They were also more likely to be turned down for credit. These data point to a lack of access to credit and consequent lack of liquidity for people struggling to afford medications. Indeed, the SHED data support a connection between credit problems and problems paying for prescriptions. Figure 6 shows the rate of people reporting problems paying for prescriptions in the SHED survey by self-rated credit quality. Those who rated their credit as poor had much higher rates of problems with prescription medication costs compared to those with good or excellent self-reported credit ratings.



Source: Survey of Household Economics and Decisionmaking (2016)

FIGURE 5. CREDIT CONDITION BY PRESCRIPTION COST PROBLEMS

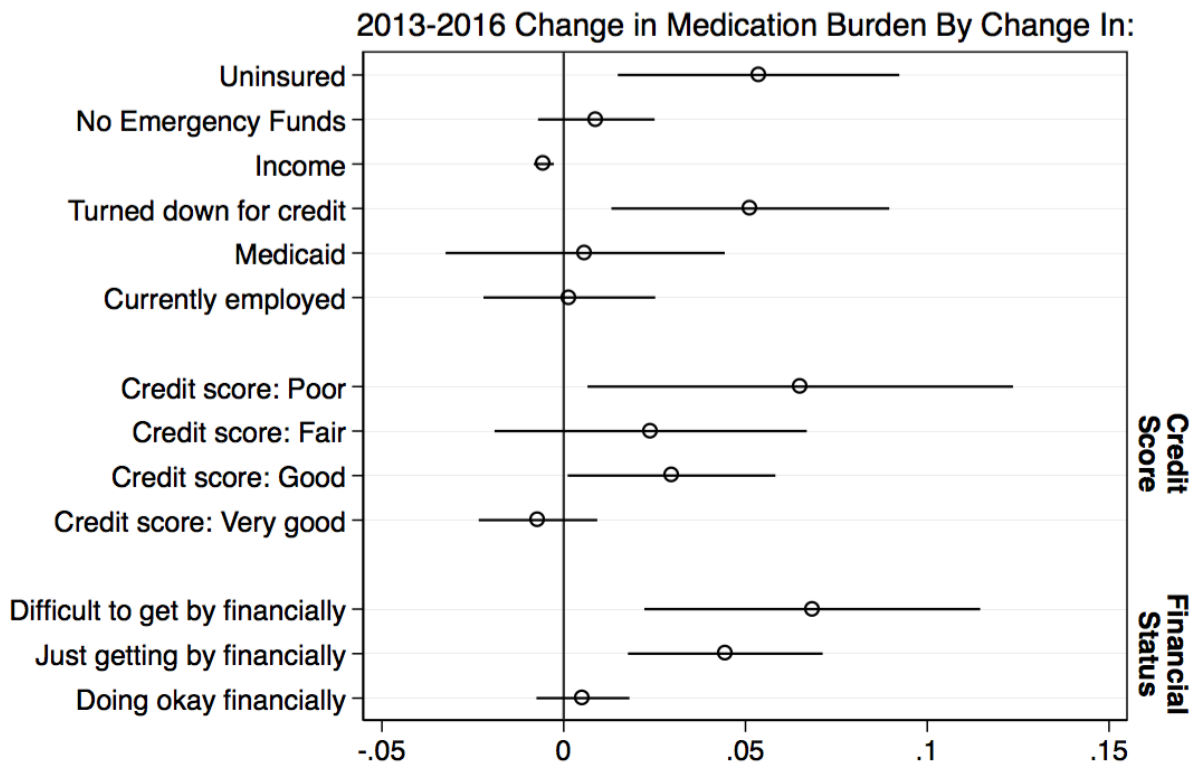


Source: Survey of Household Economics and Decisionmaking (2016)

FIGURE 6. PROBLEMS WITH MEDICATIONS COSTS BY SELF-REPORTED CREDIT RATING

The SHED data also allows us to track the effects of changes in households on ability to pay medication costs. The survey has been conducted since 2013, and a subset of respondents have been surveyed for more than one year, creating a panel to track households over time. This panel can be used to estimate the effects of changes in a household that happen when households report having prescription cost problems one year after not reporting such problems in previous years.

