



AMERICAN INSTITUTES FOR RESEARCH®

# Consumer Education Initiatives in Financial and Health Literacy

## Task 4: Deliverable 4, Final Report

December 6, 2010

*Submitted To:*

Office of the Assistant Secretary for Planning and Evaluation  
U.S. Department of Health and Human Services  
Alana Landey and Gretchen Lehman, Project Officers

*Submitted From:*

American Institutes for Research  
Elizabeth Frentzel  
Deepa Ganachari  
Megan Bookhout  
Marilyn Moon  
Julia Galdo  
Sandra Robinson

“American Institutes for Research” is a registered trademark. All other brand, product, or company names are trademarks or registered trademarks of their respective owners.

## Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>II</b>
Lessons Learned Relating to Target Audiences.....	ii
Lessons Learned Relating to Disseminating Information.....	iii
Lessons Learned Relating To the Source of the Initiative .....	iv
Next Steps .....	iv
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
Terms and Definitions.....	2
<b>2.0 POLICY CONTEXT .....</b>	<b>2</b>
Financial Literacy .....	4
Health Literacy.....	6
<b>3.0 METHODOLOGY .....</b>	<b>9</b>
Scope.....	9
Literature Review.....	9
Peer-Reviewed Literature.....	10
Gray Literature .....	11
Data Abstraction and Analysis.....	11
Limitations to the Literature Review Methodology .....	11
Key Informant Interviews .....	11
Limitations to the Interview Methodology .....	13
<b>4.0 FINDINGS FROM THE LITERATURE.....</b>	<b>13</b>
Financial Literacy Research Overview .....	13
Health Literacy Research Overview .....	14
Lessons Learned Relating to the Target Audiences.....	15
Lessons Learned Relating to the Channels of Information.....	20
Lessons Learned Relating to the Source of the Initiative .....	24
Identification of Challenges and Limitations.....	26
<b>5.0 FINDINGS FROM THE INTERVIEWS .....</b>	<b>27</b>
Characteristics of Financial and Health Literacy Initiatives.....	27
Interview Sources.....	28
Initiative Goals.....	28
Target Audiences.....	29
Channels .....	31
Content.....	34
Collaboration .....	35
Evaluation.....	36

Lessons Learned From the Interviews .....	41
Promising Elements from Financial Literacy Initiatives Applicable to Health Literacy.....	41
Promising Elements from Health Literacy Initiatives Applicable to Financial Literacy.....	43
Lessons Learned Applicable to Both Financial and Health Literacy .....	47
Limitations to Findings from the Interviews .....	53
<b>6.0 NEXT STEPS .....</b>	<b>54</b>
Implications for Future Initiatives .....	54
Opportunities to Synchronize Initiatives across Agencies and Initiatives.....	57
<b>REFERENCES.....</b>	<b>59</b>

## Appendices

- Appendix A: Literature Review Methodology and Sources
- Appendix B: Interview Protocol and Information Sheet
- Appendix C: Literature Review Results
- Appendix D: Description of Consumer Education Initiatives

## Executive Summary

Consumer education regarding financial and health decision making has been an important issue for many years. In a concerted effort to develop successful consumer education programs, the Office of the Assistant Secretary for Planning and Evaluation (ASPE), Department of Health and Human Services (HHS), commissioned the American Institutes for Research (AIR) to conduct an environmental scan to provide a synthesis of the research, develop lessons learned from financial and health literacy, and identify future next steps.

This environmental scan focused on financial and/or health literacy initiatives for low-income or underserved consumers. We define *financial literacy* as the ability to make informed judgments and manage money effectively (U.S. Government Accounting Office [GAO], 2006). *Health literacy* is the ability to obtain, process, and understand basic health information to make appropriate health-related decisions (HHS, 2000). *Initiative* is any effort or program that seeks to educate individuals about financial or health issues and, more importantly, to engage individuals to improve their skills and behaviors relating to finances and health.

AIR conducted a review of literature from 2005 through 2010 and conducted interviews with program officials from Federal agencies and private organizations to develop key findings and lessons learned. The lessons learned below are categorized around those related to target audiences, channels of information, and sources for information.

### Lessons Learned Relating to Target Audiences

**Better long-term financial and health outcomes are associated with highly targeted and proactive counseling.** Both the research and the interviews suggested that highly targeted or individually tailored counseling or interventions increases the likelihood an individual would become aware of the information, find it relevant, use it, and perform a specific and desired behavior. Theoretical frameworks were sometimes used to understand the knowledge, attitudes, and beliefs of consumers and develop information or an initiative specific to the audience. Both the interviews and the literature suggested customizing the information to specific target populations, such as new immigrants, or even tailoring it at the individual level and that the information should be relevant to the situation. Seemingly, conversely, the interviews suggested that materials developed for low-income or low-health literacy audiences may benefit those with higher incomes or health literacy levels, thus developing interventions with low-income and low-health literacy audiences specifically may be the most efficient approach. However, this is not to say that interventions should not be customized to a specific audience, the intervention should be simple to understand, and the behaviors required should be easy to perform. The literature and interviews also indicated that for complex information or for information aimed at older adults, in-person or phone-based assistance was found more effective than other forms of dissemination.

**Consumer feedback is important throughout the process for developing initiatives.** Multiple interview participants had processes to solicit consumer feedback regularly, and these participants expressed the importance of consumer input throughout the development and implementation of education materials, trainings, and web-sites.

**Previous behavior and current self-efficacy is an indicator of future behavior, while self-perception is a poor reflection of financial and health literacy levels.** The financial literacy research indicated that prior behaviors, such as homeownership were associated with better future financial decision making. In health literacy research, self efficacy, the belief in one's own ability to succeed at performing specific tasks, was associated with better chronic disease self-management. In contrast, self-perceptions of performance such as English proficiency and credit have been found to be poor reflections of financial and health literacy. These findings can be particularly important because program evaluations often rely on self-assessments rather than on observation of behaviors.

### Lessons Learned Relating to Disseminating Information

**Initiatives that are simple and enjoyable, and that normalize positive financial behaviors are more likely to change behavior.** Information from both the literature and the interviews demonstrated that individuals would be receptive to behavior change when they saw the benefit of performing a particular behavior, when they believed that they could perform the behavior, when barriers to performing an activity were reduced, and when the social support necessary to carry out the behavior was available.

**Effective dissemination of information is more challenging than content development.** Both the literature and the Federal agency interviews indicated that it was easier to develop content for initiatives that aimed to raise awareness or elicit behavior change than to ensure effective delivery and dissemination of these materials. Barriers to information, such as lack of internet access predicted the degree of information-seeking. Understanding the facilitators and barriers to accessing information is important to determining the best methods of disseminating information.

**Education assists in managing present difficulties and in preventing future problems.** Both chronic care education and financial education consist of managing long-term issues or conditions, preventing potential problems, and managing problems should they arise, and conducting regular checkups (for health) about specific health or financial issues. In health, most models focused on improving interactions between clinical providers and patients, typically by training clinical providers to provide more patient-centered education and provide decision making support to patients, who can then become more independent concerning the care of their chronic condition. This model could be adapted to the field of financial literacy—if there were a trusted source to provide information, coach, and interact with individuals.

**Ongoing peer mentoring, interactive assistance, counseling, and coaching can be crucial in helping consumers attain long-term goals.** Both the literature and the interviews suggested that interactive activities to reinforce positive health or financial behaviors over the long term helped maintain and sustain these behaviors. Interviews suggested that consumer education should start at an early age and receive reinforcement throughout adulthood. Conversely, the literature suggested counseling provided the greatest benefit to specific situations and audiences, for example, borrowers with the lowest ability to manage finances and the greatest need to do so, a fact that once again illustrated the importance of creating initiatives that target to specific situations and audiences. Financial education for low-income consumers should focus on issues, such as predatory lending, that particularly affect low-income households.

The literature also reported only modest results from financial education when it provided a limited number of trainings and when the depth of trainings or the preparation of the educators

was limited. It appears that the need to develop and evaluate specific *approaches* to teaching and training is as crucial as the content of the training.

**Community-based partnerships and collaborations are a central component of effective outreach.** Partnerships and community collaborations can deepen an initiative’s penetration into a target community and increase the breadth of its outreach to target populations. Community-based initiatives are also more likely to be trusted sources. Thus, increasing the number of community-based organizations involved in specific health literacy initiatives may augment the dissemination of these initiatives. Increasing the number of community-based organizations engaged in financial education and counseling, and increasing the training and standardization for financial educators, may help improve access to quality financial education and counseling.

### Lessons Learned Relating To the Source of the Initiative

**There is a demand for increased training and endorsement of standards for financial educators.** Although many consumers have a usual source of health care and a clinical provider they trust, not all consumers have a locally-based and—most important—trusted financial advisor. In contrast to financial educators, clinical providers receive rigorous and consistent training across the United States. Both the literature and the interviews strongly supported training, credentialing, and setting standards for financial educators. In addition, even for health educators, the literature reported that training clinical providers to be patient-centered improved patient-provider interactions and health outcomes.

**Communities have trusted sources of health education but often lack a trusted source of financial education.** Most individuals have a usual source of medical care and trust their doctors. In contrast, individuals do not necessarily have a trusted source of financial information. Problems are also conveyed in different ways; in health, significant health problems are often conveyed in person, sometimes over the phone, and there may be confirmation through a written document. Strategies to manage the problems are also discussed. In contrast, financial problems are less personal and do not typically include strategies to manage the problem.

### Next Steps

The findings from this project have suggested several possible next steps in our efforts to better understand and promote financial literacy and health literacy among low-income populations.

**Continue and enhance qualitative research with consumers to ensure that the content of current and new financial and health information is appropriate and specific to the circumstance.** The literature and the interviews both identified the importance of generating content that is appropriate, indicating that information that is easily understood by those with low financial or health literacy levels will also be understood by those with higher levels. Testing materials with target audiences is an important technique to ensure the appropriateness of the information.

**Develop and evaluate training protocols to ensure that financial educators are knowledgeable and use an evidence-based approach to financial education.** As the literature reports, there is ambiguous evidence that financial education leads to financial literacy and improved financial management in the long-term. Interview findings suggest that few initiatives collect effectiveness information that illustrates their success in influencing behavior. The lack of valid and reliable educational standards for financial literacy suggests

that future research should focus on developing and evaluating training protocols and supporting the use of these effective models.

**Examine the organizational factors of community-based institutions that produce or are associated with effective financial or health literacy initiatives.** We found no evidence that community-based organizations are measuring the effectiveness of their financial or health literacy initiatives. However, community-based organizations often engender more trust than larger organizations or the government, are more able to develop customized information because of knowledge of the community, and are more able to conduct outreach effectively because of residing in the community. It is likely that some community-based organizations are more effective in producing results than others, and future research could examine what community-based organizational factors are important for ensuring effective initiatives.

**Find linkages between financial decision making and other activities that could provide educational opportunities.** Related to examining organizational characteristics that produce or are associated with effective financial or health literacy efforts, examine activities that could be connected and related to improving financial or health literacy. For example, some grocery stores have in-store banking services where it could be possible to provide financial education similar to how some pharmacies provide diabetes education.

**Borrowing from health care, examine the use of regular financial checkups and screenings to improve financial literacy.** Research and the interviews indicate that health care institutions are more predisposed than financial institutions to provide regular financial education because there is greater acceptance among health professionals of the need to educate patients. Future research could examine the long-term annual efforts to provide tailored financial education, and determine their effect on improving financial literacy. Future financial literacy research could also examine alternative methods of dissemination, such as building on prior initiatives that have proven to be effective, such as tailoring information to individuals.

**Build more effective evaluations into initiatives.** Interview participants rarely conducted evaluations of their initiatives. More commonly, ongoing monitoring was conducted to determine progress. Future initiatives, particularly those involving multiple grantees, could include simple evaluation plans from the beginning.

**Expand on traditional forms of research to segment audiences and, ultimately, to target financial or health literacy initiatives to smaller audiences.** This research project focused on low-income consumers. However, there are multiple ways to segment audiences that may help develop more refined financial and health educational initiatives specific to small target audiences. Future research could examine demographically and behaviorally distinct segments of the population by looking at demographic, lifestyle, attitudinal, and behavioral characteristics. This could be valuable for helping to understand small target audiences, to develop content, and develop a dissemination strategy.

**Explore new methods of outreach, such as the new forms of online communities.** The research suggested that peer counseling was effective and that following up with participants after the conclusion of a program to provide continued support and remediation was important. Establishing online discussion groups or other venues for continued peer-to-peer contact could be another type of effective outreach, especially for “graduates” of programs. This electronic

format should be evaluated as a method of outreach to low-income individuals who have internet access.

**Examine the knowledge, attitudes, and beliefs of individuals with the lowest financial literacy skills and least interest in financial literacy.** As noted earlier, many financial literacy studies encountered self-selection bias to participate in financial education programs. Other research indicates that people with very low literacy levels have less interest to seek financial counseling. Combined with low literacy levels, this lack of interest in financial counseling may have resulted in many people's never receiving the financial education support they might need. Examining the knowledge, attitudes, and beliefs of this specific audience would be valuable in determining how to develop an appropriate initiative to reach low-income audiences.

The findings from this study have suggested several opportunities to synchronize across agencies and initiatives to improve dissemination of initiatives and build on initiatives.

**Link seemingly disparate programs to create a more holistic program.** One current example of program linkage is between the Department of Housing and Urban Development's Home Equity Conversion Program and the Administration on Aging's (AoA) Benefits Enrollment Centers initiative, which together provide financial counseling as part of benefits enrollment. In a similar manner, the U.S. Department of Agriculture's cooperative extensions and the Administration of Children and Family's (ACF) Head Start programs could work together to provide financial education at Head Start sites. The State Health Insurance Counseling and Assistance Programs (SHIP), which provide counseling for Medicare beneficiaries, that could be linked with other initiatives in order to help consumers who are facing financial challenges.

**Imbed programs for older adults into programs for younger adults.** The interviews suggested the need to incorporate situation-specific financial education throughout the lifespan. Most financial education initiatives at the local level are aimed at people with disabilities or older adults, yet young people are disproportionately affected by poverty. For example, ACF's Head Start program and AoA's Aging Disability and Resource Centers could work together to provide education for parents of children at Head Start locations.

**Provide critical information, as well as reminders throughout the lifecycle.** Many low-income Medicare beneficiaries remain unaware that they are eligible for the low-income subsidy, which would pay for a prescription drug benefit. Information that may substantially affect individuals needs to be disseminated and discussed. One method to disseminate this information is through common community-based organizations that already interact with low-income individuals. For example, traditional organizations include schools, senior centers, and food banks, but state departments of motor vehicles, churches, or even hairdressers could be included.

**Consider a single vehicle for managing information needs.** There are several programs that seek to help consumers make sense of very confusing information, and it would be helpful to link these programs more effectively. For example, to obtain information on long-term care insurance and benefits there are SHIPs at the state level, Medicare's toll-free line, the Social Security Administration's toll free line, Area Agencies on Aging, AoA's Aging Disability and Resource Centers, and AoA's Benefits Enrollment Centers, to name a few.



## 1.0 Introduction

Consumer education regarding both financial and health decision making has been an important issue for many years. The U.S. Department of Health and Human Services (HHS) Office of the Assistant Secretary for Planning and Evaluation (ASPE) initiated this project to identify the intersections of financial literacy and health literacy, the lessons each has to impart, and how and where each influences the other as a step toward improving understanding of this complex field. This study identifies current financial and health literacy strategies, initiatives, and programs conducted by HHS, selected agencies external to HHS, and selected private organizations. We structured the study to address the following research questions:

1. Which programs involve consumer education components that focus on health literacy and financial literacy?
2. Are there similarities between the consumer education competencies measured and promoted in health literacy initiatives and in human services' financial education programs?
3. Are any components of health literacy initiatives translatable to financial literacy initiatives in the human services arena, and conversely, are any components of financial literacy translatable to health literacy?
4. Which financial and health literacy approaches have been developed for different groups, such as older adults, immigrants, and other non-native English speakers, and very low-income audiences?
5. What behavioral change research has been done on these topics?
6. What are the definitions of *efficacy* and *success*, and what specific behaviors do they require of consumers?
7. What is the evidence surrounding the effectiveness of Federal financial literacy and health literacy initiatives?
8. Are there examples of initiatives or literacy curriculums in programs that integrate health literacy and financial education?
9. Are there any examples of, or opportunities for, coordination of consumer education initiatives across HHS operating divisions and, potentially, with other federal programs external to HHS?
10. What lessons can other major financial and health literacy programs provide to support HHS initiatives for strengthening consumer education programs? What core competencies do they share with HHS programs, and what can we learn from their successes and failures?

This report is organized into six sections: an introduction, a description of the policy context, an explanation of investigative methods, findings from the literature review, findings from the interviews, and a discussion of next steps and implications for the future.

## Terms and Definitions

Our focus in this study was on financial and health literacy initiatives aimed at low-income individuals. **Financial literacy** is the ability to make informed judgments and manage money effectively (U.S. Government Accounting Office [GAO], 2006). **Health literacy** is the ability to obtain, process, and understand basic health information to make appropriate health-related decisions (HHS, 2010). Consumers encounter complex information and may need to understand not only information about their health condition but also information about the risks and benefits of different treatments, how and when to take medications, and how to understand test results.

**Literacy** includes three types of literacy—prose, document, and quantitative—because adults use different kinds of printed materials in their daily lives. These types of literacy include:

- **Prose literacy:** The knowledge and skills needed to perform prose tasks, (i.e., to search, comprehend, and use continuous texts). Examples include editorials, news stories, brochures, and instructional materials.
- **Document literacy:** The knowledge and skills needed to perform document tasks, (i.e., to search, comprehend, and use non-continuous texts in various formats). Examples include job applications, payroll forms, transportation schedules, maps, tables, and drug or food labels.
- **Quantitative literacy or numeracy:** The knowledge and skills required to perform quantitative tasks, (i.e., to identify and perform computations, either alone or sequentially, using numbers embedded in printed materials). Examples include balancing a checkbook, figuring out a tip, completing an order form or determining the total amount that an item or items cost.

(Kutner, Greenberg, Jin, & Paulsen, 2006)

These three types of “literacies” are all used in health and financial literacy, but not necessarily to the same degree. Due to the sheer volume and rapidly growing nature of health literature and resources, it is likely that health literacy may include more prose literacy and document literacy compared to quantitative literacy. Financial literacy, on the other hand, has many stable concepts, but is far more likely to involve more document literacy, and especially quantitative literacy compared to prose literacy. If the *literacy* is used without modifier in this report, (i.e. financial or health) it is always referring to this definition.

Additional technical terms that are likely to be unfamiliar to persons in either the health or financial fields will be defined in footnotes.

## 2.0 Policy Context

The events of the last decade have underscored the challenges arising for consumers in both the financial and the health decision making areas. The recent economic crisis has strained the financial health of many households in the United States. Medical debt alone has contributed to bankruptcy: In one study of individuals filing for bankruptcy, almost 60% indicated that medical bills contributed to bankruptcy (Himmelstein, Warren, Thorne, & Woolhandler, 2005). It will

take years for many of these households to recover. On the health front, consumers are currently facing greater responsibility for decision making with regard to both insurance coverage and treatment for health problems, and in these two arenas, the consequences of poor choices can be devastating.

These challenging times have created an increasing awareness that a lack of financial and health literacy can serve as a major barrier to the well-being of individuals, families, and communities. Usually in very separate venues, a number of agencies have attempted to improve financial and health literacy. One point of debate is how much of the burden of choice should fall to the consumers themselves, and how much is the responsibility of better government regulation and oversight by financial and health entities. That balance will continue to be an issue as legislation passes in these areas and as the regulations supporting that legislation obtain substance. For example, the Dodd–Frank Wall Street Reform and Consumer Protection Act includes a number of protections for consumers, such as a bureau of consumer protection, which ensures that consumers receive clear and accurate information relating to mortgages, credit cards, and other financial products, and protects consumers from hidden fees, abusive terms, and deceptive practices. The Credit CARD Act of 2009 is taking effect, and HHS is involved in formulating regulations related to the Affordable Care Act of 2010, some of which will affect insurance offerings and information for consumers about the benefits of various treatments.