Figure 7 shows estimates of the effects of changing financial characteristics on self-reported prescription cost problems over time, using data from the 2013, 2014, 2015, and 2016 SHED questionnaires. These models estimate the effects of changes in household characteristics on changes in prescription cost problems. These estimates use a fixed-effects model, which means any factors that do not change over time are held constant. This analysis shows that having health insurance and higher income appear to reduce the likelihood of prescription cost problems, while having poor credit and finding it difficult to get by financially (or just getting by) are related to increased prescription cost problems (Medication Burden). Appendix C presents additional regression results on changes in prescription cost problems in the SHED.



Source: SHED 2013–2016

FIGURE 7: EFFECTS OF CHANGES IN PERSONAL FINANCES ON CHANGES IN PRESCRIPTION COST PROBLEMS

Controlling for other factors, the data show that the onset of prescription cost problems is associated with losing insurance, declining credit levels, and difficulty getting by financially. These last two factors are evidence of financial management behaviors that could be affected by a financial management intervention. None of the estimates are causal—we cannot show that people would adhere to medical treatments if financial management were improved. There may be other factors in play; for example, people who have medication problems may have poor health behaviors that limit income or are associated with other problems. But the evidence suggests financial management is an important factor in adherence to treatment regimens.

Case Study

Using data from a 2016 survey of a convenience sample of credit counseling clients who experienced problems paying for medications, we can analyze which factors affect clients' ability to pay for prescriptions.¹³ About 59% of the credit counseling clients in the survey were currently taking at least one prescription medication; of those, 35% experienced a problem paying for their medications, defined as (1) failing to take a prescription or taking less than prescribed due to cost in the past four weeks, or (2) having ever cut back or stopped taking a medicine due to cost.

Table 4 compares clients with prescriptions who reported no problems paying for medications with those struggling to pay for medications. Those who have problems with prescription costs reported poorer health and mental health status. They were also less likely to have health insurance and more likely to spend more than \$20 each month on medications. Those who reported problems paying for medications were also less confident in their financial stability; while 41% of respondents who reported no prescription cost problems were not at all confident in their ability to make ends meet in a financial emergency, more than half (53%) of respondents who had cost problems were not at all confident. These respondents also had lower credit scores, lower Financial Capability Scale scores, and lower scores on the Consumer Financial Protection Bureau (CFPB) Financial Well-Being Scale. Appendix D uses the same dataset and presents regression results on prescription cost problems.

TABLE 4. COMPARISON OF PRESCRIPTION RECIPIENTS WITH AND WITHOUT COST PROBLEMS

	No Prescription Cost Problems	Prescription Cost Problems
Overall Health Score (Possible range 6–30)**	21.8	19.9
Mental Health Score (Possible range 4–20)**	14.1	12.9
1 or More Chronic Diseases ^H	66%	67%
Health Insurance Coverage ^{**H}	97%	85%
Monthly Medication Spending		
\$1–\$20***	63%	30%
More than \$20***	27%	58%
Not Sure	10%	12%
Ability to Make Ends Meet in a Financial Emergency		
Not at all confident	41%	53%
Somewhat confident	42%	36%
Very confident	16%	11%
Any Late Payments in the Last 30 Days	71%	82%
Any Late Payments in the Last 90 or 120 Days*	52%	65%

¹³ J. M. Collins and M. Nafziger, “Finances and Health: Clarifi Survey Data,” Center for Financial Security, April 20, 2017, University of Wisconsin-Madison, cfs.wisc.edu/2017/04/20/clarifi.

Recent Accident or Injury** ^H	15%	29%
Monthly Income	\$2,606	\$2,490
Credit Score (Range 500–800 ¹)*	628	604
Financial Capability Scale Score (0–8)	3.6	3.2
CFPB Financial Well-Being Scale (14–86) ^{***}	34	30
Observations	123	66

Source: *Clarifi client survey*

*, **, and *** indicate statistically significant differences at the .10, .05, and .01 levels, respectively.

¹ 91% of clients had credit scores within this range; the other 9% were dropped as outliers.

^H Applies to any member of client's household.

Overall, these data suggest a connection between financial capability and the ability to pay prescription drug costs. Better financial management practices could help patients budget for smaller out-of-pocket costs that reduce treatment adherence and affect health outcomes. Increasing patient income or decreasing out-of-pocket costs through direct assistance or better health insurance could obviously reduce costs and hence improve adherence. Some programs do exist to help patients struggling with the cost of prescription drugs. For instance, prescription assistance programs help patients pay for prescriptions through reduced prices. However, while these programs may lower costs, they cannot address patients' financial capability, and so may not affect a patient's ability to pay other costs.¹⁴ Further, since patients may not tell their doctors when they decide not to fill a prescription, and doctors often assume that patients are adhering to treatment plans as directed, it is unclear how patients access these types of supports, if they qualify.¹⁵ At the same time, interventions through pharmacists come too late, because patients at risk of cost-related medication problems may not even turn up at the pharmacy, anticipating high costs. A financial management intervention could help patients budget for these costs ahead of time, and thus reduce the barriers to medication adherence on an ongoing basis.

Developing a New Model

Managing personal finances appears related to medication adherence, and financial interventions may improve care by helping patients with financial management skills. Prior interventions that have addressed medication cost as a barrier to proper care have focused on physicians explaining the advantages of taking medication and disadvantages of skipping or rationing treatment, but they have not addressed strategies to improve financial management.¹⁶ For example, one study

¹⁴ R. B. Haynes, K. A. McKibbin, and R. Janani, "Systematic Review of Randomised Trials of Interventions to Assist Patients to Follow Prescriptions for Medications," *Lancet* 348.9024 (August 10, 1996): 383–386; R. B. Haynes, H. P. McDonald, and A. X. Garg, "Helping Patients Follow Prescribed Treatment: Clinical Applications," *Journal of the American Medical Association* 288.22 (December 2002): 2880–2883.

¹⁵ Al Goldberg, G. Cohen, and A. H. Rubin, Physician Assessments of Patient Compliance with Medical Treatment, *Social Science & Medicine* 47.11 (December 1998): 1873–1876.

¹⁶ G. L. Kreps, M. M. Villagran, X. Zhao, C. A. McHorney, C. Ledford, M. Weathers, and B. Keefe, "Development and Validation of Motivational Messages to Improve Prescription Medication Adherence for Patients with Chronic Health Problems," *Patient and Education Counseling* 83.3 (June 2011): 375–381.

found that lottery-based daily financial incentives improved adherence to medications for patients at risk for stroke.¹⁷ Again, this intervention did not address overall financial behaviors.

The physician may seem to be the appropriate conduit for connecting financial management to out-of-pocket medication costs. Research has found that education, planning, and repetitive contact between the patient and a physician, nurse, or pharmacist can improve medication adherence, even without financial support.¹⁸ This structure is similar to some financial interventions, which also involve goal setting and building trust.¹⁹ However, many factors may prevent health care personnel from providing effective support. Both physicians and patients cite time constraints, discomfort, patient trust in their physician, and a lack of viable solutions to cost problems as barriers to addressing out-of-pocket spending.²⁰ Even when they do talk about financial barriers, health care providers may not discuss these issues as frequently as patients need.²¹ Furthermore, physicians may fail to acknowledge a patient's financial concerns or take patient costs into consideration when selecting a treatment.²² One study of 1,200 physicians found only 40% somewhat or strongly agreed that providers should be responsible for helping patients manage out-of-pocket prescription drug spending.²³ This is despite evidence that doctors can screen patients with financial difficulties early in their treatment to identify potential problems.²⁴

Thus, other approaches and outlets must be developed to help patients manage the wider issues that may affect their ability to pay for medications. The most appropriate type of intervention for this setting is financial coaching. Financial coaching fosters a collaborative, solution-focused

¹⁷ Kevin G. Volpp, George Loewenstein, Andrea B. Troxel, Jalpa Doshi, Maureen Price, Mitchell Laskin, and Stephen E. Kimmel, "A Test of Financial Incentives to Improve Warfarin Adherence," *BMC Health Services Research* 2008, 8:272, <https://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-8-272>.

¹⁸ M. Viswanathan, C. E. Golin, C. D. Jones, M. Ashok, S. J. Blalock, R. C. Wines, E. J. Coker-Schwimmer, D. L. Rosen, P. Sista, and K. N. Lohr, "Interventions to Improve Adherence to Self-Administered Medications for Chronic Diseases in the United States," *Annals of Internal Medicine* 157.11 (December 2012): 785–795.

¹⁹ J. Michael Collins and Collin O'Rourke, "The Application of Coaching Techniques to Financial Issue." *Journal of Financial Therapy* 3.2 (2012): 39–56.