Consumer education initiatives, related to both financial and health literacy, continue to be important. Resources, whether public or private, will be limited as the country comes out of a severe recession. Thus, efforts to expand consumer information and education in financial and health literacy will have to show their effectiveness and to find ways to provide services in the least costly manner. It is therefore critical to examine both what works to promote financial literacy and health literacy, and whether there are lessons to be learned across the two areas.

In some ways, the financial literacy and health literacy areas raise very similar concerns: Both address complex questions that require some sophistication; both are vitally important to the well-being of households; and both may result in incomplete and often contradictory information for consumers from a variety of sources. Health and financial literacy also overlap in terms of the costs of health care services and insurance. For example, consumers are often faced with deciding among insurance plans that require choice between greater and lesser risk of out-of-pocket spending, and planning for retirement increasingly requires individuals to recognize that they must plan for a substantial amount of spending on noncovered health-related services during retirement (both from acute and long-term-care spending). It is useful, therefore, to look at both areas for lessons that can help to determine where to direct scarce resources in the future.

Another key policy question arises regarding where to direct attention in order to enhance educational and informational initiatives. Should the focus be on individuals with low educational and financial resources, who are likely to be the least knowledgeable and most at risk? Alternatively, should greater emphasis be on empowering those who will be assertive in making decisions and hence be more likely to change? For example, in the area of health insurance choices, some have advocated that everyone can and should be educated about their options. Others believe that it is necessary to work with people at their current level of ability and interest. Some consumers will need help from family members or formal intermediaries to make decisions for them. Other consumers, who either already actively manage their health care or are likely to be able to manage their health care, may need limited assistance. Initiatives should emphasize empowering consumers on the basis of their needs and abilities. In the area of

health insurance choices, some economists have argued that only a minority of consumers need to press for changes in order to influence the market to respond. For example, if enough people leave a high-cost health plan, some economists believe that the market will respond by creating lower cost plans. Not all people who leave do so by choice, and the consequences can be devastating: A study of uninsured children and children insured by Medicaid reported that a change in the program reducing the enrollment rate by 10% would increase the health care costs for each person by \$2,121 for each child that was excluded from the program (Rimsza, Butler, & Johnson, 2007).

To begin understanding the lessons learned regarding financial literacy and health literacy, this report defines both terms and explains the reasons why financial literacy and health literacy are important to the well-being of low-income individuals.

## Financial Literacy

*Financial literacy* refers to the ability to make informed decisions about the use and management of financial resources (U.S. General Accounting Office [GAO], 2006). This includes managing risk, using credit responsibly, saving for desired goals, and avoiding transactions that can undermine financial stability. Every household has to make decisions about its finances; yet overwhelmingly, U.S. households have been shown to make poor financial choices and show a lack of financial literacy and financial planning. Although low financial literacy spans all demographic groups, it is more prominent among older adults, women of all ages, minorities of all ages, individuals with little education, and those who have had little exposure to economics while in school (Lusardi & Mitchell, 2009). The Financial Industry Regulatory Authority (FINRA) National Financial Capability Study found that measured financial capability is lowest among adults with no postsecondary education, households with incomes of \$25,000 per year or less, and Hispanics and African Americans (Applied Research & Consulting, 2009).

Financial literacy is associated with an individual's financial outcomes. Those who have relatively high levels of financial literacy tend to have better financial outcomes, and correspondingly, those who have lower levels of financial literacy tend to have worse financial outcomes. Hilgert, Hogarth, and Beverly (2003) find that households with low scores on a cash management index (indicating that they had poor financial behaviors) also had lower financial knowledge scores than individuals with higher scores on the cash management index. They found the same effect for a credit management index, a savings index, and an investment index. In a review of the literature, Lusardi (2008) suggests that financial literacy has an impact on financial outcomes by affecting individuals' ability to make decisions. Lusardi cites studies that show those who are more financially literate are more likely to invest in the stock market; those who are unable to calculate interest rates borrow more and accumulate lower amounts of wealth; those who underestimate compound interest are likely to experience difficulties repaying debt; financial literacy declines with age, with a commensurate increase in the need to make financial decisions; and women make more mistakes, particularly in relation to risk diversification. Results from the FINRA National Financial Capability Study, a survey of 1,488 individuals, reported an association between greater financial literacy and having an emergency fund and fewer incidents of credit card behavior that will lead to high-interest payments and fees (Applied Research & Consulting, 2009). However, these data were based on self-reports and may have response bias because of social desirability.

Many consumers experience financial strain. In the same FINRA study described above, almost half the respondents reported having trouble keeping up with monthly expenses and bills (Applied Research & Consulting, 2009), and low-income respondents faced even more financial challenges. While 33% of all respondents experienced a decline in income in the year preceding the summer of 2009, 41% of those earning less than \$25,000 a year experienced a decrease. Hispanic respondents were also disproportionately affected, with 43% experiencing a decline in income. Not surprisingly, individuals reporting a decline in their income were more likely to report trouble making ends meet than were those who did not report such a decrease (Applied Research & Consulting, 2009).

While most consumers interact regularly with financial institutions, a significant minority of the population, particularly those with low incomes, does not. Overall, 12% of the population appears to lack both a checking and a savings account, while 15% lack a checking account and 28% do not have a savings account. In low-income communities, 31% of individuals were unbanked (i.e. had no bank account at the time of the survey) (Applied Research & Consulting, 2009; Seidman, Hababou, & Kramer, 2005). For both the low-income group and the general population, those without bank accounts were more likely to have lower incomes, lower education levels, and to be minorities than those with bank accounts (Seidman, et al., 2005; Applied Research & Consulting, 2009). The reasons the unbanked respondents gave for why they did not have accounts included not having enough income, not being able to afford the high cost of minimum balances, and living in communities with little need for checks (Seidman, et al., 2005; Applied Research & Consulting, 2009). Other reasons included not wanting to share personal information and having an aversion towards banks (Applied Research & Consulting, 2009).

However, interacting with financial institutions is not necessarily an indicator of financial literacy. Many individuals who hold rather complex financial instruments (such as mortgages, credit cards, or individual retirement accounts [IRA]) end up with problems when they overextend themselves or default on their obligations. Similarly, many individuals overdraw their bank accounts or incur penalty fees while using debit or credit cards. Low financial literacy, particularly related to the financial products and services being used, may be a factor in such circumstances.

Research suggests that financial literacy is a significant predictor of retirement behavior (Gonyea, 2007). Although 70% of American workers are saving for retirement, only 42% have calculated how much they will need for retirement (Helman, Greenwald, Copeland, & VanDerhei, 2006). Fifty-one percent of individuals have retirement accounts from their employers, 72% of which are defined contribution plans<sup>1</sup>. Twenty-eight percent of those individuals who have employer plans also have additional retirement accounts (Applied Research & Consulting, 2009). Only 51% of those between 45 and 59 years of age have thought about what they need for retirement (Applied Research & Consulting, 2009).

Fifty-five percent of low-wage workers reported maintaining some retirement savings. Within this group, approximately 25% had set aside less than \$2,500, and another 25% had set aside

---

<sup>1</sup> In defined contribution plans, employees and in most cases employers pay fixed contributions into an individual account. The contributions are then invested. The returns on the investment are transferred back to the individual's account. The advantage of these plans is that contributions are pre-tax. The intent of this plan is to save for retirement in a simple and recurring manner.

only \$2,500 to \$10,000 (Gonyea, 2007). Those with a greater understanding of investment and savings options were 30% more likely to have started to build up their retirement funds; also, workers who understood their employer's defined contribution plans were twice as likely to report having retirement funds as those who did not.

Studies demonstrate that lower levels of financial literacy can lead to poorer outcomes related to preparation for retirement. Lusardi and Mitchell (2006) suggest that financial literacy is strongly associated with financial planning, and those with less financial knowledge are far less likely to plan for retirement or succeed in their planning. These authors suggest that one reason people may fail to plan for their retirements is that they have low financial literacy. The authors also find that those who were more financially literate made more sophisticated investment choices and therefore were likely to accrue more money in the long run. Results from the FINRA National Financial Capability Study also demonstrated that individuals with greater financial literacy were more likely to plan for their retirement and less willing to take financial risks than less financially literate people (Applied Research & Consulting, 2009).

## Health Literacy

According to *Healthy People 2010*, "health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (HHS, 2000, page 11-20). A number of landmark health literacy pieces published over the past decade have been crucial in describing the state of health literacy, shaping recent and ongoing research on the topic, and creating the primary strategies that research has shown to be successful in helping to improve health literacy rates. These include the Institute of Medicine's (IOM) *Health Literacy: A Prescription to End Confusion*; *Healthy People 2010*'s section on Health Literacy; and Kutner, Greenberg, Jin, and Paulsen's 2006 report, *The Health Literacy of America's Adults: Results from the 2003 National Assessment of Adult Literacy*. Much of this work has focused on the ability of individuals to understand the consequences of various medical treatments. However, there is also interest in helping individuals recognize the consequences of choosing different health insurance plans—for example, whether a plan covers certain conditions, and what are the varying financial risks associated with high-deductible plans, compared with plans with higher premiums but lower out-of-pocket costs.

Low levels of health literacy are a significant problem for U.S. adults. According to the 2003 National Assessment of Adult Literacy, only 12% of U.S. adults are at a proficient level<sup>2</sup> of health literacy (Kutner et al., 2006). Fifty-three percent of U.S. adults are at an intermediate level of health literacy; 22% have a basic level of health literacy; and 14% have less than basic health literacy (Kutner et al., 2006). Similarly, a systematic review by Sudore and Schillinger in 2009 found that approximately half the U.S. adult population has low health literacy. This is

---

<sup>2</sup> The NAAL study modified the original literacy level criteria to health information and defines **Below Basic** literacy as having no more than the most simple skills, such as locating easily identifiable information or numbers in a text or a form. **Basic** literacy indicates skills necessary to perform everyday tasks, such as reading and understanding information in commonplace texts, simple documents, and locating quantitative information and using it to solve simple one-step problems. **Intermediate** literacy is the ability to understand moderately dense and less commonplace text, locating information in dense, complex documents and making inferences about the information, and locating quantitative information and using it to solve problems when the arithmetic operation is not obvious. **Proficient** indicates skills necessary to perform more challenging and complex activities, such as reading lengthy, abstract prose, synthesizing information, or locating abstract quantitative information and using it to solve multi-step problems.

particularly alarming because low levels of health literacy are associated with poorer health outcomes for individuals (Berkman, DeWalt, Pignone, Sheridan, Lohr et al., 2004; Kutner et al., 2006; IOM, 2004; HHS, National Institutes of Health [NIH], 2006; HHS, Office of Disease Prevention and Health Promotion [ODPHP], n.d.; Sudore & Schillinger, 2009). Those with low health literacy are at greater risk of hospitalization (HHS, 2000) than those with high health literacy. In addition, individuals with low health literacy have annual health care costs more than four times as great as those of the general population, and 75% of individuals diagnosed with chronic conditions fall into the limited (general) literacy group (HHS, 2000). Low health literacy is also associated with obtaining fewer preventive procedures, such as flu shots; waiting longer to see a doctor (until individuals are sicker) compared to individuals with higher levels of health literacy; and having poorly control chronic conditions (HHS, ODPHP, n.d.).

Although individuals across all demographic groups may have low levels of health literacy, individuals with low educational levels and adults living below the poverty line are more likely to have low levels of health literacy (Kutner et al., 2006). An expert panel report from 2009 on improving the health literacy of older adults also found that a majority of U.S. adults do not have the health literacy skills to understand what they are reading when they see health materials (HHS, Centers for Disease Control and Prevention [CDC], 2009a). Improving the health literacy of persons with inadequate or insufficient skills is one of the health-promotion objectives in *Healthy People 2010*.

It will be necessary to overcome multiple barriers in order to improve health literacy; these include, but are not limited, to stigma around health issues, language and cultural barriers, differing cultural and educational backgrounds of the providers and the patients, and fear and emotional barriers (IOM, 2004). Certain strategies are helpful in surmounting these obstacles. *Healthy People 2010* notes that it is important to target a specific audience in order to frame information for individual use and make that information easily understandable. Many individuals with low health literacy are also those who are not native English speakers or who have lower educational levels (IOM, 2004; Kutner et al., 2006). Clear communication is therefore an important strategy in reaching these individuals and improving their health literacy. This includes the concept of *plain language*—a method of writing and speaking designed to improve the accessibility of information for individuals who have low health literacy skills (HHS, ODPHP, 2005b). Specific strategies for clear communication include organizing information to list key messages first, segmenting the information into easy to understand portions, using white space, and simplifying language and avoiding technical jargon (HHS, ODPHP, n.d.). The use of plain language has been steadily moving into health care to help individuals better understand their health care diagnoses (HHS, ODPHP, 2005b). There is still work to do; more than 300 studies show that the majority of health materials currently in existence exceed the reading level of the average U.S. adult (IOM, 2004). When addressing health issues, it is imperative to consider all aspects of communication, including the “source, message, channel, and receiver” (HHS, NIH, 2006). Clearly communicating health information also extends beyond the use of linguistic terms into the realm of culture. To increase health literacy, it is important for providers and those who deliver interventions to be able to understand the best way to access individuals in terms of their own cultures (HHS, ODPHP, n.d.).

Another barrier relates to current interest in using evidence-based health care to inform decision making. A qualitative and quantitative study found that few consumers understood terms such as “medical evidence” or “quality guidelines” (Carman et al., 2010). Many participants believed

that higher utilization of care and of the newest technologies meant higher quality care. A third of the participants perceived that treatments that are more expensive were superior to less costly ones. These attitudes and beliefs are likely to present a barrier to developing initiatives for evidence-based decision making.

Another communication issue is the use of the internet and other electronic forms to disseminate health information (HHS, 2000). Electronic information has the capability to increase the dissemination of health resources and information, and thereby promote health literacy. However, it also has the disadvantage of widening the gap between those with enough income to have access to the internet and those who do not (HHS, 2000). This issue relates conversely to the goal of making information easily accessible to target audiences, including older persons, for whom low health literacy is a serious concern. Limited health literacy in older adults may be a function of reduced cognitive functioning, but this may be compensated for through training (HHS, CDC, 2009a). The best ways to present information to older adults include keeping the information focused, repeating the message, allowing time for processing, using face-to-face communication, emphasizing short-term benefits, and following up with individuals (HHS, CDC, 2009a). It is particularly important to work with older patients in translating information they receive into actions they can perform (HHS, CDC, 2009a). Recommendations that came out of CDC's Expert Panel on Improving Health Literacy for Older Adults (2009a) included:

- Using plain language
- Trying to simplify or “bundle” messages so that patients do not get overwhelmed
- Using multiple channels to disseminate information
- Working on finding ways to bridge the technological gap for older adults
- Improving websites to make them more user friendly
- Examining data for populations with special needs

While literature on how health literacy interventions might improve health outcomes is relatively scarce, studies that exist show promising results in improving health knowledge and/or outcomes (Berkman et al., 2004). Interventions designed to mitigate the effects of lower health literacy often improve outcomes more for those with lower health literacy than those with higher health literacy (HHS, NIH, 2006). Interventions for health literacy can be applied in a number of contexts, such as schools, workplaces, health care settings, and community settings (HHS, 2000). There are also multiple levels of interaction to consider when attempting to intervene in health literacy: the clinician–patient level, which can include clear communication, teach-to-goal methods, and reinforcement; the health care organization–patient level, in which clear health education materials, visual aids, and medication labeling are important; and the community–patient level, in which lay health educators, adult education referrals, and the mass media are important (Sudore & Schillinger, 2009). Effective health programs also must target a community's needs and take into account diverse populations (HHS, 2000).

Improving health literacy in the future will require approaching the issue from two different sides: the “demand side,” or what the health care system needs patients to understand and perform to improve the patient's health, and the “skill side,” or what patients need to do to respond to the health care system (HHS, NIH, 2006). It will be necessary to overcome barriers,



including the stigma that individuals with low health literacy can feel, the language and cultural barriers hindering effective communication, the complexity of health care systems preventing dialogue between providers and patients, the demands for literacy skills mismatched with individuals' actual literacy skills, and fear and emotional barriers (IOM, 2004). Older adults may also feel embarrassed by their lack of knowledge about technology, although trainings on how to navigate web-sites have been successful (HHS, CDC, 2009a).

Various sources have made a number of recommendations for ongoing improvements in health literacy (HHS, ODPHP, 2005a; IOM, 2004; Rudd, 2004; HHS, ODPHP, n.d.). In general terms, these recommendations include (1) Implementing programs in schools and other adult education programs already in existence; (2) Having health care systems look into the most effective approaches to increasing health literacy; and (3) Exploring ways to better communicate health information.

### 3.0 Methodology

We generated the study findings synthesized in this report through a review of the research and evaluation literature and through interviews with federal officials, most of who worked for HHS agencies, to identify and describe financial and health literacy initiatives and the lessons learned. We conducted nine interviews with representatives of private organizations who directed exemplary financial and health literacy initiatives.

#### Scope

Our focus in this study was on financial and health literacy initiatives aimed at low-income individuals.

We define an *initiative* as any effort or program that seeks to educate individuals about financial or health issues and, more importantly, to engage individuals to improve their skills and behaviors relating to finances and health. These skills and behaviors may include, but are not limited to, proactive behaviors to prevent problems from occurring (e.g., budgeting to avoid overspending and monitoring blood glucose levels for diabetics to prevent high levels of glucose), general preventive behaviors that may or may not have a direct impact (e.g., reviewing one's credit scores and getting mammography screenings), managing problems (e.g., reducing debt and controlling asthma flare-ups), decision making (e.g., choosing mortgage options and health care treatments), and planning for the future (e.g., saving for expenses in retirement, including health care).

Finally, we focus on initiatives that target, or that would be valuable for, *low-income individuals*. Thus, we have included studies and initiatives that focus on specific income levels, that describe the setting as an "underserved area," and that are likely to be valuable to all consumers, including those with low incomes. We have excluded initiatives that generally target persons with higher incomes (e.g., planning that involves paying financial planners).

#### Literature Review

The literature review consisted of evaluating studies from peer-reviewed and other literature. Below we describe the main methods of gathering and evaluating literature.

**Peer-Reviewed Literature**

The study team scanned the social science and medical peer-reviewed literature, including both qualitative and quantitative descriptive studies, using Academic Search Premier, Business Source Corporate, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Professional Development Collection, PsycInfo, PubMed, SocSci Index, and the Web of Science. We searched these databases, using keyword search terms and the Medical Subject Headings (MeSH) (in PubMed) for each category of interest and limiting our searches to resources developed domestically. Detailed information about search terms is presented in Appendix A.

We reviewed 166 abstracts related to financial literacy and 360 related to health literacy, for a total of 526 abstracts. On the basis of our review of the abstracts, we retrieved 178 full text articles. While we focused primarily on recent literature, we included articles or books from before 2005 if they were considered seminal in their field. We did not include research related to educational work for school grades from kindergarten through college, mostly because our goal was to focus on assessing programs that would be helpful to low-income adults.

**Table 1. Literature review and initiative priorities**

<b>High Priority</b>	<p><b>Goal</b></p> <ul style="list-style-type: none"> <li>• <b>Literature review:</b> to describe findings from consumer education initiatives relating to health and financial literacy</li> <li>• <b>Initiatives:</b> to describe HHS and selected additional federal agency and private consumer education initiatives relating to financial or health literacy, including the findings, results, and lessons learned from the efforts</li> </ul> <p><b>Topics:</b> financial literacy, health literacy, and consumer education</p> <p><b>Target audience:</b> low-income consumers, including, in some cases, information that would be of value to these consumers</p> <p><b>Types of Data</b></p> <ul style="list-style-type: none"> <li>• <b>Literature review:</b> Quantitative data with evidence and qualitative methods, such as meta-analyses and literature reviews</li> <li>• <b>Interviews:</b> initiatives that seek to improve individuals’ skills and behaviors in health and finance</li> </ul> <p><b>Timeframe</b></p> <ul style="list-style-type: none"> <li>• <b>Literature review:</b> the last 5 years (seminal pieces that are older than five years are also included)</li> <li>• <b>Interviews:</b> Ongoing or recently completed initiatives</li> </ul>
<b>Excluded</b>	<p><b>Excluded from interviews and the literature review</b></p> <ul style="list-style-type: none"> <li>• Education or initiatives directed to those in kindergarten through 12th grade and college</li> <li>• Campaigns seeking to raise awareness or simply share information</li> <li>• Health literacy issues that are not generalizable to financial literacy</li> </ul> <p><b>Literature review-specific</b></p> <ul style="list-style-type: none"> <li>• Opinion or editorial pieces</li> <li>• Literature external to the United States</li> <li>• Literature in languages other than English</li> </ul>

### Gray Literature

We defined *gray literature* as any non-peer-reviewed literature that met the study’s inclusion criteria. This included presentations, articles, white papers, trade publications, issue briefs, and books. We did not include articles from magazines or newspapers.

To scan the gray literature, we examined the HHS web-site and the web-sites suggested by the project team. We also conducted a more targeted web search based on some of the findings from the peer-reviewed literature (see Appendix A for the list of web-sites we reviewed).

### Data Abstraction and Analysis

We entered all documents into a Microsoft Access database, and abstracted key features and identified key themes (see Appendix A for the data abstraction protocol). We developed an abstraction form in Microsoft Access for the peer-reviewed and gray literature (screen shots of the Access forms appear in Appendix A). The main elements of the abstraction form were document information, purpose, methods, and main findings. We also noted the type of documents that we found in the literature (e.g., systematic reviews and single descriptive studies).

Once we had abstracted the information, we synthesized it by main themes relating to financial literacy, health literacy, and the way in which each of these concepts informs the other.

### Limitations to the Literature Review Methodology

The one major limitation in our study was the general scarcity of gray literature focusing on financial literacy among low-income populations. There is a fair amount of literature on how to become more financially literate; however, these documents did not specify a target population and did not evaluate the effectiveness of the tool or initiative used. Literature from behavioral economics is not included as it tends to focus on higher income populations.

### Key Informant Interviews

To understand existing, completed, and planned federal initiatives associated with financial and health literacy, we conducted interviews with officials from HHS and additional federal agencies. We also interviewed individuals from eight external organizations focused on financial and/or health literacy to get a broader view of these fields. See Table 2 for the names of the agencies and organizations from which we drew our interviewees.

**Table 2. Agencies and organizations that participated in interviews**

<b>HHS Agencies</b>	<ul style="list-style-type: none"> <li>• Administration for Children and Families (ACF)</li> <li>• Administration on Aging (AoA)</li> <li>• Agency for Healthcare Research and Quality (AHRQ)</li> <li>• Centers for Medicare &amp; Medicaid Services (CMS)</li> <li>• Health Resources and Services Administration (HRSA)</li> <li>• Indian Health Service (IHS)</li> <li>• Office of the Assistant Secretary for Planning and Evaluation (ASPE)</li> <li>• Office of Public Health and Science (OPHS)</li> </ul>
---------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Table 2 continued. Agencies and organizations that participated in interviews**

<b>Other Federal Agencies</b>	<ul style="list-style-type: none"> <li>• U.S. Department of Agriculture (USDA)</li> <li>• U.S. Department of Education (ED)</li> <li>• U.S. Department of the Treasury (Treasury)</li> <li>• Federal Deposit Insurance Corporation (FDIC)</li> <li>• Federal Reserve Board of Governors (Federal Reserve Board)</li> </ul>
<b>Private Organizations</b>	<ul style="list-style-type: none"> <li>• AARP</li> <li>• Earned Assets Resource Network (EARN)</li> <li>• Financial Literacy Center</li> <li>• Health Education Council</li> <li>• Illinois State University (ISU) Extension</li> <li>• National Council on Aging (NCOA)</li> <li>• National Endowment for Financial Education (NEFE)</li> <li>• NeighborWorks America</li> <li>• Stanford Chronic Disease Self-Management Program</li> </ul>

To identify potential initiatives of interest for the study, we developed priorities for inclusion based on the project’s focus on assisting low-income persons with financial and health decision making (see Table 2). Based on input from the chair of the HHS Health Literacy Work Group (HLWG) and a web scan of federal agencies, we developed a database of initiatives, including the agency or organization name, a description of the initiative, its focus on financial or health literacy (or both), target audiences, whether the initiative sought to change behaviors and/or improve skills, and links to information. The initial list contained 112 initiatives across 13 HHS agencies, six additional federal agencies external to HHS, and 12 private organizations. On the basis of input from the Task Order Officers and comparison of the list to initiative priorities, we narrowed the list to 59 initiatives that met the inclusion criteria.

We conducted a total of 35 interviews with 46 individuals during March through August 2010. On the basis of these interviews, we gathered information on a total of 38 initiatives from 13 federal agencies and eight private organizations. For two interviews, we grouped multiple initiatives if they lacked specific titles or if there were multiple similar initiatives at a given agency. For example, we grouped multiple consumer education initiatives and campaigns at AHRQ, since the participants described them in general terms. We also grouped CMS’s Compare web-sites—Nursing Home Compare, Hospital Compare, and Medicare Prescription Drug Plan Finder—and considered them as a single initiative because of the similarity among their goals and methods. Our response rate for our interview requests was 84%.

For the interviews, we used a semi-structured protocol that covered the following topics: participants’ roles and responsibilities, background and goals of the initiative, target populations, behaviors that the initiative promoted, coordination with other government divisions, activities to determine effectiveness and success, lessons learned, unanticipated outcomes, and completed and ongoing research (see Appendix B for the protocol). We did not ask the same questions of more than nine nonfederal respondents, in compliance with Paperwork Reduction Act rules.

Each interview was audio recorded. A note taker was present and prepared a written transcript of the discussion. Information from the interview was then entered into a spreadsheet, organized by the specific topic areas in the protocol, and reviewed to identify themes, trends, and relationships among observations.

### **Limitations to the Interview Methodology**

There were a few limitations to the interview methodology. With more time and resources, more government agencies could have been included. Notable exclusions from the list include the Social Security Administration, the National Institutes for Health, and the Veterans Administration. In addition, although we sought to obtain data on evaluations, most interview participants were not able to discuss specific evaluation data. However, in some cases, participants were able to provide documents or references to specific results and data.

## **4.0 Findings from the Literature**

The literature review sought to identify strategies and interventions for improving financial and/or health literacy of consumers, particularly those with low incomes. In this section, we provide overviews to the research in financial and health literacy and a description of lessons learned based on target audiences, dissemination strategies, and sources of information.

### **Financial Literacy Research Overview**

Financial literacy has been studied in three main settings: (1) as part of individual development account (IDA) programs; (2) financial education programs aimed at low-income audiences or underserved areas; and (3) secondary data analyses. IDAs are short-term, limited use, matched savings accounts that are typically bundled with services, such as financial education and peer mentoring, into a program intended to help low-income individuals purchase or develop assets, such as a home, a small business, or postsecondary training or education. While there are a number of studies examining IDAs, there are limitations: Self-selection into these programs which increases the likelihood of having characteristics that differentiate participants from the general public; inconsistency between financial education across IDA programs thus decreasing the comparability; the value of the financial education component as a secondary to the matched program thus limiting generalizability to other financial education programs; and none of the IDA research studies have a control group to evaluate the differences between those who receive financial education and those who do not.

Financial education has been evaluated in financial management courses directed at low-income audiences in community settings. Four of these studies were evaluations of specific training programs, All My Money (developed by USDA) (two studies) and the Financial Links for Low-Income Persons (two studies). Two evaluations examined credit counseling programs and one examined a mandatory financial education program in a low-income housing program. All My Money sought to provide a comprehensive financial education program to educate persons about spending choices, budgeting, planning, understanding credit, managing a checking account, and planning expenditures. Financial Links for Low-Income Persons sought to educate individuals about opening banking accounts, banking practices, credit use, savings, and in one program, potential public- and work- related benefits (Zhan, Anderson, & Scott 2009; Zhan, Anderson, & Scott 2006). Collins (2010) examined a similar program, only participants were required to take the financial education courses. None of these studies included a control group and all but one (Collins, 2010) allowed participants to select into the counseling, thus it is unclear whether self-selection or the program was the key factor in improving financial literacy.

The two credit counseling evaluations had different foci: Elliehausen, Lundquist, and Staten (2007) examined counseling relating to the financial goals, financial strengths and weaknesses, and examining the family's budget; Hatarska and Gonzalez-Vega (2006) examined counseling

programs to improve spending, improving the use of credit, and consolidating debt. Both of these studies had limitations including self-selection; a lack of control-group for the Hatarska and Gonzalez-Vega study; and, although Elliehausen et al. included a control group, the participants were not randomly selected into either group. Elliehausen et al. (2007) discovered that counseling resulted in virtually no improvements in credit scores. It was the self-selection, *not* the counseling, which had produced financial improvements.

Finally, the literature review also examined research from data sets (Courchane, Gailey & Zorn, 2007). Using datasets from a 2000 Freddie Mac survey and 1.2 million mortgage loans, the authors examine the accuracy self-assessment of credit and the association between self-assessment of credit and the ability to obtain a mortgage loan. The limitation to this study is that the data do not combine consumers' subjective assessments of their financial records with observed financial market outcomes in a later period. The definitive analysis of whether or not accurate self-assessment of credit improves financial outcomes likely awaits such data.

### Health Literacy Research Overview

The research topics included in health literacy review covers, in order of prevalence, preventive cancer screenings, chronic disease, healthy living (including exercise, diet, and risk reduction), health management, and accessing health care services. The preventive cancer screenings included breast cancer and colorectal cancer. Most of preventive literature examined the comparison of trained providers, either a patient navigator (typically a nurse or social worker) or a clinician and sort of written material, such as a letter or a brochure. The other preventive literature focused on targeting specific ethnic groups (African American women and Hmong men and women) and comparing different modes and level of tailoring, for example, comparing video, print, interactive computer, and group learning sessions. These interventions had several limitations, the most common being small sample-sizes which decreased the precision of the study. Similar to financial literacy, self-selection into some of the studies posed a bias: self-selected participants may be more interested in self-care and health management and could be different from the general population. Other limitations included patient attrition from the study; differences between treatment and control group potentially confounding the findings; and a lack of control groups.

Health literacy has also been examined in the context of improving chronic conditions such as diabetes, heart failure, asthma, and hypertension. The modes of delivery for these studies were one-on-one education or counseling and group sessions. Where there was a control group, the control group typically received a pamphlet. These studies also had their own limitations, again the most common being small sample size. Lack of a random controlled design also limited findings for a few studies. Not all studies examined clinical outcomes which would have been valuable to ascertain the achievement of the initiative. Finally, two studies relied on self-selection into the study and self-report of behavior, increasing the likelihood of positive results.

Five health literacy studies examined health management, including patient-specific health improvement/risk reduction activities (e.g., fall prevention and medication management), diets, and general health improvement/risk reduction activities (e.g., smoking cessation, diet improvement, exercise), and drug allergy awareness. All but one of these studies, the drug allergy awareness study, examined a health educator and individual interaction, including counseling, phone support, and classes. The drug allergy awareness used a form only. The most common limitations to these studies included conducting the studies at a single health site



decreasing generalizability; a lack of control group for comparison; self-selection into the study; and self-reporting behavior. Other limitations include participant attrition and poor recall for self-reported behaviors.

Similar to the financial literacy research, most of the studies focused on interventions involved interactions between a health educator and a patient. Of the health educator-patient interaction studies, less than half involved a clinical provider such as a physician, nurse, or social worker. The others used a trained educator, but it was unclear whether these educators had degrees related to the activity; in one case, it appeared they were trained graduate students. Several of the studies also examined the use of materials, whether as a usual source of information as part of the control group, or as a key source of providing or collecting information, such as collecting data on allergies. In only one case were alternate methods examined, such as the use of a video, interactive computer, and a pamphlet.

Unlike the financial literacy, there were no articles studying the same intervention, although in at least one case, such as Montz & Seshamani's article on WISEWOMAN, there are several publications on the program, but all were published prior to 2005.

Appendix C presents details of the studies and results in financial literacy and health literacy.

### **Lessons Learned Relating to the Target Audiences**

**Better long-term financial and health outcomes are associated with highly targeted and proactive counseling.** Evaluations of financial and health literacy initiatives have shown that developing initiatives aimed at a specific audience—or better yet, an individual—are superior to initiatives aimed at a more general audience. In a literature review conducted by the Federal Reserve Bank of Cleveland, the authors found that highly targeted and proactive programs are more likely than more general ones to be effective in changing people's financial behavior (Hathaway & Khatiwada, 2008). The authors also indicate the need for more rigorous study of financial education. Programs should target a specific audience, such as homeowners, and a specific area of financial activity, such as choosing among mortgages or mortgage modifications. In addition, the authors suggest that training should occur just before the related financial event, such as applying for a mortgage. This finding may explain other findings suggesting that financial education and counseling provide only modest financial improvements. Perhaps the reason for the modest financial improvements is that the financial education is general and not specific to a particular event, issue, or concern. The Federal Reserve Bank authors found that, in studies on counseling on homeownership and on credit card use, preemptive counseling, before the purchase of a home or a bad credit event, could improve outcomes by decreasing default rates or future loan delinquency, or by improving borrower skills and planning. In contrast, reactive counseling, such as postpurchase or crisis counseling, was not as effective as preemptive counseling at limiting bad credit outcomes or future problem behaviors. Similarly, both research studies by Zhan, Anderson, and Scott (2006 and 2009) suggest that focused information for small, targeted populations is likely to improve financial literacy. In the 2006 study, Zhan et al. reported that low-income participants were not aware of public benefits such as transitional Medicaid, subsidized child care, and the Earned Income Tax Credit (EITC), suggest the need for better dissemination of these important potential benefits when conducting financial education. Zhan et al.'s 2009 study found that providing financial education to immigrants who were unfamiliar with banking and/or were skeptical of banks increased understanding about banks; for

example, there was a 58% decrease in the number of people who found understanding how to use a bank “hard.”

Health literacy has a history of *targeting* small subpopulations and even *tailoring* information to individuals. Targeting is developing materials for a specific segment of the population, smaller than the general public, but still fairly broad, like minority women or older adults with heart disease. With tailoring, the aim is to develop information or an intervention for an individual on the basis of an assessment (HHS, 2000; Kreuter & Skinner, 2000).

To develop targeted or tailored and culturally appropriate materials that engage the desired audience and to determine the best method for disseminating the information, developers may use a variety of methods, such as focus groups, interviews, and observations. Many tailored initiatives in health literacy focus on a specific issue, such as asthma control, diabetes control, or increasing colorectal screening rates. An example of this is the Chicago Initiative to Raise Asthma Health Equity, developed by Martin et al. (2009), which used four educational activities and six home visits responsive to each participant’s own particular needs, to improve that individual’s asthma self-management. Champion et al. (2006) examined different interventions to increase mammography rates. Examining pamphlets, videos, and an interactive computer-assisted instruction program that was tailored to the individual’s own beliefs and readiness for mammography, the authors found that 52% of the interactive computer group either worked toward getting a mammogram or obtained a mammogram, compared with those in the pamphlet or video group. These data indicate that tailored, interactive approaches are more effective in increasing mammography rates among African American women. Similarly, Kagawa-Singer, Tanjasiri, Valdez, Yu, and Foo (2009) found that using a culturally customized intervention with Hmong women in California improved mammography rates by almost 30%. In a randomized study of ethnically and linguistically diverse low-income patients, Percac-Lima et al. (2008) found that a culturally tailored navigator program designed to overcome barriers to colorectal cancer screening could significantly improve patient colonoscopy rates. A trained navigator or community health worker met with patients and provided individually tailored interventions, including patient education, procedure scheduling, translation, explanation of preparation, and help with transportation and insurance coverage, resulting in twice the number of colonoscopy completions and colorectal cancer screenings. Smith and Wolleson (2010) also reported that individualized and tailored counseling to low-income pregnant women resulted in increases in health literacy scores and functional self-care literacy<sup>3</sup> scores. In a study of low-income patients receiving diabetes education while waiting in a doctor’s office, Drago (2009) reported that 92% of patients demonstrated improvement in health literacy skills due to short (15-minute to one-hour) training sessions. Montz and Seshamani (n.d.) examined data from 10,000 low-income and uninsured or underinsured women who participated in a tailored counseling program to improve their diet and exercise, reduce or stop smoking, and reduce other risks identified by study participants. The authors reported a 5% reduction in 10-year estimated chronic heart disease risk, an 8% reduction in 5-year estimated cardiovascular disease risk, and a 7% decline in smoking since the program began. It is important to consider both the target audience and the timing of delivering an educational message in order to have the greatest impact. If possible, tailoring messages to individuals, to address their specific needs at the time of need, could promote even greater behavior change.

---

<sup>3</sup> This measured attitudes toward pregnancy, support of the child’s development, level of safety (e.g., car seats), use of community resources, and use of illegal substances and tobacco.



**Use of theoretical models on behavioral change have proved useful for developing initiatives.** Health literacy has developed theoretical models to help develop interventions. These theoretical models, while untested by themselves, have proved valuable in developing a plan to address a health concern. Champion et al.'s intervention to improve mammography rates was informed by the Prochaska and DiClemente's (1984) Stages of Change Theory. This theory reasons that people tend to progress through different stages on their way to successful change. There are five stages: (a) *precontemplation* (not yet seeing that there is a problem behavior that needs to be changed), (b) *contemplation* (realizing a problem exists but not being ready to make a change), (c) *preparation*, (d) *action* (changing behavior), and (e) *maintenance*. The authors found that there was significantly more forward movement in mammography "stage of readiness among" participants in the interactive computer group, compared with those in the pamphlet or video group. These data indicate that tailored, interactive approaches are more effective in moving African American women forward in their mammogram stage of readiness. This finding could be modified to apply to financial literacy initiatives.

Similar to the Stages of Change Theory, some of the research in financial literacy has found that educating individuals at the time of their need is more effective than educating individuals after a negative financial event has occurred (Hathaway & Khatiwada, 2008). The objective of the study described in the literature review was to provide the information that individuals needed to know at the time when they needed it. For financial literacy, topics could include retirement planning, home ownership, obtaining a mortgage, or managing debt. The purpose of focusing the topic is to tailor the initiative to an individual at the time that would be most appropriate.

Another commonly used behavioral theory is the Health Belief Model. This theory examines (a) perceived susceptibility of a health condition, (b) perceived severity of a health condition, (c) perceived benefits of changing one's behaviors, (d) cues to action or strategies to facilitate embracing new behaviors, and (e) self-efficacy (Glanz, Rimer, & Lewis, 2002). For example, initiatives could increase perceived susceptibility to and severity of a poor financial outcome, the perceived benefits of changing one's behaviors, strategies to facilitate embracing new behaviors, and self-efficacy. Using the Health Belief Model, focus groups and interviews could examine perceived susceptibility to a specific negative financial outcome (e.g., loss of money from a bank), perceived severity of the negative financial outcome, perceived benefits of changing one's behaviors, and strategies to facilitate positive financial behaviors. This information could be used, for example, to develop an initiative that mitigates negative beliefs about banks, increases positive beliefs about banks, such as financial safety and ease of paying bills, and increases self-efficacy to perform positive financial behaviors.

The Theory of Planned Behavior has been used in both health and financial literacy (Ajzen, I, 1985). In the Theory of Planned Behavior, action is guided by *behavioral beliefs* (e.g., beliefs about the consequences of a behavior), *normative beliefs* (expectations about others), and *control beliefs* (e.g., beliefs about what may facilitate or impede the performance of a behavior). Collins' 2010 study used the Theory of Planned Behavior to develop and examine a five-session financial education initiative. Based on the theory, it was expected that, compared with the control group, the housing voucher clients who completed a mandatory financial education program would improve in the following areas: (a) self-assessed knowledge of financial issues; (b) attitudes about saving and budgeting; and (c) objective measures of financial behavior, including credit reports and bank statements. Collins found that the knowledge of current interest rates and what is in a credit report increased by 29% and knowledge of managing money by 44% at follow-up.