²⁰ Peter A. Ubell, Cecilia J. Zhang, Ashley Hesson, J. Kelly Davis, Christine Kirby, Jamison Barnett, and Wynn G. Hunter, "Study of Physician and Patient Communication Identifies Missed Opportunities to Help Reduce Patients' Out-Of-Pocket Spending," *Health Affairs* 35.4 (April 2016): 654–661; J. D. Piette, M. Heisler, S. Krein, and E. A. Kerr, "The Role of Patient-Physician Trust in Moderating Medication Nonadherence Due to Cost Pressures," *Archives of Internal Medicine* 165.15 (August 2005): 1749–1755.

²¹ G. C. Alexander, L. P. Casalino, and D. O. Meltzer, "Patient-Physician Communication about Out-of-Pocket Costs," *JAMA* 290.7 (August 2003): 953–958, and "Physician Strategies to Reduce Patients' Out-of-Pocket Prescription Costs," *Archives of Internal Medicine* 165.6 (March 2005): 633–636.

²² H. H. Pham, G. C. Alexander, and A. S. O'Malley, "Physician Consideration of Patients' Out-of-Pocket Costs in Making Common Clinical Decisions," *Archives of Internal Medicine* 167.7 (April 2007): 663–668; Ubell et al., "Study of Physician and Patient Communication."

²³ W. H. Schrank, S. M. Asch, G. J. Joseph, H. N. Young, S. L. Ettner, Y. Kholodenko, P. Glassman, and R. L. Kravitz, "Physicians' Perceived Knowledge of and Responsibility for Managing Patients' Out-of-Pocket Costs for Prescription Drugs," *Annals of Pharmacotherapy* 40.9 (September 2006): 1534–1540.

²⁴ V. Shankaran, S. Jolly, D. Blough, and S. D. Ramsey, "Risk Factors for Financial Hardship in Patients Receiving Adjuvant Chemotherapy for Colon Cancer: A Population-Based Exploratory Analysis," *Journal of Clinical Oncology* 30.14 (May 10, 2012): 1608–1614.

partnership between the coach and the client; the relationship is focused on the individual developing his or her own goals, plans, and measures of progress, with the coach encouraging goal-based behaviors and holding clients accountable to their self-defined goals. In this way, coaching supports people in making and implementing financial action plans. Ideally, a financial coaching intervention could help patients learn to better manage their finances so that they can accommodate prescription costs. Financial coaching has the potential to improve patients' confidence in their finances and ability to pay for treatment, reducing financial stress, improving adherence, and ultimately leading to better health outcomes.

We propose a pilot model, called FINMed, to help people improve their health behaviors based on solution-focused financial coaching.²⁵ FINMed is a financial coaching intervention provided by telephone to patients who have experienced a recent change in relatively small out-of-pocket medical costs (\$20–\$100 per month) or a pattern of problems paying for ongoing health care needs and who have chronic conditions requiring monthly out-of-pocket spending, such as diabetes, hypertension, anxiety, or depression. The intervention is brief, solution-focused coaching lasting **about 30 minutes** with **2–3 follow-up** sessions conducted via SMS or email. The coaching involves:

- Determining the patient's health goals and motivation
- Planning for the costs of obtaining health care
- Setting up a process to make sure the patient will have the funds needed when the next medical treatment (e.g., refill or therapy session) comes due

FINMed is designed to help patients achieve two outcomes:

- Adhere to medical treatments (self-reported or based on administrative records)
- Reduce stress about paying for ongoing out-of-pocket costs (self-reported)
- Engage in goal-focused and more intentional financial behaviors (self-reported)

The coaching session will take the form of a structured conversation that leads the client through the process of identifying goals and defining desired outcomes. Table 5 describes the sequence of topics included in a model coaching session.

²⁵ L. S. Green, L. G. Oades, and A. M. Grant, "Cognitive-Behavioral, Solution-Focused Life Coaching: Enhancing Goal Striving, Well-Being, and Hope," *The Journal of Positive Psychology* 1.3 (2006): 142–149.

MODEL FINMED COACHING SESSION

Thanks for taking the time to talk with me today about reaching your healthcare goals. We can work on what you need to be successful in paying for your care.

What would you like to get out of our meeting today?

What would that do for you?

How will you know if this meeting has been helpful?

What else would be helpful for me to know as we get started today?

What's most important to you about your goal?

If anything were possible, what would you like to see happen?

What steps have you already taken towards your goal?

What's worked well? (*Acknowledge and affirm any steps already taken.*)

What's gotten in your way? (*Validate the client's concerns.*)

On a scale of 1–10, with 10 being all your financial worries are taken care of and 1 is the worst situation you can imagine, where are you now?