In a similar manner, at follow-up, the program led to a 25% increase in self-reported spending control, a 44% increase in timely bill payment, and a 35% increase in following a budget.

**Self-perceptions are a poor reflection of health and financial literacy.** This finding can be particularly important, since program evaluations often rely on self-assessments rather than direct observation of behaviors or records of behaviors. Among consumers who speak Spanish as their primary language, a significant number of patients who report English proficiency in fact have an inadequate level of English health literacy, as measured by the Rapid Estimate of Adult Literacy in Medicine (REALM) and the Short Test of Functional Health Literacy in Adults (STOFHLA). This fact suggests a need for a more liberal use of interpreters (Zun, Sadoun, & Downey, 2007). In addition, in Sarkar, Fisher, and Schillenger's (2006) study of primary care patients, the authors found that health literacy levels were not a predictor of better self-management of diabetes<sup>4</sup>.

Findings in financial literacy are similar. Courchane, Gailey, and Zorn (2007) analyzed the relationship between individuals' (of all income levels) real credit records from 1.2 million mortgage loans and their self-assessments of their credit from a survey. These authors found that consumers' perceptions of their credit quality did not always reflect their actual credit scores, although financial knowledge and literacy increased the accuracy of self-assessment. Those with low to moderate levels of knowledge about their personal credit scores often overestimated their level. Those with incomes of less than \$35,000 also overestimated their credit scores. These findings suggest that individuals who inaccurately assess their own credit scores are likely to be denied credit, pay higher costs on mortgages, and/or have other negative financial outcomes.

**Past behaviors are indicators of future behaviors.** Within the financial literacy research, many personal characteristics indicative of stronger previous financial management, such as homeownership or having greater financial assets, are associated with better future financial decision making. In a study of a small IDA program, Grinstein-Weiss, Curley, and Charles (2007) found that home ownership upon entry into the IDA program was an important predictor of savings. In a similar manner, graduation from an IDA program emerged as a significant predictor of household savings, resulting in a \$341 increase in household savings, compared with the savings of those who did not complete the IDA program (Loibl et al., 2008). The authors found that future orientation toward financial planning emerged as a main effect in predicting household savings. Loibl et al. also reported that participants with greater household financial assets were more likely to be employed full time or to own an investment account, and were more aware of the future consequences of their financial actions. These findings suggest that previous successes in financial management create financial dispositions and behaviors that provide long-term benefits. Over several years, the strict program structure and intensive financial training may help participants build the skills they need to achieve savings goals even after leaving the IDA program. As greater household financial assets are associated with considering future consequences, it is possible that individuals with better previous financial behaviors are more likely than program graduates to have better future behaviors (Loibl et al., 2008).

---

<sup>4</sup> An interview with IHS contained a similar finding. The interview participant noted that although IHS measured health literacy levels as part of one of its projects; these levels did not correlate with how well individuals understood specific health information.

**Higher self-efficacy is associated with better self-care and disease management.** Self-efficacy is the belief in one's own ability to succeed at performing specific tasks. Individuals with high self-efficacy are likely to be more proactive about a situation because they believe that their actions matter, whereas people with low self-efficacy may have a sense of hopelessness or fatalism about a situation, feeling that nothing that they do will make a difference. Self-efficacy was originally defined by Bandura (1977) and is used to understand an individual's ability to perform activities, as well as to take initiative. Three recent studies examined the association between self-efficacy and managing chronic health conditions.

Sarkar, Fisher, & Schillinger (2006) conducted a study examining factors associated with better self-care and disease management of low-income patients at two primary care clinics. Across race/ethnicity and health literacy levels, people reporting higher levels of self-efficacy also tended to show a greater likelihood of following an optimal diet and an exercise regimen. Each 10-point increase in reported self-efficacy (out of a 100 point scale) was associated with a 16% higher likelihood of following an optimal diet and a 10% higher likelihood of following an exercise regimen. There were also significant relationships found between self-efficacy and self-monitoring of blood glucose and between self-efficacy and foot care.

In a smaller study of adults in Chicago who sought to improve asthma self-efficacy, the researchers randomized participants into a control group that received only education pamphlets and a treatment group that participated in four group sessions lead by a community social worker and received six home visits by community health workers (Martin et al., 2009). The 42 participants were predominantly African American and of low-income status, and had poorly controlled, persistent asthma. After the counseling, the treatment group reported significantly higher asthma self-efficacy at 3 months. At 6 months, the intervention group had improved asthma quality of life, compared with controls. Another study of 275 hospital patients found that the most significant predictor of low medication adherence was low self-efficacy (Gatti, Jacobson, Gazmararian, Schmotzer, & Kripalani, 2009). In other words, patients who did not believe that they could manage their medications were not likely to do so. Finally, in one study on information seeking by low-income pregnant women, Shieh, Mays, McDaniel, and Yu (2009) found that a significant barrier for women with low health literacy was low self-efficacy.

Although the direction of causality is unclear, whether certain behaviors cause self-efficacy or self-efficacy causes certain behaviors, there is evidence that self-efficacy is a predictor of self-management. This finding suggests that activities and information to increase self-efficacy could play a critical role in health and financial literacy. Thus, developing an initiative that attempted to increase an individual's self-efficacy as well as changing a behavior may increase the likelihood of success for an initiative.

**The benefit from focusing on consumers with the poorest financial literacy could apply to health literacy initiatives.** Low-income consumers have the most to gain from financial education if the education targets low-income-specific issues. Two recent studies also found that counseling provided the greatest benefit to those borrowers with the least demonstrated ability to handle credit at the time of counseling (Chang & Lyons, 2008; Elliehausen et al., 2007). In a similar manner, Hathaway and Khatiwada's (2008) literature review found two studies suggesting that education for low-income consumers should target financial issues particularly affecting low-income households, such as public and work-related benefits and predatory lending, although the authors did not provide specific data from the studies. Furthermore, the authors argue that, because of the variety of public benefits, financial educators must be

knowledgeable about what is available in their area. Translating this finding into the health field, targeting persons with multiple chronic conditions or with significant disabling conditions may lead to better outcomes or better health stabilization than more general health literacy initiatives would. Targeting those with the greatest need is not a widespread practice in the health literacy field, although there are two such examples: The patient-centered medical home and the Chronic Care Model. A patient-centered medical home is an approach to providing comprehensive primary care that is patient centered; care is coordinated and integrated, and has a whole-person orientation. Patient-centered medical homes typically concentrate on persons with chronic conditions, and have been effective in preventing emergency room visits, reducing costs, and improving quality of care (Grumbach, Bodenheimer, & Grundy, 2009). The Chronic Care Model encourages more education and interaction between the provider and the patient (Wagner, 1999). First developed by Wagner in 1999, this model seeks to improve clinician interactions with patients, thereby encouraging patients to be informed, engaged, and active. Clinicians plan, educate, and provide decision making support. The model starts with changing the behavior of the health care team to tailor information to patients and train patients to take care of themselves and manage their own condition or conditions. In turn, patients have the necessary information and skills to make decisions and have confidence in making health care decisions later. In a study using the Chronic Care Model in the community, the researchers reported decreases in blood glucose levels, decreases in non-HDL cholesterol<sup>5</sup>, and improvements in diabetes knowledge (Piatt, et al. 2006). Focusing on individuals with the greatest need could benefit health outcomes and could be a more effective use of resources under certain circumstances.

### Lessons Learned Relating to the Channels of Information

**Activities should be simple, enjoyable, and normalize positive behaviors.** Audience-centered communication initiatives use the concept of *fun, easy, and popular* to develop initiatives (Smith, 2007). *Fun* refers to whether the target audience perceives a positive benefit to the behavior, as well as a lack of negative emotions, such as shame, frustration, and fear. *Easy* refers to whether the intended audience has the knowledge and skills to perform the behavior successfully. *Popular* refers to the need for participants to believe that the new behavior is normal and common among other individuals. Health literacy initiatives incorporate this concept into campaigns and information, developing activities that are easy to engage in and understand and acknowledging challenges that occur. One example of this type of initiative is the People Reducing Risk and Improving Strength through Exercise, Diet and Drug Adherence (PRAISED) intervention to improve diet, exercise, and medication adherence in a senior housing community (Resnick, Shaughnessy, Galik, Scheve, Fitten et al., 2009). The initiative held one-hour sessions over 12 weeks, and included exercise, motivation, and ongoing education, and then reported participants' diet, exercise, and medication adherence in logs. The program was successful in getting participants to engage in education and exercise three times per week, and participants demonstrated improved outcomes in blood pressure.

One example of this approach to in financial literacy is making it easier to save for retirement through savings bonds. Starting next year, Americans' have the option of using their refunds to purchase U.S. Savings Bonds by simply checking a box on their tax returns, even if the taxpayers do not have bank accounts (Retirement security for American families, n.d.). Another example of could be developing an initiative around obtaining a checking and savings account for new

---

<sup>5</sup> Non-HDL cholesterol levels refer to the three other types of cholesterol: low-density lipoprotein (LDL), very low-density lipoproteins (VLDL), and intermediate-density lipoproteins (IDL). Measuring the non-HDL cholesterol is a newer method of predicting overall cardiovascular health.

immigrants. The initiative could focus on positive benefits, such as having a central place for your money, checks to use for payments, and (potentially) automatic deposits from the employer, as well as potential gains in savings accounts. In addition, the initiative could reduce negative emotions, such as fear of banks and fear of loss of money, by describing what banking is, the ease of getting a bank account, the types of available bank accounts, and the rules for keeping money safe. To popularize the use of checking and savings accounts, videos of other immigrants similar to the target population could show the video participants indicating the benefits of using the banks. To emphasize the ease of using banks, the video could describe a typical banking process, acknowledging the discomfort the person might have about setting up an account.

**Education assists in managing present difficulties and to prevent future problems.** Both chronic care education and financial education consist of managing long-term issues or conditions, preventing potential problems, managing problems should they arise, and conducting regular checkups or check-ins about specific health or financial issues. In both cases, lack of knowledge and ability to maintain consistent positive behavior over time leads to poor outcomes, such as poor quality of life—exemplified by emergency room visits, days spent at home, problems with credit, and lack of money. Where the chronic care education and the financial education initiatives differ are the outcomes when individuals manage their conditions or finances well. In chronic care, the positive outcome of managing their condition is the lack of deterioration and lack of problems, such as emergency room visits, surgery, or loss of eyesight. In financial education initiatives, the positive outcome is not only a lack of financial deterioration but, potentially, financial progress, such as increasing savings, owning a home, or improving credit.

Two studies examining chronic care self-management found that participants in the treatment group were more likely to do a better job of managing their health care, although the results on quality of life were mixed. In one study on asthma self-management in which the treatment group received four group sessions and six home visits by community health workers, compared with the control group's receipt of educational pamphlets, the treatment group was more likely to have asthma action plans at 3 months, and at 6 months. The treatment group had improved quality of life and improved asthma coping skills, compared with the control group (Martin, et al., 2009). Hostetter (2008) found that patients with coronary failure trained by health care providers about self-management were more likely than those in the control group to check their weight daily and watch for signs and symptoms that indicated worsening of heart failure. However, there were no significant differences in quality of life between the two groups. Finally, in a study implemented in underserved communities, patients in the intervention group, who received tailored and planned education from their clinicians, had significantly lowered blood sugar levels, improvements in non-high-density lipoprotein also known as non-HDL cholesterol levels, and higher frequency of self-monitoring, compared with the control group (Piatt et al., 2006).

Similar results were found in financial literacy evaluations that discussed skill building, including planning (Lyons, Chang, & Scherpf, 2006; Grinstein-Weiss et al., 2007). For example, Lyons, Chang, and Scherpf studied individuals who took part in an eight-session financial education program to train individuals on making spending choices, managing personal finances (e.g., bank accounts), managing credit problems, and planning expenditures. After the counseling sessions, 85% of participants reported improving financial management.

The concept of chronic care is so significant in health education that a field of study dedicated to the Chronic Care Model has emerged. First developed by Wagner in 1999, this model seeks to improve clinician interactions with patients, thereby encouraging patients to be informed, engaged, and active. Clinicians plan, educate, and provide decision making support. The model starts with changing the behavior of the health care team to tailor information for patients and train patients to take care and manage their own condition or conditions. In turn, patients have the necessary information and skills to make decisions and have confidence in making health care decisions later. In a study using the Chronic Care Model in the community, the researchers reported decreases in blood glucose levels, decreases in non-HDL cholesterol, and improvements in diabetes knowledge (Piatt, et al., 2006). One challenge to applying this model to the financial education field is that most individuals do not regularly interact with a trusted and credible financial educator, as people may with a health care provider.

**Low health literacy and education levels and barriers to information predict the degree of information seeking.** One way that individuals can increase their health literacy is through accessing information pertinent to their health condition, a critical step toward health decision making and health management. Shieh, McDaniel, and Ke (2009) examined the information-seeking behaviors of pregnant women and found that information needs and information barriers predict women's degree of information seeking. Barriers to information were categorized as psychological (e.g., avoiding health decision making), demographic (e.g., minority status or low health literacy), interpersonal (e.g., lack of a support network), environmental (e.g., lack of libraries or internet services), and information source barriers (e.g., a provider's disregard for prenatal health education). Even when controlling for first pregnancy, low-income level, and additional health issues, *barriers to information* were the most significant predictor of women's information-seeking behavior, not *information needs*. In a similar study conducted by Shieh, Mays, McDaniel, and Yu (2009), findings suggest that varying health literacy levels may contribute indirectly to health outcomes by affecting other information-seeking behaviors. The authors reported that only 14% of pregnant women with low levels of health literacy frequently used the internet as an information source, compared with 47% of those with high levels of health literacy. As the internet can be a significant source of information, this presents a huge gap for low-income pregnant women in terms of their information-seeking capabilities. At the same time, it is unclear whether individuals become more literate because of the internet or information-seeking individuals are more likely to use the internet.

Two studies found that the barrier of low health literacy was a more relevant predictor of health outcomes than was lower education, although it was still significant. Inadequate health literacy had a strong, independent association with mortality even after adjusting for sociodemographic characteristics, chronic conditions, and physical and mental health (Baker, et al., 2007). In addition, the extent of the association between inadequate health literacy and mortality was similar to the association between low annual income and mortality. Wolf, Gazmararian, and Baker (2005) also reported that individuals with inadequate health literacy had worse physical function and mental health than those with adequate health literacy levels.

At the same time, one study found a strong correlation between lower levels of education and less information seeking (Wiltshire, Roberts, Brown, & Sarto, 2009). Using the 2000–2001 Household Component of the Community Tracking Study, the authors observed that, compared with individuals with college or higher level education, respondents with less than a high school

education were 74% less likely to seek information; high school graduates were 51% less likely, and those with some college were 29% less likely. When adjusting for variables, poverty is significantly associated with information seeking; the poor (those at less than 99% of the federal poverty level) were 13% less likely to seek health information, and the near poor (those at 100 to 199% of the federal poverty level) were 15% less likely, when compared with the non-poor (at 300% or more of the federal poverty level). This study did not examine health literacy, and thus it is unknown whether education level or the health literacy would be a greater barrier to information seeking.

**Peer mentoring has been shown to improve outcomes.** Peer mentoring may support behavioral change. Examples in the health field include the American Cancer Society's mentor program and Weight Watchers. These peer-mentoring programs are long term, with the expectation that individuals will participate although with the understanding that participation is voluntary. Some dieting behaviors are similar to financial management, such as reducing spending and financial planning, and have been found to be effective in one study. A randomized trial evaluating multiple diet plans, including Weight Watchers, which includes a peer-mentoring component to the program, found statistically significant reductions in weight and cardiovascular risk factors (Dansinger, Gleason, Griffith, Selker, & Schaefer, 2005).

In financial literacy, three studies of IDA programs report that IDA enrollees who participated in peer-mentoring programs had an average monthly net deposit of between \$8.19 and \$16.53 higher than IDA enrollees who did not participate in peer-mentoring programs or who participated in programs without peer mentoring (Curley, Ssewamala, & Sherraden, 2009; Grinstein-Weiss et al., 2007; Grinstein-Weiss, Yeo, Despard, Casalotti, & Zhan, 2010; Han, 2007). In contrast, the gains in individuals' average monthly net deposit based on financial education were quite modest, although still statistically significant (Curley, et al., 2009; Grinstein-Weiss et al., 2007; Grinstein-Weiss, et al., 2010; Han, 2007). Han and Hong (2006) also found positive correlations between the access to peer mentoring and savings, but did not describe the effect on the average monthly net deposit. This finding suggests that peer mentoring, which provides informal support, encouragement, and sharing related to saving in IDAs, may be a valuable method of increasing financial literacy. Of course, one of the limitations of these findings is that they are from studies of IDA programs alone and thus are hindered by self-selection bias.

**Communities have trusted sources of health education but often lack a trusted source of financial education.** Eighty-five percent of individuals have reported that they have a usual place to go for medical care (HHS, CDC, NCHS, 2010). Almost 70% of participants in the Health Information National Trends Survey stated that they trusted the information from their doctors "a lot" (HHS, National Cancer Institute [NCI], 2009). Individuals may go to a doctor, nurse, pharmacist, or a public health department. In contrast, communities do not necessarily have trusted sources of financial information, even if the potential exists. Over 60% of banks provide education in the form of pamphlets to unbanked and/or underbanked individuals, although less than 40% perform outreach efforts to engage with the unbanked and/or underbanked and only 25% target marketing to reach unbanked and/or underbanked individuals. Most important, although most banks are aware of significant unbanked or underbanked populations in their area, less than 20% seek to actively market to this population (FDIC, 2009). While banks exist in most but not all communities, common reasons reported for the unbanked to avoid them are a lack of comfort with banks and a lack of trust of banks (FDIC, 2009). Ease and

comfort with using a bank may be further hampered by constraints imposed by the bank: Approximately 40% of banks offer limited extended hours and foreign language capabilities. In addition, 25% reject new account applications by those with poor credit histories (FDIC, 2009).

**The amount of education participants receive positively correlates with the outcomes.**

Research on IDA programs has found that the more an individual participated in financial education, the more the individual saved, as defined by individuals' average monthly net deposit. Specifically, three studies showed that each additional hour of financial education corresponded to an increase of \$0.45 to \$1.76 in average monthly net deposit (Curley et al., 2009; Grinstein-Weiss et al., 2007; Han, 2007). Han and Hong (2006) also found positive correlations between the amount of education and savings, but did not describe the effect on the average monthly net deposit. Seeking to identify the specific amount of financial education that led to the best outcomes, Curley et al. found that each additional hour of financial education led to a \$1.23 increase in an individuals' average monthly net deposit. Each hour between 7 and 12 hours of education led to an increase of \$1.76 in individuals' average monthly net deposit, but that having more than 12 hours of financial education did not correlate with an additional significant increase. One explanation for increased savings is because financial education may help IDA program participants make better financial decisions and identify opportunities and possible consequences related to saving and asset building (Grinstein-Weiss et al., 2007).

In a similar manner, in health literacy, Counsell et al. (2007) found that ongoing visits over a two-year period between a nurse and individuals 65 and older improved self-management and health outcomes. The visits, which encouraged goal setting and self-care, taught problem-solving skills, and provided education using low-health-literacy materials, led to improved self-management of chronic conditions and fewer emergency room visits. The findings of Ell et al. (2009) did not support these findings, although this may be due the nature of the study and the shorter length of visits. The investigators found that the use of patient navigation (decision support and emotional support provided by a nurse) had no effect on drug adherence, compared with the control group, which received standard written information and information from their clinical providers. This result might reflect that patients with cancer already have significant motivation to adhere to medication regimens, that the written information was sufficient, or it might reflect the similar finding from the IDA research that there is a limit to the amount of education or information a patient needs before there is no impact.

### **Lessons Learned Relating to the Source of the Initiative**

**Health educators and financial educators have different training, backgrounds, culture, and capabilities affecting the way in which they inform and support individuals.** Clinical providers (e.g., doctors, nurses, pharmacists) as well as dietitians, and health educators, have rigorous and consistent training across the country (HHS, CDC, National Center for Health Statistics [NCHS], 2010). Financial educators, although they have on average 12 years of experience (Lyons, Palmer, Jarayatne & Scherpf, 2006), do not have training that is comparable to that of clinical providers or other key health educators. While there is certainly financial education certification, someone who provides financial education does not need certification, and the certification process is not consistent. This is not to say that, by default, clinical providers always inform and engage consumers and financial educators do not, but clinical providers are more consistently and rigorously trained and thus have the knowledge to educate patients.



Medical and financial problems are generally communicated in very different ways. In the case of financial literacy, news such as a rejection of credit or other problems with credit may be conveyed by letter, over the phone, or in person. The individuals delivering this information may be experienced—or not—and they may not be trained to provide the information, regardless of experience. The individuals delivering this information may perceive that training, educating, or counseling consumers is not their role or responsibility. The individuals delivering the news may not provide potential solutions or strategies to improve the situation, and these individuals typically lose interest in serving the client. Interactions with the financial industry are relatively impersonal and fragmented. If a person seeks a credit card, it is typically through the mail or online. While opening a bank account generally involves face-to-face interaction, it is a one-time event and the bank staff is likely to be focused on gathering the required information rather than encouraging questions and providing education.

In contrast, in health literacy, those providing news such as diagnosis of a chronic or life-threatening disease or problematic lab work results are typically trained clinicians and usually give the news in person or over the phone and also in writing afterward as a confirmation, although they may not communicate well. In many cases when giving serious or potentially upsetting news, clinicians are trained to provide support and/or options (although they may not provide the support or options). Data from the consumer perspective also supports a related finding: Almost 70% of participants in the Health Information National Trends Survey stated that they trusted the information from their doctors “a lot” (HHS, NCI, 2009).

Another example of the difference between financial and health educator culture is fraud: Both have fraud, but within medicine, fraud and abuse are typically aimed at the payer (e.g., health insurance agency, Medicare, Medicaid) and not the individual. Much of the fraud in financial literacy is aimed at the consumer (e.g., investment fraud and mortgage information). Thus, there are some core differences between financial and health educators’ perceived roles and culture.

**Training clinical providers improves outcomes.** Four research studies exemplify the benefits of training clinical providers to improve the health literacy of patients. Valente, Murray, and Fisher (2007) instituted a program in which nurses and pharmacists encouraged patients to report allergy concerns, and found that both nurses and patients increased awareness and reporting of allergies. Patients increased their reporting of medication allergies by 30%, and the number of reports of adverse drug events by nurses rose from an average of 3 to an average of 48 per month. AHRQ funded a study of the Patient Safe-D program, designed to increase safe discharges through the use of standardized tools (Williams & Maleque, 2009). Patients in the treatment group received a form describing their needs after discharge, discussed it with a nurse, and received a discharge patient education tool for later use as a reference; patients in the control group received the standard discharge information. Patients’ knowledge was then assessed using teach-back techniques, and a pharmacist reviewed a medicine reconciliation form with the patient. After individual counseling, program participants were twice as likely as those in the control group to understand their diagnoses and 50% more likely to understand their treatment (Williams & Maleque, 2009). In addition, having a nurse advocate work directly with patients and then follow up after discharge reduces readmission rates. In six hospitals, nurses in the position of heart failure advocate worked individually with patients to teach them how to manage their disease, and discussed relevant topics. Nurse advocates followed up with patients after discharge to address problems with self-management. Patients managed by nurse advocates were more than 5 times less likely to be readmitted within 28 days (5.5%, compared with 28.6%) than

were those without nurse advocates (Hostetter, 2008). Christie et al. (2008) also found that using trained nurse advocates increased colonoscopy rates among low-income minority patients. Similarly, Khankari et al. (2007) found improved colonoscopy rates, from 12% to 28%, among low-income individuals through sending out a letter to patients about the reasons for a colonoscopy and through provider training on communicating with patients about the importance of colonoscopies. Rochon (2007) found that after involving physicians in a three-pronged program to help health literacy, reports of confidence in taking medications increased from 63% to 80% in older adults and from 50% to 73% in neighborhood clinics. Based on these findings, training financial educators using an evidence-based training would be promising to improve outcomes.

### Identification of Challenges and Limitations

**Actual behaviors are challenging to collect and/or are rarely collected.** Collecting accurate data poses a significant problem for both financial and health literacy fields because, in both fields, much of the data that are collected are self-reported and the responses often suffer from a social desirability bias, whereby a respondent will overreport positive behaviors and underreport negative behaviors. Rarely do studies have the resources or capabilities to observe behaviors. This challenge typically arises from lack of access to data, for example, inability to gain access to medical records because of the Health Insurance Portability and Accountability Act regulations, as well as financial institution regulations.

**Significant literature exists prior to 2005.** The literature review focuses on data from 2005 through 2010 but there is significant research prior to 2005.

**It is unclear what level of targeted and/or tailoring is needed in an initiative in order to show effectiveness.** Lyons et al. (2006) suggest that financial education initiatives must specify the behaviors that they expect to change with the knowledge the education initiative provides, and that the best evaluation is whether individuals are able to make sound decisions regardless of their financial situation, which may be at odds with the desired outcomes, such as decreasing the amount of debt. The research on improving health literacy is focused on small target audiences, and it is not compared with less targeted populations. It is unclear from the research how targeted and/or tailored initiatives should be to be effective.

**Many financial literacy programs have yet to be evaluated or have not been rigorously evaluated.** Hathaway and Khatiwada (2008) note that existing research on the effectiveness of financial education programs is incomplete and unconvincing. Fox, Bartholomae, and Lee (2005) and the Organisation for Economic Co-operation and Development (OCED) (2005) reported that most financial education programs do not include impact evaluations as a component of their program design. Equally important, however, is the difficulty of devising feasible measures to assess whether financial education programs have attained their main goals—increasing consumer awareness and changing individual financial behavior.

The lack of published research is also due to data scarcity. In 2000, PricewaterhouseCoopers abandoned a project to study the effectiveness of counseling after a feasibility study concluded that lenders either collect very limited data or do not collect any about borrowers who have undergone counseling (Mallach, 2001). Data availability is an important issue because even when such data are available, they are often proprietary and, thus, less accessible to external researchers. In addition, because many affordable-credit programs require counseling as part of the loan qualification requirements, is it hard to find an adequate control group (Hartarska &

Gonzalez-Vega, 2006). Lyons et al. (2006) identified three main gaps in program evaluation: a lack of general understanding or capacity to run a successful evaluation; evaluation components as afterthoughts, developed after the program has already begun and not embedded in the beginning; and a lack of industry standards.

Programs could also be conducted more rigorously. While most of the health literacy evaluations included a control group, not all were and not all were randomized. Specifically, the literature does not succeed in establishing the extent of the benefit provided by the initiatives, particularly the financial education initiatives. One problem is that most authors assume a causal relationship between financial education and financial outcomes, when in fact the correlation is often weak. Causality might run both ways between knowledge and behavior.

**Self-selection bias may also skew results of an initiative.** Hathaway and Khatiwada (2008) suggest that participants, who may have a foundation in financial literacy, however small, may be more likely than those who do not to attend financial education courses or counseling sessions. As discussed earlier, studies of IDA programs that match savings rates and provide financial education suffer from self-selection bias because the participants already want to set up a savings account. Meier and Sprenger (2009) found in a study of low-income consumers that participants who are more patient are more likely to participate in financial education programs. However, because previous research has indicated that patient individuals will also have generally better financial outcomes, regardless of whether they participate in educational programs, it is difficult to determine whether the program or the participant characteristic has led to improved financial outcomes (Dellavigna & Paserman, 2005). Most health literacy research includes participants who already participate in a health care system and are thus likely to be more active and engaged in managing health care—and the more active and engaged they are in managing their health, the more likely they will have higher levels of health literacy. The health literacy research often has some sort of control or a pre-post assessment, but it does not account for this important characteristic. The results strongly suggest that it is necessary to undertake a greater number of randomized evaluation studies of people who do not self-select in to health care settings or financial programs in order to support claims that education programs are effective.

## 5.0 Findings from the Interviews

Our interviews sought to identify current strategies and interventions to improve the financial or health literacy of consumers, particularly those with low incomes. Below we discuss the findings from the interviews, addressing the strategies that the initiatives have used, who is involved, and what outcomes were assessed, if any. See Appendix D for a description of each of the initiatives.

### Characteristics of Financial and Health Literacy Initiatives

In this section, we provide a background of the initiatives, describing the types of offices that participated in the interviews and the goals, target audiences, channels of dissemination, content, and level of coordination across agencies.

## Interview Sources

Our interview participants were gathered from the following organizational categories:

1. **Program offices:** These offices, which create and administer programs, accounted for the majority of the initiatives included in the study. The initiatives shared a similar funding approach, in which an agency funded a grantee that either carried out the services or coordinated service provision among subcontractors. Depending on the initiative, grantees were state or local agencies, academic institutions, nonprofits, or other nongovernmental organizations.
2. **Policy offices:** These offices primarily conduct research to provide policy guidance but do not generally run programs. However, Treasury’s Office of Financial Education, a policy office, ran two initiatives included in this study—the Community Financial Access Pilot and MyMoney.gov web-site.
3. **Direct service providers:** Most of the federal initiatives included in the study did not provide services directly to consumers. However, one exception is the Indian Health Service (IHS), which works directly in 180 hospitals and clinics throughout the country.
4. **Private initiatives:** We have included the following nongovernmental organizations and academic institutions involved in financial and/or health literacy education initiatives: AARP, Earned Assets Resource Network (EARN), the Health Education Council, Illinois State University (ISU) Extension, the National Council on Aging (NCOA), the National Endowment for Financial Education (NEFE), and Stanford’s Chronic Disease Self-Management Program. We also interviewed an official from the Financial Literacy Center, a collaboration among Dartmouth College, RAND, and the Wharton School.

## Initiative Goals

Thirty of the initiatives focused on financial literacy, 13 on health literacy, and nine on both (see Table 3 for the number of initiatives, by agency and focus). Overall, initiatives with a predominantly financial focus concentrated on teaching specific financial behaviors, increasing consumers’ financial independence, and helping them enter the financial mainstream. Financial education and literacy initiatives mostly aimed to enhance consumers’ financial knowledge, behaviors, and skills surrounding specific core competencies. Health literacy initiatives had broader goals of increasing awareness of health conditions and engagement in health behaviors, and rarely focused solely on health literacy skills.

**Table 3. Number of initiatives, by agency and focus**

Federal Agencies	Financial	Health	Both
Administration for Children and Families (ACF)	6	2	2
Agency for Healthcare Research and Quality (AHRQ) <sup>a</sup>	0	3	0
Administration on Aging (AoA)	5	0	1
Office of the Assistant Secretary for Planning and Evaluation (ASPE)	1	0	1
Office of the Assistant Secretary of Health (ASH)	0	1	0
Centers for Medicare & Medicaid Services (CMS)	0	0	2
Health Resources and Services Administration (HRSA)	0	1	0
Indian Health Service (IHS)	0	1	0
Department of Education (ED)	1	0	0
Department of the Treasury (Treasury)	3	0	0

Federal Agencies	Financial	Health	Both
Federal Deposit Insurance Corporation (FDIC)	1	0	0
Department of Agriculture (USDA)	1	0	0
Federal Reserve Board (Federal Reserve)	2	0	0
Private Organizations	Financial	Health	Both
AARP	2	2	1
Earned Assets Resource Network (EARN)	3	0	0
Financial Literacy Center	1	0	0
Health Education Council	0	1	0
Illinois State University (ISU) Extension	1	0	1
National Council on Aging (NCOA)	2	1	1
National Endowment for Financial Education (NEFE)	2	0	0
Stanford's Chronic Disease Self-Management Program	0	1	0
<b>Total</b>	<b>31</b>	<b>13</b>	<b>9</b>

<sup>a</sup> AHRQ has multiple activities related to health literacy. Due to the large number of relatively similar activities, we have grouped many of them.

### Target Audiences

This study design focused on initiatives that either exclusively targeted low-income audiences or that could indirectly benefit this group through services, information, or assistance. Twenty-seven initiatives included low-income individuals as part of their target populations. These 27 initiatives were designed for low-income individuals, for those with low to moderate income, or for individuals at risk of becoming low income. Initiatives also targeted other audiences, such as older adults, immigrants and refugees, and minorities.

Most financial literacy initiatives identified low-income or low- and moderate-income consumers as their primary target. These initiatives mostly comprised cash assistance programs, programs that utilized in-person or direct counseling or assistance, and certain benefits coordination programs. For example, three initiatives under ACF's Office of Refugee Resettlement (ORR) provided cash assistance and financial counseling to refugees.<sup>6,7</sup> The AoA's National Center for Benefits Outreach and Enrollment's (NCBOE's) Benefits Enrollment Centers were designed to provide benefits coordination assistance more broadly to consumers with limited means who were receiving public benefits, although not all benefits were restricted to low-income audiences. The National Council on Aging's (NCOA) Economic Security Initiative and Reverse Mortgage Counseling Services offered personalized counseling and assistance to low-income and middle-income older adults seeking help with benefits coordination or information about using their home as a source of financing. The National Endowment for Education (NEFE) partnered with Habitat for Humanity to develop the *Homeowners Handbook* specifically for Habitat for Humanity homeowners, who tend to be low-income individuals.

<sup>6</sup> ORR defines refugee as "any person who is outside any country of such person's nationality or, in the case of a person having no nationality, is outside any country in which such person last habitually resided, and who is unable or unwilling to return to, and is unable or unwilling to avail himself or herself of the protection of, that country because of persecution or a well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion" (HHS, ACF, ORR, 2008).

<sup>7</sup> In addition to refugees, ORR also serves asylees, Cuban/Haitian entrants, Amerasians, victims of human trafficking, unaccompanied alien children and survivors of torture. For further information, see <http://www.acf.hhs.gov/programs/orr/about/whoweserve.htm>.

Health literacy initiatives rarely identified low-income audiences as their foremost target group, most likely because the goal was to improve specific health knowledge, attitudes, and behaviors rather than improve general health literacy. These initiatives were more likely to target individuals with limited health literacy, vulnerable populations, or minority groups with poor health outcomes, or intermediaries, such as family members and caregivers, who assisted consumers with health-related decision making. However, the HealthFinder web-site did target low-income populations as a proxy for audiences with limited health literacy. In addition, AARP's campaigns to educate the elderly on appropriate use of prescription drugs targeted low-income consumers. The Health Education Council's tobacco cessation programs were also geared toward low-income adults, young adults, and individuals in correctional facilities.

Many initiatives (34) were designed to serve multiple underserved populations, including older adults, people with disabilities, immigrants, individuals with low English proficiency, women, minorities, and rural populations. Grantees' operations are often able to target the needs of the specific communities in which they are located. As a result, programs may vary broadly by state or by individual community, depending on the program's administration. For example, although the AoA's Pension Counseling and Information Program broadly serves financially disadvantaged individuals, one program grantee has a stronger focus on older women because of the growing proportion of this demographic in the grantee's community. Another program grantee chooses to target individuals with limited English proficiency because of the large number of immigrants and non-native English speakers in the grantee's geographic area. Each of the eight communities that participate in Treasury's Community Financial Access Pilot is able to determine a specific target group. The USDA's Financial Security program maintains an overarching goal of improving financial stability among consumers but allows each grantee to determine actual activities on the basis of the target community's needs.

Among the initiatives that serve underserved populations, the following programs targeted older adults: AoA's BenefitsCheckUp<sup>®</sup>, AoA's Part D Outreach, AOA's Women's Institute for a Secure Retirement (WISER) program, AoA's Eldercare Locator, and USDA's Financial Security Program, which initially targeted seniors but has now expanded to wider audiences. In addition, most AARP initiatives target older persons, including pre-retirees (50–64 years of age). Initiatives that target minorities include IHS's Education Program, AoA's WISER program, AHRQ's public service announcements, and radio station initiatives, and AARP's Financial Freedom Tour and multiple initiatives to promote safe and effective use of medications among seniors. Initiatives that target non-native English speakers include the AoA's WISER program and AHRQ's public service announcements initiative. All NCOA initiatives and most AARP initiatives targeted older adults.

The following initiatives had very broad target populations but acknowledged trying to identify particular subgroups within their audiences. Treasury's MyMoney.gov web-site targets all consumers but attempts to break down information by target group (e.g., youth, retirees, women, and military personnel). ASPE's Own Your Future long-term care campaign targets individuals between 40 and 70 years of age. Program staff for this initiative acknowledged the importance of using numerous outreach strategies to accommodate the significant diversity—for example, in income, education, and age—within this broad target population. Among the private organizations included in the study, Stanford's Chronic Disease Self-Management Program has a broad target population of individuals older than 40 years of age, but works extensively with low-income, African American, and Hispanic communities.

## Channels

Initiatives varied in their channels, or methods, for reaching consumers (see Table 4 for common dissemination methods). All the initiatives used one or more of the following approaches: web-sites, direct phone or in-person assistance, events, one-on-one and group trainings, paper-based materials, and media campaigns.

**Table 4. Modes of dissemination of initiatives (initiatives may fall under one or more categories)**

Mode of Dissemination	Financial	Health	Both
Web-sites, web-based tools and materials	15	6	4
Direct assistance (phone/ in person)	19	5	4
Print-based information	7	8	2
Other (DVD, fotonovela, television, or a variety, depending on grantee)	2	2	1

### *Web-Sites and Web-Based Tools*

Web-sites provide consumers with access to information to help them make financial and health decisions or learn what resources and tools are available to assist in decision making. Initiatives that use web-sites generally act as portals to complex or large quantities of information, and disseminate information, link consumers to community resources and service providers, provide access to web-based tools, coordinate information on different but related public assistance programs, and provide information to intermediaries and health providers. Overall, more web-sites associated with financial initiatives are interactive than are those associated with health education, although there certainly are important exceptions. Appendix E lists the addresses of those initiatives with web-sites.

AHRQ’s Consumers and Patients web page contains numerous plain language brochures, booklets, checklists, audiovisual materials, and podcasts aimed at raising consumer awareness of health issues and engaging consumers in preventive practices and value-based decision making. AHRQ’s Chartered Value Exchanges comprised of community-based collaboratives, which in turn include health care providers, employers and other health plan purchasers, health plans, and consumer advocacy organizations that provide consumers with information about the quality and value of providers at the local level. According to an AHRQ interview participant, most collaboratives have web-sites providing consumers with this information.

The Federal Reserve System’s consumer education web-site and Treasury’s MyMoney.gov consolidate information from multiple federal agencies and provide interactive tools to assist consumers in financial decision making. ASH’s HealthFinder.gov, a portal to a vast amount of health information and huge number of health tools, allows users to search for specific health resources or providers and materials on health literacy. CMS’s Nursing Home Compare and Hospital Compare sites allow consumers to access information on the service quality of health care providers, with the goal of enhancing consumer or caregiver health-related decision making and engaging providers to care about service quality. CMS’s Prescription Drug Plan Finder provides information on costs and medication choices for drug plans, in order to assist Medicare beneficiaries or their intermediaries in choosing a drug plan. AoA’s Eldercare Locator allows seniors and caregivers to locate information such as fact sheets and brochures, and to connect with state or local organizations that can assist them in accessing services (e.g., transportation or housing assistance).



Most private organizations use web-sites and web-based tools for their initiatives. Most AARP initiatives use the web extensively—through webinars, interactive web-based tools, articles and publications, and social media—as part of their tactical approach to reaching consumers. ISU Extension’s Small Steps to Health and Wealth consists of a four-week interactive online course in which consumers learn about and identify ways to achieve health and financial goals. NEFE’s collaborations with Habitat for Humanity yielded the Recipes for Financial Fitness web-site. The web-site contains tutorials, checklists, and interactive tools to help Habitat for Humanity homeowners navigate the responsibilities of homeownership. NCOA’s My Medicare Matters initiative was initially a community based education and outreach campaign across 27 states to offer face-to-face counseling to seniors on Medicare Part D. Since Medicare Part D implementation, the initiative has become primarily web-based and offers information for both, Medicare beneficiaries and counselors.