Based on client's response: What's working well that gets you to [any number above 0; 0 or negative self-rating provides a clean slate for starting]?

If you were one point higher up on that scale, what would be different?

When you get to that next step, how will you know things are improving?

Has there been a time when you were able to come up with money in your budget to cover other unexpected expenses?

If yes:

What helped you to do that? Thinking about what worked, what would you like to repeat?

If no:

What did you do to cope with that financial stress? Thinking about what didn't work, what would you want to do differently?

Spending Planning

If the client is interested in budgeting tools, introduce tools such as Appendix E.

Consider timing of prescription refills—30-day supplies cycle based on when prescription was first filled, not a calendar month. The issue may not be not having money at all, but not having liquidity when refill is due.

Consider whether there is room for other savings/expense goals in the budget (emergencies, seasonal expenses, etc.)?

Referrals

Referrals to debt management

Referrals to loan refinancing

Referrals to student loan payment options

Referrals to medical assistance

MODEL FINMED COACHING SESSION (CONTINUED)

Next Steps

What are you taking away from our conversation so far?

What would you like to see yourself doing differently between now and the next time we check in?

What's your first step to get a little closer to your goal?

When can you do that?

What support do you need to be successful?

What might get in your way?

How will you know if you're on track?

Who or what can help you stay on track?

On a scale of 1–10, with 10 being very confident, how would you rate your confidence in your financial plan as you leave here today?

Explore response:

What makes it a 5 or 8? What number would you like it to be?

At the start of our meeting, you said you would like to get [session goal] out of our meeting. Did we meet your goal?

If yes:

Acknowledge and celebrate client's success during session.

If no:

Revisit what's missing or still needed.

Follow-Up

Before the coaching session ends, set a follow-up plan to check-in on progress toward the goal.

Date and time of follow-up

Method of contact, who initiates

Specific outcomes client would like to achieve by that date

Collaborate with client to create reminders; for example:

Client sets up reminder email or text for X day to alert that a refill is due soon and it will cost \$X.

Client uses SMS reminders for ongoing refills or treatments.

Ideal plan has 3 reminders at 14-day intervals (but co-create with client)

Conclusion

Thank you for taking the time to meet today. You have made a great plan for yourself!

I look forward to our check-in on [date agreed with client].

The story of Rochelle helps illustrate how FINMed can help people manage their finances more effectively, with the goal of being better able to handle financial obligations, lower stress about making ends meet, and ultimately increase adherence to medical treatments. Rochelle Hicks is a 50-year-old mother of two with a full-time job and health coverage. At her annual physical this year, her doctor decided she had done as much as she could to lower her blood pressure with diet and exercise and diagnosed her with stage 2 hypertension. She was prescribed a two-drug combination; and a third medication could be added if her blood pressure is not controlled. Under her current insurance plan, the combined copayment for these medications totals \$45. The refill schedule is based on when she went to the doctor and first had the prescriptions filled, about the third week of the month. Rochelle is paid on the first of the month; she may not have enough set aside to refill her prescription three weeks in.

Working with her coach, Rochelle decided her goal was to pick up her prescriptions a week in advance and established that she needed to have about \$100 set aside to make sure she could always make that out-of-pocket cost. Her coach texted her the first two months after they met, to remind her of her goal. Rochelle was able to set aside \$25 a month for the next several months until she had enough saved to pay her medication copayments for two months even if she had other money troubles.

The coaching process helped Rochelle to model her financial behaviors to deliver the outcome she needed. The coaching session helped her explore her feelings about and perceptions of her health and financial behaviors, determine the value she places on her treatment, and establish her health and financial priorities. It also helped her identify the steps she needed to take to self-actuate her financial plans.²⁶

Conclusion

Medical treatments, especially prescription drugs, present an ongoing, sometimes substantial household expense. These costs are burdensome for the most economically vulnerable households, and are an issue even for those with health insurance. Those most at risk for missing treatments due to cost concerns are people with chronic conditions requiring ongoing medications that generate continuing monthly expenses.

This report outlines the issues faced by economically vulnerable families trying to adhere to treatments despite the challenges of meeting out-of-pocket costs. We propose FINMed, a new, low-intensity financial coaching model to help these families address the cost-related barriers to adherence and consequently boost medication adherence.

²⁶ Piette et al., "The Role of Patient-Physician Trust in Moderating Medication Nonadherence Due to Cost Pressures."