### *Direct Assistance—Phone-Based and In-Person*

Financial and health literacy initiatives use a range of approaches to assist consumers, including individualized assistance (in-person and telephone) and trainings (one-on-one and group). Approximately half (15) of the financial and health literacy initiatives use direct consumer interaction to provide information and assistance, training, and counseling.

In federal health literacy initiatives, direct assistance most often means answering consumer questions regarding benefits and eligibility for public assistance programs. For example, AoA’s ten Benefits Enrollment Centers use varying approaches—including in-person and phone-based assistance—to help seniors and people with disabilities identify public benefits programs and enroll in them. Through AoA’s initiative on Part D Outreach, states use one-on-one counseling to enroll and educate Medicare beneficiaries.

Apart from these two initiatives, few other federal health initiatives referenced direct person-to-person interaction. In one instance, health literacy initiatives were one component of a larger wellness program. ACF’s Street Outreach Program embeds health promotion in a larger home-based training as part of a sexual abuse prevention program for youth. Overall, it appears that the health literacy initiatives that use direct interaction do so through one-time or as-needed interactions to communicate a prevention message or provide benefits-related assistance and advice to consumers.

Financial initiatives are more likely than health initiatives to incorporate multiple trainings or ongoing counseling for consumers. Each of the eight pilot programs funded through Treasury’s Community Financial Access Pilot contains a financial education component as part of the overall goal “to increase access to financial services and financial education for low- and moderate-income people” (Treasury interview participant). Five initiatives represented in the interviews (Microenterprise Development Program, Refugee Agricultural Partnership Program, Refugee IDA, Cash and Counseling, and Assets for Independence) contain a financial assistance component in conjunction with in-person guidance on proper utilization of funds and achievement of financial goals. Although cash assistance programs are most likely to contain a direct training or counseling component, some financial initiatives provide only financial education to consumers. For example, certain grantees of AoA’s WISER initiative deliver consumer education workshops on retirement planning.

Most of the private organizations that we interviewed were involved in initiatives to directly reach out to and engage consumers. AARP’s multiple education campaigns make use of in-state



events, seminars, or tele-town halls, to educate consumers about programs and interactive web-based tools. ISU Extension's Sharpen Your Financial Coaching Skills trains intermediaries, such as community-based professionals or volunteers who work with low-income families, to provide coaching and education to families experiencing financial difficulties. Through a six-week community-based participative workshop, Stanford's Chronic Disease Self-Management Program reaches individuals in a variety of settings, such as senior centers, churches, and hospitals. EARN's IDA and Savings Account for Education (SAFE) matched savings programs, and a financial coaching program for alumni of its IDA program requires participants to attend one-time in-person workshops or ongoing counseling and coaching, depending on the specific initiative. Multiple NCOA initiatives, which were created in partnership with other organizations, involve direct assistance. Their reverse mortgage counseling initiative, the Reverse Mortgage Counseling Services network, offers telephone and face-to-face counseling to seniors who may be considering a reverse mortgage. As part of an Economic Security Initiative, NCOA established pilot centers where low-income seniors could receive in-person assistance with obtaining and managing federal and state benefits. NCOA's My Medicare Matters campaign uses trained counselors to educate and counsel beneficiaries about Medicare Part D prescription drug plans. The Pack Your Bags campaign, established through a partnership between NCOA and CVS, allows seniors to receive an in-person consultation with a pharmacist in order to address medication-related questions and issues.

### **Outreach and Education**

Our inclusion criteria emphasized initiatives that engaged consumers to improve their financial or health literacy. This led us to exclude initiatives solely aimed at raising *awareness* of a particular issue (e.g., diabetes) or broad-based programs (e.g., Medicaid). Because media campaigns are more often used to raise awareness than to engage consumers, the initiatives we reviewed were not likely to include these modes of outreach and message delivery. However, there were three exceptions, described below.

First, through the *Medicare & You* handbook, CMS aims to educate consumers about Medicare benefits; preventive services, such as flu shots and the Welcome to Medicare physical exam; and health plan choices to assist beneficiaries in decision making about Medicare coverage options. CMS disseminates hard copies of the handbook to all Medicare beneficiaries, and electronic copies are publicly available, as well. Second, AHRQ's Office of Communications and Knowledge Transfer uses public media campaigns, including print and audiovisual and radio public service announcements, to encourage consumers to engage with providers, ask for information about care and treatment, and seek health information. Third, ASPE's Own Your Future campaign enables individual states to implement campaigns to raise awareness among Medicare beneficiaries and prospective beneficiaries of ways to plan for long-term care costs that are not covered by Medicare. All participating states distribute direct mailings to residents between the ages of 45 and 70, and hold press conferences to launch the campaign. However, additional activities vary by state and can include media campaigns using television and radio public service announcements, internet advertising, newspaper articles, partnerships with large employers within the state, and resources for consumers on a state government web-site.

Some initiatives use media campaigns as a part of their initiative. AoA's Part D Outreach enrollment initiative, Aging and Disability Resource Center, and Benefits Enrollment Centers require grantees to conduct outreach campaigns about the assistance available through the programs. For example, through AoA's Part D Outreach, states receive funding to conduct

outreach and enrollment activities. They, in turn, may use a variety of strategies, such as media campaigns and mailings to encourage Medicare beneficiaries to use their services. Examples of outreach efforts include but are not limited to public service announcements, enrollment events, and health fairs.

Of the private organizations included in this study, AARP discussed its comprehensive media campaigns to raise public awareness of its activities. AARP's programs for Medicare beneficiaries, baby boomer women, pre-retirees, and unbanked individuals incorporate community-based seminars, tele-town halls, advertisements, public service announcements, and in-state events held with state AARP offices.

## Content

Financial initiatives are generally similar to one another with respect to the skill sets they want to build in consumers. When asked to describe their initiatives, some interview participants involved with financial literacy initiatives spontaneously listed numerous specific core competencies (see Table 5). Overall, financial initiatives appear to have in common the multiple behaviors or skills that they aim to develop in consumers.

Specifically, initiatives aim to improve consumers' knowledge about the financial marketplace, help individuals enter the financial mainstream, reinforce consumer confidence when dealing with financial products, and encourage consumers to work toward achieving a financial goal. Initiatives focus on specific behavioral skills, such as budgeting, monitoring cash flow, saving, reducing debt, planning for long-term care, banking, and improving credit. Specific credit-related behaviors include increasing credit scores, understanding the connection between credit history and credit scores, managing credit, making more than the minimum payment on a credit card, staying within a credit limit, accessing a credit report, and avoiding credit scams. The initiatives also cover topics relating to cash flow; these include managing a checking account, building savings, reducing debt, and spending less than total earnings. Most programs targeted consumers' personal spending habits; however, ACF's Microenterprise Development Program trains refugees to start and manage small businesses.

All initiatives within ACF's Office of Refugee Resettlement (ORR) use direct education and counseling to build financial knowledge among refugees. The Microenterprise Development Program provides financial assistance and counseling to help refugees start small businesses, get work experience, improve credit rating, and graduate to the financial mainstream. The ORR IDA program encourages refugees to build savings, and includes basic and advanced financial literacy trainings that assist refugees in working toward one of the following goals: home purchase, capitalization of a business, education, or vehicle purchase. The main goal of the FDIC's Money Smart program is to improve consumer financial knowledge by teaching the basics of personal finance to under-banked and unbanked populations.

Health literacy initiatives tend to have a broader focus than financial literacy initiatives. In general, initiatives that focus on improving health literacy target health behaviors that are applicable to a general audience, and do not focus on particular diseases. Instead, they promote decision making about prevention, disease management, health care providers, and public benefits. Programs that do address specific health concerns focus on disease prevention and health promotion. For example, a participant from ASH's HealthFinder.gov initiative stated that encouraging consumers to engage in preventive behaviors was a key program goal. Table 6

contains a list of common core competencies cited by participants involved with health literacy initiatives.

**Table 5. Examples of commonly cited core competencies of financial literacy initiatives for low-income audiences**

Preventive Measures	<ul style="list-style-type: none"> <li>• Creating a budget and savings plan</li> <li>• Tracking income and expenditures</li> <li>• Creating and using a checking account</li> </ul>
Managing Credit	<ul style="list-style-type: none"> <li>• Understanding credit and borrowing</li> <li>• Distinguishing credit history and credit score</li> <li>• Avoiding scams</li> </ul>
Planning for Future Expenses	<ul style="list-style-type: none"> <li>• Creating and using a savings account</li> <li>• Using mainstream financial products (e.g., matched savings accounts)</li> <li>• Reducing debt</li> <li>• Understanding and building retirement savings</li> <li>• Planning for long-term care and end-of-life care</li> </ul>

**Table 6. Examples of commonly cited core competencies of health literacy initiatives for low-income audiences**

Preventive Health care	<ul style="list-style-type: none"> <li>• Understanding prevention benefits and practices (e.g., “Welcome to Medicare” physical)</li> <li>• Understanding disease- or condition-specific preventive practices</li> </ul>
Managing Treatment and Conditions	<ul style="list-style-type: none"> <li>• Obtaining information on a specific health condition</li> <li>• Developing a treatment plan specific to an individual’s disease or condition</li> </ul>
Planning for Future Health Care Needs	<ul style="list-style-type: none"> <li>• Understanding Medicare plan options and choosing among services</li> </ul>

While few federal initiatives address both health literacy and financial literacy, none focus on educating consumers specifically about the relationship between health and financial security. Two private initiatives deal with this topic. AARP’s Decide. Create. Share. program encourages baby boomer women to make better decisions about long-term-care insurance, and educates them about preventive practices, health risks, and the relationship between health and long-term care expenses. ISU Extension’s Small Steps to Health and Wealth educates individuals on ways to attain their health and financial goals, while informing consumers of ways that health and financial well-being influence each other.

**Collaboration**

Federal participants reported collaborating with other federal agencies, departments, and nonfederal organizations for a variety of reasons, including program conception and funding, implementation, policy creation, and ongoing direction. Interview participants from 15 initiatives reported some type of coordination with other federal agencies, although they did not always specify the exact nature of the partnership. We did not document any instances in which participants from a health literacy initiative partnered with a financial literacy initiative, or vice versa. Participants from financial literacy initiatives often referred to collaboration with other members of the Financial Literacy and Education Commission (FLEC). Interview participants frequently cited collaboration around program creation and implementation. Participants from health literacy initiatives reported coordinating with other agencies to develop consumer tools and materials and receive guidance through advisory groups.

AoA's NCBOE formed an advisory committee composed of federal agencies with public benefits programs. This group provides guidance to the center's initiatives, such as the Benefits Enrollment Centers pilot, and identifies opportunities for greater collaboration in benefits coordination and outreach. The steering committee for ODPHP's HealthFinder.gov web-site includes HHS agencies, such as HRSA, CDC, USDA, the Office of Minority Health (OMH), NIH, and AHRQ, as well as the Department of Veterans Affairs (VA) and ED. The steering committee assists in ensuring that information presented on the web-site is accurate and up to date. A participant from AoA's Part D Outreach initiative stated that she communicated intensively with CMS and HRSA during the program's initial stages.

Private organizations commonly reported collaboration. Participants described partnerships with other private organizations, nonprofit groups (to increase outreach), academic institutions (for materials development), and government agencies (for funding).

- AARP partners with multiple private financial organizations for its Financial Freedom Tour, with Walgreens initiatives to promote appropriate use of medications among seniors, and with multiple other nonprofit organizations and foundations for the Bank on Cities campaign.
- EARN receives federal and non-federal funding for its IDA program and partners with local nonprofit organizations that serve specific target populations, such as African Americans, Latinos, and refugees. Since many EARN clients learn about the organization's services by word-of-mouth from other clients, such partnerships help the group increase the reach of their services.
- The curriculum for ISU Extension's Small Steps to Health and Wealth was developed by faculty at Rutgers University, and extension programs across other universities share resources.
- NEFE partners with other nonprofit organizations such as Habitat for Humanity and the Welfare to Work Partnership as well as Citigroup, a financial services company.
- The Health Education Council receives federal and non-federal funding for its tobacco cessation work and has partnerships with national and community-based organizations.
- NCOA works with multiple partners in operational and advisory capacities, including but not limited to other nonprofit organizations such as Catholic Charities and the Access to Benefits Coalition, and private organizations such as CVS (a chain of pharmacies) and AstraZeneca (pharmaceutical).

## Evaluation

In general, initiatives relied on ongoing monitoring to report on project activities. Monitoring included obtaining information from grantees on program activities and recipients or collecting web metrics. Monitoring also included process measures, such as tracking distribution of print materials, number of people enrolled, and number of trainings held, or checking accounts opened. Participants from multiple federal programs (seven) reported funding external resource centers that provided technical assistance and training to their grantees. Resource center activities included developing program and outreach materials, such as toolkits, checklists, and evaluation plans; providing technical assistance; compiling best practices and lessons learned

from grantees; and conducting program evaluations. In some instances, it was mandated at a program's creation that an external agency conduct an evaluation of the program.

### *Evaluation of Effectiveness*

Overall, participants seemed unsure about concrete measures of program success. Few federal interview participants (five) reported overall evaluations of the effectiveness of their initiatives or initiatives to document program outcomes. However, some participants mentioned that grantees had to describe processes for evaluation when applying for funding. Participants cited evaluations, such as nationwide research reports and case studies of multiple grantees. FDIC (2007) conducted a longitudinal evaluation of the Money Smart curriculum and found that program participants were more likely to open deposit accounts, save money in a mainstream deposit product, use and adhere to a budget, and have increased confidence regarding financing.

The John C. Chaffee Foster Care Independence Program funded a multisite evaluation of grantees. One resulting evaluation report focused on a specific grantee's life skills program and comprised lessons learned, as well as a study of the program's approach, service implementation, populations served, barriers to implementation, and impact on youth. The evaluation examined the effects of the program on helping youth achieve better social and economic outcomes such as higher employment rates and reduced numbers of nonmarital pregnancies and births. The evaluation failed to document a significant positive or negative impact of the program on outcomes associated with a successful transition to adulthood, such as employment, earnings, educational attainment, or homelessness (Courtney et al., 2008).

ASPE's Cash and Counseling program gave rise to numerous research publications, including overall program evaluations, evaluations of specific grantee approaches and experiences, and discussions of consumer experiences. An evaluation report published in 2007 examined the program's effects on consumers and caregivers, discussed implementation issues, and described the program's effect on Medicaid and Medicare costs and services. The report compared findings for a treatment group (enrolled with the program) with a control group and stated that the treatment group was more likely to be satisfied with the care received and with their life in general (Brown et al., 2007).

ACF's Assets for Independence (AFI) initiative funded an impact report that estimated the effects of IDAs on AFI participants' ability to build assets, such as home ownership, capitalization of businesses, and attainment of higher education, as well as the program's impact on participants' net worth, employment status, and income. The report estimated that, after three years, participation in the program had a significant effect on increasing the rate of homeownership, business ownership, and pursuit of postsecondary education among participants. The report did not find a significant effect on net worth or income, and estimated a slight increase in likelihood of employment, although this was not significant (Mills, Lam, DeMarco, Rodger, & Kaul, 2008).

In 2006, ACF's ORR IDA program funded an evaluation to examine the characteristics of program participants, community impact of the program, and participant outcomes, such as home ownership, business ownership, vehicle purchase, and education attainment. The evaluation found that, over a five year period, 81 percent of program participants attained their IDA goal of purchasing a major asset and approximately five percent left the program without obtaining their goal. Approximately half the participants used their IDA funds to purchase a vehicle, which was the most commonly acquired asset. Approximately ten percent of participants each purchased a

home or computer, six percent pursued postsecondary education, four percent used the IDA funds to start a small business, one percent carried out home renovations, and less than one percent sought job training or technical education (Hein, 2006).

Some of the private initiatives that we included have engaged in ongoing activities to measure their effectiveness and success.

- AARP's Financial Freedom Tour and initiatives to improve medications use among seniors employ qualitative surveys to track consumers' knowledge and satisfaction with the information provided through the program and consumers' propensity to act on the basis of the information.
- The Bank on Cities campaigns (e.g., Bank on San Francisco), for which AARP partners with other organizations, measure the number of new bank accounts that low-income individuals open, as one determinant of the program's success.
- A participant from the Financial Literacy Center noted that all the Center's work was evaluated. An evaluation of a retirement planning aid for low-income workers and women found that participation in supplementary retirement accounts more than doubled after implementation of the intervention (Lusardi, Keller, & Keller, 2008). An evaluation of videos to promote retirement savings among this target population described a reduction in anxiety about future retirement needs, improvement in knowledge and awareness of future financial needs, and an increase in saving behavior (Lusardi, Keller, & Keller, 2009).
- As part of their My Medicare Matters campaign, NCOA and its partners utilized numerous performance measures, including the number of Medicare beneficiaries who received education and personalized counseling regarding their Medicare prescription drug options, community events held, and community based organizations recruited. The campaign also used in-person and web-based customer satisfaction surveys to collect information on beneficiaries' satisfaction with the education they received and their ability to make an informed decision about their Medicare prescription drug coverage. The surveys indicated that 90 percent or greater of recipients were satisfied with the education they received and felt they made an informed decision regarding their coverage (NCOA, 2007).
- Although Stanford does not centrally administer the Chronic Disease Self-Management Program, it has been extensively evaluated since its inception. The program has been found to be effective in managing progressive, debilitating illnesses, resulting in fewer hospitalizations compared with the number of hospitalization of people who have not participated in the program. The findings also appear to endure over time; for example, initial improvements in exercise and social limitations are maintained over a two-year period. In addition, the program has been found to be effective across a diverse set of diseases, and across socioeconomic and educational levels. Results of all studies indicate that the chronic disease self-management program also led to reductions in health care expenditures—to decreases in emergency room visits, fewer hospitalizations, and fewer days in the hospital (Lorig et al., 1999; Lorig et al., 2001; Lorig, Sobel, Ritter, Laurent, & Hobbs, 2001)



Some initiatives from private organizations were commenced recently, and therefore comprehensive evaluations were not possible.

- AARP began its initiatives to educate consumers about the recent health care reform and to educate using the “Decide. Create. Share.” campaign over the past year. However, to evaluate the effectiveness of the initiative, the organization plans to measure changes in baby-boomer women’s knowledge about long-term care by administering national surveys at five-year intervals.
- EARN’s IDA program recently implemented a comprehensive quantitative and qualitative study to learn about program participants’ knowledge, attitudes, and savings behaviors. The survey is administered upon a participant’s initiation into the program (baseline) and at each successive year of participation. However, as data collection began in 2008, the tool has not yielded sufficient data for meaningful analysis.
- ISU Extension’s Sharpen Your Financial Coaching Skills train-the-trainer program only recently completed pilot testing and implementation.
- NCOA launched its demonstration program consisting of eight community-based Economic Security Service Centers in 2010.

Participants noted that formal evaluations are not often feasible due to resource constraints. A participant from the Health Education Council stated the organization had limited capabilities to carry out evaluations and could benefit from collaboration with a research partner who could focus on documenting outcome measures and tracking program success. In addition, assessing the effectiveness of an initiative may be considered secondary to the organization’s primary focus on implementation and service delivery.

We would love to [do research projects] but [we] do not have the resources to research. When [we] seek funding, [we] are looking to provide services on the ground and it’s a secondary interest to [conduct] research to know it’s effective. [It] would be great to get research dollars but they’re hard to find. —NCOA interview participant

### *Evaluation of Program Approach and Structure*

Four federal participants reported that there had been some type of process evaluation. This included comprehensive evaluations, as well as guidance documents to assist future grantees in designing and implementing similar programs. ACF’s AFI program funded a process evaluation that comprised case studies of 14 grantees and examined the design, implementation, and running of the initiatives (DeMarco, Mills, & Ciurea, 2008). The report contains challenges the grantees faced and identifies promising practices and lessons learned. One of the many research publications resulting from ASPE’s Cash and Counseling program includes a case study of 12 state grantees’ experiences with planning, developing, and implementing the initiative. The report describes challenges the grantees faced, the ways in which they addressed these challenges, and lessons learned in program planning, design, and implementation (O’Keeffe, 2009). AoA’s Pension Counseling and Information program funded a feasibility study in 2000 that examined the possibility of expanding the initiative to a permanent, nationwide program (Westat, 2000). Although the report focused on ways to finance an expanded program, it also examined grantee approaches and compiled recommendations and a framework for expansion. The resource center serving ACF’s ORR program is responsible for numerous resources, such as training materials, management guidance, and evaluation tools. One publication relevant to



ORR's Microenterprise Development Program included a guidebook of lessons learned from the Microenterprise Development Program initiatives with program planning, outreach, administration, and management (Dobson, Black, & Hein, n.d.). The resource center also manages a blog that contains consumer experiences and other anecdotal evidence of success.

NCOA and AstraZeneca assessed the My Medicare Matters campaign in 2007. A resulting report examined lessons learned from program implementation, including the creation of collaborations and partnerships that were crucial to the campaign. The report outlined numerous attributes that contributed to the campaign's success, including shared goals among program partners, clear delineation of roles and responsibilities, detailed implementation and management plans, recruitment and engagement of community based partners, and use of quantitative and qualitative data to measure performance (NCOA, 2007).

### *Evaluation of Web-Sites and Print Materials*

Federal interview participants used various methods to gather consumer feedback on web- and print-based information, including cognitive testing during formative research and usability testing. CMS officials described the way in which the *Medicare & You* handbook undergoes annual testing with beneficiaries and consumers. AoA surveys assessed the experiences of consumers and Area Agencies on Aging (AAA) directors who used the Eldercare Locator web-site (Customer Care Measurement & Consulting, 2006). The initiative also included consumer usability testing of the Eldercare Locator web-site (HHS, AoA, 2009). A participant from AHRQ noted that all agency products underwent consumer testing during the formative stage but that the effectiveness of the materials was not commonly evaluated following their release:

The agency does testing and evaluation of all their [consumer] products. They perform usability as well as cognitive testing... The agency does a lot of focus group testing to determine the best language to use. We ask people their opinions on everything, from the color to the illustrations. However, they have not done many full scale evaluations of their products... They are working on some comparative effectiveness evaluations with the emergence of new funding. –AHRQ interview participant

Web-based initiatives, such as HealthFinder.gov and MyMoney.gov, retained metrics including the number of new and repeat visits to a site, and tracked how often people downloaded materials in order to identify products that were popular with consumers. A participant working with ASH's HealthFinder.gov web-site described the challenge of measuring effectiveness of the site on an ongoing basis and the initiative to collect consumer feedback:

Effectiveness is always a challenge. We try to build into our studies [assessments] to measure self-efficacy, comprehension, [and] spot checks. We have feedback mechanism surveys and feedback points on the web-site. –ASH interview participant

Among the private initiatives we examined, a participant from AARP noted that activities to determine and evaluate the organization's web-based efforts were consistent across most initiatives. Evaluation activities included monitoring the number of people attending in-state events, community events, webinars, and tele-town halls; using web metrics to track the use of online tools and literature; and conducting focus groups with consumers for materials development and testing. Monitoring of web metrics and media coverage was also used to assess NCOA's My Medicare Matters web-site, along with web-based customer satisfaction surveys to understand whether consumers found the information helpful in making a decision about their Medicare prescription drug coverage. A participant from NEFE stated that the

organization tracked the number of materials distributed for print materials, such as the Habitat for Humanity's *Homeowners Manual*; however, the organization had not published evaluation research. The Health Education Council conducted pilot testing during the development of a tobacco cessation curriculum targeted at correctional facilities. The organization also collected information on the number of program materials distributed and the number of individuals trained to administer the curriculum. Although the organization utilized instruments to collect metrics on changes in knowledge and attitudes resulting from the curriculum, a participant from the organization noted it was challenging to obtain such information consistently from the many institutions that implement the curriculum.

### **Future Evaluation Resources**

Participants also cited future plans to collect data and conduct research and evaluations for their initiatives, notably for newer initiatives that had not existed long enough to conduct a thorough evaluation or collect outcomes data.

- A participant with the John C. Chaffee Foster Care Independence Program noted the pending launch of a National Youth in Transition database, which collects case-level information on youth and young adults in foster care. The participant stated that such information would allow a stronger quantitative approach to program evaluation and effectiveness.
- A participant with the Part D Outreach initiative stated that the program would compile a nationwide program report. However, she was not sure whether this report would be publicly available.
- An AoA participant stated that the program would conduct a process evaluation of the Eldercare Locator in late 2010.
- AoA's pilot of the Benefits Enrollment Centers ended in July 2010, and a process evaluation is planned.
- Treasury's Community Financial Access Pilot will also develop a report based on lessons learned; the report will contain anecdotal descriptions of successes, failures, barriers, and recommendations for future implementation.
- A participant working with Head Start Innovation and Improvement grantees stated that each grantee is responsible for conducting evaluations, which will occur in 2011.

### **Lessons Learned From the Interviews**

In this section, we describe the lessons learned from the interviews to inform future financial and health literacy initiatives for greater effectiveness.

#### **Promising Elements from Financial Literacy Initiatives Applicable to Health Literacy**

**Ongoing assistance, counseling, and coaching can be crucial in helping consumers attain long-term goals.** The importance of in-person assistance, counseling, and training was a common thread among many (12 federal, 7 private) of the financial literacy initiatives included in this study. Although expensive, this form of communication can be beneficial when consumers must decipher complex information—for example, regarding intricate public benefits programs, such as Medicaid, or confusing financial products, such as reverse

mortgages—as part of their decision making. Such in-person communication can also be valuable with specific groups, for example, low-literacy audiences and older adults, who may have trouble accessing written and web-based information products. Although some health initiatives, such as AoA’s Part D Outreach initiative, did incorporate phone-based and in-person assistance, financial programs were far more likely to provide comprehensive ongoing counseling to their recipients than were health programs. Interview participants associated with these financial literacy initiatives felt strongly about the role of intensive counseling in ensuring their programs’ success. Participants from ACF’s ORR noted that their program outcomes, such as lower default rates, were superior to those of mainstream IDA and microenterprise development programs. The ORR interview participants were asked what they perceived as having contributed to these positive results, on the basis of the anecdotal information they received from their program participants. They attributed these successes in part to the strong financial training component that program recipients must undergo prior to making financial decisions with long-term implications, such as buying a home or starting a small business.

I think one major reason we have such a low default rate as part of the IDA program is due to the extent of financial literacy training people get before they enter into these large commitments.  
–ACF interview participant

In-person interaction did not necessarily stop with education on specific financial behaviors. Initiatives also comprised recurring coaching in order to mitigate ongoing financial risks and achieve financial goals.

A good portion of what we’re talking about in financial education and coaching is ... decision making, and that’s transferrable ... particularly this concept of coaching. It’s not just coming to a class on Tuesday nights and being there for an hour. It’s that plus having someone available to help you stay on track with your savings and give advice about events that come along that might impact your ability to save and reach your goal. [Individuals participating in the initiative] do have financial education classes but [they] also have helpers and supports. I consider those other supports to be providing financial education. Maybe [it] isn’t training on how to open a bank account, but more on how to stay on track with [a] plan to save money. –ACF interview participant

Five federal health literacy initiatives included in-person interaction with consumers. Such interaction could be important for health initiatives that aim to engage consumers in attaining challenging long-term health goals, such as altering dietary behaviors, achieving and maintaining weight loss, and exercising regularly. Like financial goals, these health issues require an individual to evaluate their well-being or health on an ongoing basis over a long period of time. With respect to financial well-being, lack of planning for the future can result in poor outcomes, such as insufficient retirement funds, poor credit, and loss of housing. Similarly, obesity is an outcome that can result from action or inaction throughout an individual’s life. Losing or maintaining a healthy weight requires long-term self-management that may be assisted by ongoing coaching for at-risk individuals. Lack of management of one’s weight or obesity has been associated with increased risk for heart disease, high blood pressure, type 2 diabetes, arthritis-related disability, and some cancers (HHS, CDC, 2009b).

EARN’s Alumni program provides yearlong coaching to individuals who have successfully reached their savings goal through their IDA program. Since the alumni already have the knowledge and skills that enable them to build savings, the program provides targeted

coaching to allow alumni to achieve additional goals, such as repaying debts or building an emergency fund. The program focuses on empowering individuals to achieve behavior change and helping them identify and address threats to their long-term financial security.

**The specific approach to teaching and training is as crucial as the content in determining program success.** Financial literacy initiatives placed a relatively strong emphasis on understanding the most effective way to teach particular behaviors to consumers. This observation arose less frequently among the health literacy initiatives, possibly because, of the health initiatives included in this study, most did not provide the level of intense counseling that was present in the financial initiatives. However, the observation may be relevant to health programs for understanding how to connect with a particular audience.

Two participants involved in separate financial literacy initiatives stated that their initiatives addressed the way in which they presented information to a target audience, reinforced the audience's knowledge, and measured its grasp of the material, rather than focusing only on curriculum development. Both participants thought that numerous publicly available consumer tools and financial educational resources—such as the Money Smart curriculum—already existed, and both advocated for a greater focus on identifying the most effective ways to convey this information to a target audience (both small scale and widespread) to enable the audience to master its financial goals. ED's Adult Numeracy Instruction project uses an evidence-based approach to identify techniques to improve the quality of math instruction. Although the initiative does not directly target financial decision makers, it indirectly affects consumers by attempting to understand how individuals learn numeracy in a way that is relevant to their everyday lives. A participant from AoA's WISER initiative noted the importance of presenting information in a manner that was understandable to many audiences:

Information cannot be complicated. [It] has to be at an 8th- or 9th-grade level. It's how it's presented, as opposed to what's presented. –AoA interview participant

### **Promising Elements from Health Literacy Initiatives Applicable to Financial Literacy**

**Consumer education should start at a young age and receive reinforcement throughout adulthood.** Early and ongoing education can build and strengthen knowledge, attitudes, and beliefs of young people as they progress to adulthood and engage in health and financial decision making. Although this study did not address efforts directed at youth, multiple interview participants conducting financial initiatives stressed the importance of providing formal financial education within schools, with the aim of preventing long-term problems such as debt, poor credit, and fraud. Financial education should still be situation-dependent and targeted. At a young age, the simple foundations of finances should be taught (e.g., adding, subtracting). In high-school and/or college, financial education related to credit cards, credit, and debt should be taught, as it is more relevant to consumers in that age group. While none of the interview participants brought this up specifically, using a theoretical framework to develop educational information or interventions could be of value as well. For example, using the Stages of Change Theory it may be beneficial to begin discussing savings and retirement with teenagers and young adults even though this subpopulation may not be considering long term savings or retirement (i.e., precontemplation). However, it may help to move this population from precontemplation to contemplating savings and retirement. The USDA's Financial Security Plan expanded its initial focus on older adults, to include all age groups once it recognized that adulthood may be "too late" to achieve optimal financial-planning outcomes. A participant affiliated with this initiative stated that early financial education is a necessity:

[It is necessary] to start as young as possible...the earlier you instill habits of financial responsibility, the better you can build it. –USDA interview participant

Interview participants from ACF's ORR also noted the importance of introducing financial education in schools. A participant from Treasury's MyMoney.gov reiterated that healthy financial behaviors, like healthy eating habits, should be emphasized early in an individual's life.

**Many audiences, including low- and moderate-income groups, could benefit from financial education initiatives.** Most financial education initiatives (14 federal, 6 private) included in this study targeted primarily low-income consumers, whereas health education initiatives had a broader reach and encompassed either individuals at risk for a health condition or specific groups, such as ethnic minorities, women, and rural populations. Many interview participants stated that there were mandates or regulatory reasons for such broad populations although some participants recognized the need for customizing information to specific populations. Certain health efforts—such as CMS's Hospital and Nursing Home Compare Web sites and ASH's HealthFinder.gov—aimed to provide information to far larger audiences, including informational intermediaries (e.g., family members, discharge planners, nurses, and social workers). In a similar manner, the Federal Reserve's consumer education Web site targeted all consumers. Although these are Web-based initiatives and are therefore able to reach a wider audience with relative ease, multiple interview participants perceived a benefit in expanding financial education efforts beyond low-income audiences. As we discussed earlier, participants pointed out the need for formal school-based financial education targeting all young people. One participant also stated a universal need for greater financial awareness:

Financial education is really needed across the board. It's not just low-income families that need this. Other families and other people, even those who have money, are not necessarily good managers. People who are higher income, lower income, or just getting out of college—all those people need to know how to make decisions. –ACF interview participant

The participant referred to the current financial and housing crisis by describing how uninformed decisions about mortgages made by individuals of all income levels were able to adversely affect the entire population. Financial education and assistance efforts can expand beyond their focus on low-income groups and recognize that poor financial decisions can originate from and affect a variety of audiences.

**There is a demand for increased training and endorsement of standards for financial educators.** Among providers of health care and health information, there exist numerous widely recognized degrees and certifications that attest to an individual's capability to serve as a trustworthy source of information. The Bureau of Labor Statistics cites an advanced degree in health education and Certified Health Education Specialist certification as examples of such designations (U.S. Department of Labor [DOL], Bureau of Labor Statistics, 2010). Advanced degrees such as an R.N., N.P., and M.D. are also generally considered by the public to represent standardized and skilled levels of health and medical training. Although similar advanced financial degrees exist—such as Certified Public Accountant (CPA) and Certified Financial Accountant (CFA)—these speak to an individual's ability to provide financial services and advice. Not all financial educators have these degrees, and individuals with these degrees are not necessarily perceived as financial educators by themselves or others. Low-income populations do not generally interact with these financial professionals. We did not learn about widely

recognized degrees or certifications to demonstrate the ability to provide financial education. One interview participant described this challenge:

It's important to know that it takes skill to provide effective financial education and [the] coaching aspect is an important component. It takes training to create effective coaches and effective educators... There are some certifications for financial educators, but there's not one that is easily recognized as the certification. –ACF interview participant

An interview participant associated with ED's Adult Numeracy Instruction project expanded on the importance of appropriate training for educators. Although the initiative does not directly address financial education, it aims to provide teachers with evidence-based training necessary to ensure proper math instruction, which may include helping students develop numeracy skills. The participant described the program's focus on the way in which teachers introduce a particular topic to students, reinforce understanding of the topic, ensure independent or supported practice, promote transfer of knowledge to different situations, and reeducate when necessary. The participant went on to note that, in the absence of effective educators, good education resources will have limited effectiveness.

**Approaches to addressing specific health behaviors can also tackle particular high-risk financial behaviors.** Consumer behaviors surrounding certain risky financial- and health-related behaviors may share similar characteristics and underlying causes. These may include negative behaviors influenced by an individual's emotional or psychological state or proclivity for destructive actions. Health initiatives generally promote prevention and encourage healthy decision making by attempting to make consumers aware of the adverse effects of their risky behaviors, inform consumers about healthy choices, increase consumers' confidence in their ability to achieve behavioral change, and address contextual issues, such as emotional or psychological conditions, that may increase risky behaviors. When asked about how health initiatives can inform financial ones, a participant from Treasury described this possibility:

For example, managing money and managing weight; sometimes there are emotions underlying both sides, so it would be important to learn about how to deal with those. There are people who don't have good spending habits and it may be that they do not have the financial education or literacy. It might be that they spend because they have psychological issues or [that] there is something in their lives that is affecting them, and spending a way to deal with those issues. The same goes for managing weight, for example, when it's stress-related... I think there is a lot to learn from these, such as creating healthy habits early on—healthy eating habits and healthy savings habits. –Treasury interview participant

The same goes for managing weight, for example, when it's stress-related... I think there is a lot to learn from these, such as creating healthy habits early on—healthy eating habits and healthy savings habits.

Initiatives to address risky or destructive financial behaviors need to incorporate knowledge, attitudes, and beliefs about finances. A Federal Reserve participant explained that consumers who engage in these behaviors may be suffering from a lack of confidence. This participant believes that financial literacy initiatives can adopt approaches to increasing consumer self-efficacy and confidence that are similar to the approaches that have been implemented in the health field. A participant from ACF echoed the importance that building consumer confidence plays in empowering individuals to make informed health decisions. As part of the overall goal to improve health literacy of Head Start parents, grantees implemented trainings

for parents on ways to respond when their children fell ill. The participant discussed the trainings' approach to building the parents' confidence:

Parents are reporting that [they have] a lot more confidence in this area, which is probably the biggest thing. They're feeling much more comfortable and competent in terms of taking their children [to a doctor]... [The] ability to feel confidence and competent is huge. Feeling more comfortable dealing with the health care delivery system, feeling more confident to ask questions, better understanding the importance of preventive health... –ACF interview participant

Just as people can initiate exercise and proper nutrition practices at any age and must integrate these practices into their daily lifestyle, people can learn healthy financial behaviors and must practice them regularly in order to achieve success. A participant from the Federal Reserve described the way she uses health and nutrition examples when speaking about financial education initiatives:

People don't get into credit card problems overnight and won't get out of them overnight, and people don't get obese overnight and won't get thin overnight either. –Federal Reserve interview participant

The participant noted that individuals undergo regular checkups to monitor health indicators such as cholesterol, blood sugar, and blood pressure. She felt that similar financial checkups could be promoted to monitor spending regularly, net worth, cash flow, and other factors relating to finances. A participant from the Financial Literacy Center echoed the relevance of using an ongoing, step-by-step approach to promoting positive financial behaviors. For example, goals such as quitting smoking or eating healthier foods are usually achieved in steps, rather than through a one-time behavior change. She noted that a similar strategy of promoting realistic, tangible sequential actions can be applied to financial literacy. The participant described how the Financial Literacy Center used this approach in developing a financial-planning video to promote saving for retirement among low-income groups.

They designed a very simple seven-step planning aid, [consisting of] a step-by-step description of how you enroll in a supplementary retirement account... They provide precise steps on how to translate something into action to change behavior. To make sure that information translates into behavior, [it] needs to provide specific direction. [An initiative] needs to be very specific about how people can achieve an objective. [It is] important to break down important decisions into small steps. A lot of the health literature is a series of steps, such as how to go on a diet or eat less. [It] can't tell people, "Starting tomorrow, you're going to save \$1,000 per month." [It] must do it in steps. –Financial Literacy Center participant

One private initiative emphasized similarities in approaches to successfully achieving financial and health behavior change. ISU Extension's Small Steps to Health and Wealth focuses on motivating individuals to improve their health and financial situation by exploring behavior change strategies common to both disciplines. These include setting goals and limits, charting steps necessary to achieve a goal, practicing moderation (e.g., in eating and spending), partnering with other individuals to achieve targets, and monitoring individual progress. The program also addresses challenges commonly faced by individuals pursuing financial or health behavior change, such as psychological barriers, motivation issues, and difficulties upholding their commitment to a goal.



**Audiences with limited English proficiency can benefit from materials and trainings specific to them.** Health initiatives were more likely than financial initiatives to target audiences with limited English proficiency, and participants often noted the availability of materials and tools in languages other than English. Some participants indicated that certain web-based financial education materials—for example, information resources and interactive tools on MyMoney.gov—are available in multiple languages. A participant from the Federal Reserve acknowledged the need for more materials on the agency’s consumer information web-site that are accessible to non-native English speakers:

Currently a lot of materials [on the web-site] are translated into Spanish, and they recognize the need in the future for other languages like Chinese, Hmong, or Russian as immigrants are often in the low- to moderate-income bracket... They are moving in that direction. –Federal Reserve interview participant

However, participants from most programs that involved direct or in-person financial education or assistance did not reference resources for audiences with limited English proficiency. A participant from Treasury elaborated on why the availability of such resources is important:

The GAO is doing a study about financial literacy and English proficiency, and the connection between the two.<sup>8</sup> If you’re going to talk about money, of course you’re going to want to speak in your own language if English is your second language. –Treasury interview participant

Health initiatives often target limited English proficiency and non-English-speaking audiences through media campaigns that use such outreach strategies as foreign language advertising, mailings, and public service announcements.