Appendices

APPENDIX A. DATA USED IN THIS REPORT

APPENDIX B. MEDICAL COST PROBLEMS

APPENDIX C. 2013–2016 SHED: CHANGE IN PRESCRIPTION COST PROBLEMS

APPENDIX D. MARGINAL EFFECTS OF LOGISTIC REGRESSIONS ON PRESCRIPTION COST PROBLEMS

APPENDIX E. PLANNING FOR MEDICATION COSTS: EXAMPLE WORKSHEET

Appendix A. Data Used in This Report

This report relies on a literature review coupled with original analyses of the datasets listed below.

Medical Expenditure Panel Survey (MEPS). The MEPS is the most complete data source on the cost and use of health care and health insurance coverage in the United States. The surveys include questionnaires sent to household members and their medical providers. The MEPS also has an insurance component that includes a survey of employers to collect health insurance plan information. The MEPS includes questions about medication problems and expenditures on medical services, but not about personal finances and financial management. One limitation of the MEPS is that it only captures events associated with a payment. Skipping or delaying a prescription refill due to costs is only captured as a self-reported question and is not commonly used in the data. The MEPS data in this report are from 2014.

Medication Adherence Survey. The National Community Pharmacists Association sponsored the Medication Adherence Survey in 2013, looking at US adults ages 40 and older with an ongoing prescription medication for a chronic condition. Thirty percent of all adults in the United States fit this description, with a median age of 60 and about four prescriptions per person on average.

National Financial Capability Study (NFCS). The FINRA Investor Education Foundation administers the NFCS each year. The survey data capture financial behavior, attitudes, and financial literacy, along with questions about skipping prescriptions and other medical treatments due to cost. The data in this report are from 2015.

Survey of Household Economics and Decisionmaking (SHED). The Federal Reserve Board conducts the SHED, which includes questions about savings, credit access and behavior, retirement savings and planning, and other financial issues. In addition, the survey includes questions about skipping prescription medications and other medical treatment due to cost. This report links the 2013–2016 SHED surveys over time using individual identifiers in the dataset.

Clarifi Client Survey. In the summer of 2016, Clarifi, a nonprofit financial counseling provider that serves about 15,000 Philadelphia-area residents each year, surveyed a sample of its non-housing counseling clients to document their credit status and medication use.

Appendix B. Medical Cost Problems

	Failing to get Rx due to cost		Failing to get care due to cost ¹	
	%	N	%	N
All	15%	4,086	24%	6,413
Age <35	19%	1,506	33%	2,601
35–55	17%	1,626	26%	2,460
55+	10%	954	15%	1,352
High school or less	17%	1,126	26%	1,730
More than high school	15%	2,960	23%	4,683
Low income	19%	1,207	30%	1,814
High income	14%	2,879	22%	4,599
White	15%	2,809	23%	4,445
Non-White	16%	1,277	25%	1,968
No insurance	26%	724	47%	1,286
Enrolled in health insurance	14%	3,301	21%	5,042

Source: National Financial Capability Study (2015), FINRA Investor Education Foundation.

Note: All data sets apply sampling weights.

¹ Combines individuals who skipped medical treatment or failed to see a doctor due to cost.

Appendix C. 2013–2016 SHED: Change in Prescription Cost Problems

	(1)	(2)	(3)
Health insurance	-0.050** (0.021)	-0.049** (0.021)	-0.054** (0.024)
Medicaid	0.012 (0.022)	0.012 (0.022)	0.004 (0.023)
Disabled and not working	0.010 (0.025)	0.007 (0.025)	-0.004 (0.026)
Currently employed	0.001 (0.014)	0.000 (0.014)	-0.001 (0.014)
\$5,000 to \$14,999	-0.055* (0.029)	-0.053* (0.029)	-0.035 (0.034)
\$15,000 to \$24,999	-0.024 (0.026)	-0.021 (0.026)	-0.016 (0.029)
\$25,000 to \$39,999	-0.035 (0.024)	-0.033 (0.024)	-0.040 (0.026)
\$40,000 to \$49,000	-0.040* (0.024)	-0.038 (0.023)	-0.038 (0.026)
\$50,000 to \$74,999	-0.062*** (0.022)	-0.061*** (0.022)	-0.057** (0.025)
\$75,000 to \$99,999	-0.071*** (0.023)	-0.073*** (0.023)	-0.073*** (0.026)
\$100,00 to \$150,000	-0.064*** (0.024)	-0.066*** (0.024)	-0.068*** (0.026)
\$150,000 or more	-0.043* (0.024)	-0.039* (0.024)	-0.039 (0.026)
Checking/savings/account		0.009 (0.013)	0.013 (0.014)
Have emergency funds		-0.009 (0.009)	-0.009 (0.009)
Have credit card		-0.008 (0.022)	0.003 (0.026)
Turned down for credit		0.043* (0.022)	0.045* (0.023)
Find it difficult to get by financially			0.068** (0.027)
Just getting by financially			0.040** (0.016)
Doing okay financially			0.001 (0.008)
Credit score: Poor			0.061* (0.035)
Credit score: Fair			0.018 (0.026)
Credit score: Good			0.021 (0.017)
Credit score: Very good			-0.007 (0.010)
Constant	0.197*** (0.028)	0.197*** (0.035)	0.166*** (0.042)
Observations	9,026	8,986	8,327

Source: 2013, 2014, 2015, and 2016 SHED, using household fixed effects OLS with robust standard errors.

Standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix D. Marginal Effects of Logistic Regressions on Prescription Cost Problems

	(1)	(2)	(3)
Monthly Income (Range \$0–\$9,416)	–0.0134 (–0.39)	–0.0025 (–0.07)	–0.0204 (–0.78)
Credit Score/100 (Range 500–800 ¹)	–0.0898* (–1.77)	–0.110** (–2.21)	–0.115** (–2.27)
Monthly Prescription Spending Exceeds \$40	0.239** (2.18)	0.238** (2.23)	0.227** (2.03)
Health Insurance Coverage ^H		–0.370* (–1.90)	–0.432*** (–2.82)
Financial Well-Being Score 26–38	–0.0673 (–0.57)	0.0297 (0.25)	0.0416 (0.41)
Financial Well-Being Score 38+	–0.264** (–2.27)	–0.166 (–1.36)	–0.167* (–1.65)
1 or More Chronic Diseases ^H		–0.125 (–1.55)	–0.170** (–2.22)
No. of Clarifi Appointments		0.0261 (0.84)	0.0346 (1.01)
Sought Help from Mental Health Professional		0.0346 (0.37)	0.109 (1.27)
Recent Accident or Injury ^H		0.128 (1.23)	0.0940 (0.93)
Overall Health Score (Possible range 6–30)		–0.0129 (–1.40)	–0.0228** (–2.31)
Black			0.211** (2.53)
Household Size			0.0144 (0.53)
Receiving Public Assistance			–0.286*** (–3.08)
Observations	118	118	118

Source: Clarifi Survey

*, **, and *** indicate statistically significant differences at the .10, .05, and .01 levels, respectively. T-statistics are in parentheses.

¹ 91% of clients had credit scores within this range; the other 9% were dropped as outliers.

^H Applies to any member of client's household.

Appendix E. Planning for Medication Costs: Example Worksheet

A. Typical Monthly Take-Home Income: _____ (after taxes and deductions)

B. Monthly Expenses: _____

Expense Type	Amount
Food at Home/Groceries	
Food Out	
Rent/Mortgage	
Heat/Gas/Utilities	
Electric	
Car Payment(s)	
Student Loans	
Childcare and/or Tuition	
Insurance Premiums	
Child Support/Alimony	
Credit Card / Other Loans	
Other Ongoing Expenses	
TOTAL	

What About?

- | | | |
|---|--|---|
| <input type="checkbox"/> Car Repairs or Maintenance | <input type="checkbox"/> Taxes | <input type="checkbox"/> Home Maintenance |
| <input type="checkbox"/> Holidays/Birthdays/Gifts | <input type="checkbox"/> Donations/Charity | <input type="checkbox"/> Hobbies |
| <input type="checkbox"/> Emergencies | <input type="checkbox"/> Vacations | <input type="checkbox"/> Clothing |

C. Monthly Medication Expenses: _____

	Budget	30-Day Supply?
Medication 1		<input type="checkbox"/>
Medication 2		<input type="checkbox"/>
Medication 2		<input type="checkbox"/>
Other copays and ongoing medical costs		<input type="checkbox"/>
TOTAL		<input type="checkbox"/>

** Total Disposable Income Left = A _____ – B _____ – C _____ = _____

Medications Too Expensive? See: www.rxassist.org www.pparx.org rxhope.com