### Lessons Learned Applicable to Both Financial and Health Literacy

**Materials and resources targeting low-literacy and low-income audiences have widespread applicability.** Products that do not require high levels of literacy and products created for low-income consumers can have a broader benefit, as audiences of varying literacy and economic levels can understand them. Overall, participants acknowledged that consumer education materials can have a positive impact on building health care decision-making skills among consumers. A participant from AHRQ stated that materials that are created for low-literacy audiences are inherently accessible to all audiences:

Consumer materials have had a very big impact. The products that require very low literacy appeal to a much wider audience than some of the major research [publications], which have a much smaller audience. People want and need these tools. –AHRQ interview participant

A participant working with ODPHP’s HealthFinder web-site reinforced this idea:

When you design things to be easier for people with low health literacy, it is easier for everyone. –ASH interview participant

In a similar manner, participants noted that some resources created to increase skills and knowledge of positive financial practices can have far-reaching appeal. Although many resources are created to benefit low-income audiences specifically, the general public is often

---

<sup>8</sup> U.S. Government Accounting Office (2010).

in need of information on healthy financial behaviors. A participant from ACF's AFI program described the need for a broader approach:

It's not just low-income families that need [financial education]. Other families and people, even those that have money, are not necessarily good managers. –ACF interview participant

In order to develop materials that are comprehensible to all audiences, many initiatives include consumer feedback and testing. AHRQ and CMS participants stated that they conducted substantial and regular usability and cognitive testing for web-based and print information. CMS specifically targets individuals with low education levels, who are representative of their intended audience, as part of the annual consumer testing of the *Medicare & You* handbook.

**Consumer feedback is key, especially when solicited early and on an ongoing basis.** Multiple initiatives had processes to solicit consumer feedback regularly, and participants reiterated the need for consumer input early in the development of education materials, trainings, and web-sites. A participant working with the HealthFinder web-site stated that designing a web-site with input from the target audience would increase the likelihood that the web-site would be easy to use and would engage that audience. A participant from the Federal Reserve noted that she solicited feedback from prospective consumers, for materials available on the agency's consumer information web page. Another participant described how CMS's *Medicare & You* handbook underwent multiple rounds of testing annually and how that input was incorporated into the final product:

The *Medicare & You* handbook is tested with consumers each year ... about 75 interviews with beneficiaries and caregivers, [through] multiple rounds ... [with] beneficiaries and caregivers primarily, in multiple cities around the country. Each year, we test the sections of the book where there are significant changes. –CMS interview participant

This participant also commented on the fact that consumer input was incorporated into the final product:

Each year we learn something in testing or get feedback in a certain direction. This information is used to make changes to or clarify handbook content to enhance consumer understanding. If suggested edits are significant, the revised content is tested again with consumers. –CMS interview participant

An AHRQ participant described a broader approach to engaging consumers in product development:

It is really valuable to have consumers represented on expert panels or as part of advisory groups. [Consumers] should be involved from the beginning, when thinking about what products are going to be developed. –AHRQ interview participant

Participants from private organizations echoed the importance of understanding consumer perspectives. An AARP official noted that consumer feedback was essential throughout the process of materials and message development. For example, the organization used focus groups to gather consumer input during formative stages, as well as for testing final products. The official described how consumer feedback alerted the organization that some of its existing materials were not fully addressing the needs of the target audience.

[A lesson learned is to] understand your audience segment very deeply before designing the curricula or tactical approaches, understand where people are and [make sure] that you segment

carefully based on gender, race, level of financial literacy, etc. [AARP] found out [that] for new Spanish-speaking immigrants, [the materials] were coming in at too high a comprehension level. [AARP is] creating two sets of Spanish materials; one for a more general Spanish-speaking population, and one aimed specifically at the new immigrant population that is at a more basic reading level. – AARP interview participant

**In-person or phone-based assistance is valuable, especially when delivering complex information or providing assistance to older adults.** Many initiatives that assisted consumers with making complex financial decisions (e.g., buying a home or allotting cash assistance), enrolling in or coordinating public financial and health benefits (e.g., long-term care), and navigating multifaceted public assistance programs (e.g., Medicaid) utilized direct interaction with these consumers. Initiatives may have served more than one of these purposes. Eight health-related federal initiatives, 13 financially-related federal initiatives, and seven private initiatives contained a component that included in-person assistance or training. Some examples of initiatives that assisted consumers with complex financial decision making are ACF’s AFI program, programs run by ACF’s ORR, AoA’s Pension Counseling and Information program, and Treasury’s Community Financial Access Pilot. Some of these programs include cash assistance. It is therefore especially important for these initiatives to incorporate accompanying counseling or training on proper use and management of the cash benefit. Initiatives that use direct consumer interaction to coordinate benefits include AoA’s Part D Outreach, Aging Disability and Resource Centers, and Benefits Enrollment Centers. ASPE’s Cash and Counseling program is an initiative that assists consumers with navigating public assistance programs. Many of these initiatives specifically target older adults, who are often recipients of public assistance such as Medicare and who may be less likely than younger people to use the web as a major source of information and assistance.

A program official from NCOA discussed multiple initiatives that provided personalized assistance to older adults who needed assistance with complex health and financial matters. The My Medicare Matters campaign utilized counselors to provide Medicare beneficiaries with education and enrollment assistance related to Medicare Part D. The Reverse Mortgage Counseling Services network offers in-person and telephone assistance to middle- and low-income seniors who need education and assistance related to reverse mortgages. The organization recently launched a demonstration program to establish eight Economic Security Service Centers throughout the country. The Centers provide low-income older adults with comprehensive counseling and casework assistance to navigate federal and state benefits and services.

As is common in such programs, participants in EARN’s IDA program receive matched savings accounts to help them build their savings. Since program participants often do not have the requisite financial knowledge and familiarity with financial products to independently reach their savings goals, they receive mandatory in-person training. Participants receive coaching throughout their tenure in the program.

**Effective dissemination of information is more challenging than content development.** Multiple participants noted that developing content for initiatives that aimed to raise awareness or elicit behavior change was an easier issue to address than ensuring effective delivery and dissemination of that content. A participant from Treasury described this challenge:

A major lesson learned is that developing the "products" is the easy part of implementation. Delivery is more challenging. Financial institutions often have low-cost products that are not reaching the people who need the services. A lot of communities have financial education providers, but their reach and access [are] somewhat limited because of knowledge of availability, meaning that people don't know about them, or they are not reaching the people who could use their services. –Treasury interview participant

A participant from AoA's Pension Counseling and Outreach program noted that grantees received technical assistance related to increasing outreach practices, not developing program content. Grantees are encouraged to invest extra resources in expanding their outreach component rather than expanding to new content areas, in order to prevent grantees from diluting their focus. Treasury's Community Financial Access Pilot aims to learn from grantees' varying models of community approaches to providing financial services to populations outside the financial mainstream. One finding from the pilot was that identifying or developing a financial educational product was not difficult, while implementation and service delivery were the challenge. An obstacle that community providers in Community Financial Access Pilot faced was their inability to disseminate their information and products on a larger scale. Participants felt that a poor understanding of how to disseminate information to a target audience could greatly hinder an initiative's effectiveness, regardless of the usefulness of the initiative's educational materials,

**Audiences more effectively use content that is contextually relevant and acknowledges consumers' varying decision-making styles.** Consumers are more likely to use information that is relevant to their daily lives. When developing program content, initiatives must consider how and why consumers make specific decisions, and what factors affect different types of decision making. An AARP official explained the importance of fully understanding the target audience prior to building program strategy.

[The] most important lesson is understanding the audience segment very deeply before you design any of the curricula or your tactical approaches. Making sure you fully understand where people are and that you segment carefully, especially because people are in such different places with financial literacy. [A] one size fits all [approach] is not good. What you want to do is really design things for your segment [in a manner] that really resonates and is actionable. If the research supports it, segment based on gender or race, along with current level of financial literacy. –AARP interview participant

A participant from the Health Education Council discussed how the organization's different tobacco cessation initiatives collaborate with their varying target audiences, which include African American churchgoers and pastors, and individuals in correctional facilities. This allows the organization to understand each audience's priorities and decision-making capabilities, and to develop materials that are relevant and usable, and that engage the target audiences.

There were no [tobacco cessation] manuals for the prison setting... so together with the National Commission on Correctional Healthcare, we collaborated to assess needs and create a cessation manual [for use] in prisons and jails. A lot of traditional approaches were to suggest things like—"if you need to smoke, take a hot bath or go for a walk,"—things that weren't feasible in [a prison] environment. We feel like [we] served a need that wasn't being addressed by other cessation approaches. –Health Education Council participant

Similarly, we developed a toolkit with a booklet addressing African American churches' role in tobacco control... one for women; one for men; one for pastors... [The booklet] has resonated

well with the community it's intended to reach. People pick it up, they like it [and] they want it. They love the imagery and messaging. The use of scripture related to health is very targeted... Also, the person carrying the message has a lot of respect and hierarchy in [the Black Church]. I think that's really important. We learned that any approach [must be] specific to who we are trying to reach. –Health Education Council participant

A participant from the Federal Reserve also noted that it is important to consider how to frame choices when presenting them to consumers; to put information into a context that allows consumers to understand its importance; and to present timely, relevant, and evidence-based information that will help people make the connection between that information and the decision they need to make. A representative from ASPE's Own Your Future campaign noted that consumers' decision making is not strictly dependent on their understanding of a particular financial concept. He also explained how a social marketing approach can aid understanding of the complexity inherent in individuals' financial decision making:

The social marketing approach tries to understand how [consumers] make decisions. There's a whole variety of factors. Long-term care is laden with emotional, family, and psychological issues. You have to take this into consideration... It's necessary to understand the target market and what their motivators are in order to bring around change. –ASPE interview participant

A participant affiliated with ACF's Office of Head Start described the importance of understanding how to present information in way that encourages its uptake by consumers:

Give important information in a way that is understandable and applicable to [consumers'] lives. It's one thing to learn what to do, but if it doesn't fit into [a consumer's] lifestyle, it's not realistic. –ACF interview participant

In discussing how the Financial Literacy Center designed a video game to make financial education interesting to low-income women, the interview participant described how the Center considered the women's learning style, interests, and motivators, in order to design its product.

[We considered] how to reach low-income women. [The women] are high school dropouts and don't want to be in school, so lectures aren't the way to do it. Dartmouth is partnering with a nonprofit foundation to design a good way to reach this group. [They looked] at what these women do... they play video games. They supported the design of a video game for low-income women that teaches them the work of credit cards and interest rates... You have to motivate people and make it enjoyable. This is an important way to reach specific groups. [It's important to consider] the needs and obstacles of that particular group... It is important that the intervention meets the needs of the specific group because there are big differences [between target groups]. If you want to be effective, you need to ask what people do and enjoy doing. –Financial Literacy Center participant

Moreover, initiatives must recognize that consumers process information differently. For example, active consumers may independently seek out information to assist with decision making. They may not require assistance from others in processing the information and using it to make decisions. Passive consumers may need more assistance and may be less likely to seek out information themselves. A CMS participant described the importance of classifying audiences by their style of decision making:

[We] try to look at consumers in general, in terms of whether they're active or passive users of information, and whether they're motivated to take action. When we do outreach to people, we need to make sure they can read and understand the materials they get—language, reading

level, decision making. For example, for active decision makers—we can just put things on [the] internet. [But] if they're not motivated, we'll need to contact them directly and help them understand why taking action is important. If they don't have the skills necessary to understand materials and take action—we need to get them in touch with people to help them through the process, such as SHIPs [State Health Insurance Assistance Programs]. –CMS interview participant

**Community-based partnerships and collaborations are a central component of effective outreach.** Partnerships and community collaborations can deepen an initiative's penetration into a target community and increase the breadth of its outreach to target populations. When discussing AoA's Part D Outreach initiative, a participant stated, "partnership and community collaboration is essential." A CMS participant noted that "beneficiaries tend to trust local community resources more than government ones." A participant with ASPE's Own Your Future campaign described how consumers are more apt to trust local information sources and how this realization informed the campaign's approach:

We realized quickly that if you stay at a national level, you're not going to get consumers information they can actually use. Consumers are looking for something on the ground... We had to let go of branding the campaign... From a consumer's perspective, they don't care where the message comes from. But they do know who a Governor is. So a lot of the press on the campaign doesn't often refer to the federal government. None of the press names ASPE. –ASPE interview participant

Participants suggested that grantees worked best with organizations that were physically located within a specific target community, had a history of being active within the particular community, and had direct connections with the target populations, such as minority aging populations. Participants also noted the importance of collaborations with other organizations serving a specific target audience. A CMS participant described how the organization uses partnerships to better serve particular audiences:

There are Hispanic organizations, African American organizations, and disease-specific organizations—all of whom have their own special agendas. Part of what we do is engage those people and bring them in when we're testing. [We] get their input [and] ask them how they can use it to relay to their audience segments... We work with national organizations, their local chapters, grassroots organizations, and the SHIP. All of that is designed to help provide resources for the beneficiary in the community [where] they live. –CMS interview participant

In a similar manner, EARN obtains a portion of its IDA participants through partnerships with local nonprofit groups. Generally, most individuals who open IDAs directly with EARN learn about the service through word of mouth, which limits the spread of information about EARN's services. However, the nonprofit partners inform their clients about EARN's IDA program and are able to open IDAs for them if they decide to participate. Through these collaborations, EARN works with local groups that target vulnerable populations, such as women, refugees, and ethnic minorities, and specific geographic areas with high concentrations of these target populations. Therefore, EARN is able to utilize local partners to expand its penetration into target communities and increase the number and demographic diversity of program recipients.

In addition to strengthening an initiative's outreach, community collaborations can also serve as sources of information about new techniques for service delivery. Treasury's Community Financial Access Pilot was created specifically to promote and learn from varying community-based approaches to providing financial access and financial services to low- and

moderate-income individuals. A program official from the Health Education Council described how the council sought out community partnerships and used these local networks to build relationships with the target audience, identify an unmet need, and customize the approach to promoting tobacco cessation.

We really worked to develop relationships with national organizations who were stakeholders. They put us in touch with local people working at the ground level. We've maintained those [local] relationships over the years... We worked with the Black Church in doing direct health education among congregation members and developed relationships with pastors. [We realized] it would be great if we had [tobacco cessation] materials culturally relevant to the Black Church. [Our] strong relationship with the African American community was the main reason for developing the initiative. –Health Education Council participant

One participant cited the importance of community collaborations in ensuring an initiative's sustainability in the field. A participant from Head Start's Innovation and Improvement Grant program described how one grantee that trains local and regional Head Start programs asks trainees to create plans for involving community partners:

They [have to] develop a health improvement plan that has marketing efforts and a communication plan to ensure success at the local level. Some resources would be hospitals, clinics, physicians, schools, county offices, local business, church organizations... The idea is that this is something that could be sustained after the grant is over. –ACF interview participant

## Limitations to Findings from the Interviews

Below we list limitations to the findings from the interviews.

1. **Length of involvement in an initiative.** While many participants worked at their agencies for an extended period, some participants were not employed at the agency at the initiative's inception and may not have known all the partners involved and all the challenges faced in implementing the initiative. In some cases, participants provided information after the fact through e-mail, and in others we sought to supplement information by conducting some, although limited, additional Internet research.
2. **Inconsistent availability of document research.** In some instances, participants provided us with program materials such as evaluations or research, but in other cases, program materials were not available. It is possible that there were key resources that we did not receive.
3. **Level of involvement in activities.** Although the program officers and managers we talked to were knowledgeable about their programs, many used third parties, such as contractors, to provide information and technical assistance to grantees and to compile best practices and lessons learned. Thus, it is likely that there is more information on details of initiatives that was not available to us.
4. **Subjective and anecdotal nature of findings.** The interview protocol was designed to capture participants' subjective accounts of their experiences working with an initiative, rather than a comprehensive understanding of each initiative. Participants often provided anecdotal details to explain an initiative's history, describe barriers, facilitators and lessons learned, or illustrate successes. Participants sometimes offered supplementary information such as program evaluations. Since few initiatives underwent a true evaluation, much of the findings relied on anecdotal evidence. In



5. **Participant response rate.** Most participants readily agreed to participate. A few potential participants did not respond or were not available for interview, and we did not collect information on those initiatives.

## 6.0 Next Steps

In this section, we discuss the implications for possible next steps and a description of opportunities to synchronize across agencies and initiatives.

### Implications for Future Initiatives

Potential next research steps could lead to a more comprehensive understanding of the value of achieving financial literacy and health literacy among low-income populations.

**Continue and enhance qualitative research with consumers, to ensure that the content of current and new financial and health information is appropriate.** Both the literature and the interviews identified the importance of generating appropriate content and noted that information that individuals with low financial or health literacy levels can easily understand will also be easily understandable for those with higher levels of financial or health literacy. Most commonly, participants recommended focus groups for evaluating concepts and constructs to be used in an initiative. Cognitive and usability testing can evaluate comprehension, flow, amount of information, and recall of draft information. In conducting this testing, it is critical to include the target audience in the development of an initiative from the beginning and continue throughout. Thus, people with low incomes or people with low education levels (which is often used as a proxy for low health literacy levels) should participate in formative and qualitative research, perhaps even more frequently than people with higher income should or higher education levels should. The literature underscores that putting such initiative into developing materials will result in products that consumers are more likely to use and understand.

**Develop and evaluate training protocols to ensure that financial educators are knowledgeable and that they use an evidence-based approach to financial education.** As was reported in the literature, there is ambiguous evidence that financial education leads to financial literacy or significant changes in financial management. On the other hand, in some circumstances, the evidence suggests that financial education influences financial behaviors, such as savings. Interview findings suggest that few initiatives collect effectiveness information that illustrates their success in influencing behavior. Available literature suggests that that financial education programs increase financial literacy only modestly, and the interviews suggest that a priority in increasing financial literacy is to emphasize effective dissemination. One concern noted by interview participants was a lack of evidence-based training for financial educators. In contrast, health educators and clinicians are well taught, although they may primarily supply information within their own fields of knowledge and may not be informed about the full range of health issues. There have been substantial initiatives to develop tools to improve the clinicians' ability to help patients and other consumers understand a health condition, understand the steps necessary to manage the

condition, and feel confident about their own ability to make future health decisions. The lack of valid and reliable educational standards in financial literacy suggests that future research should focus on developing and evaluating training protocols and supporting the use of these effective models.

**Examine the organizational characteristics of community-based organizations that produce or are associated with effective financial or health literacy initiatives.** Interview participants advocated involving community-based organizations for consumer education initiatives. The literature review also indicated that outreach activities are often conducted at the community level. At the same time, many initiatives are primarily web based and thus, by definition, are developed for a national-level audience. We did not find any research to suggest that partnerships with community-based organizations were more effective than initiatives that were strictly community-based or federal in their scope. That said, community-based organizations can be a rich resource, since such organizations can have a greater depth of knowledge and understanding about their community than is possible for national organizations or the federal government. Using this connection to community residents, community-based organizations could be instrumental in initiatives to customize information and to understand consumer challenges. Furthermore, these organizations can and do serve as facilitators of potential interventions, building trust and encouraging program participation. It is likely that some community-based organizations are more effective than others are, and future research should examine what organizational characteristics produce results that are more effective. Qualitative research could explore this question by identifying potential institutional traits and full-scale evaluations to test whether community based organizations are more effective.

**Find linkages between financial decision making and other activities that could provide educational opportunities.** Related to examining organizational characteristics that produce or are associated with effective financial or health literacy efforts, examine activities that could be connected and related to improving financial or health literacy. For example, some retailers are beginning to promote saving for Christmas spending. This offers the chance to collaborate with other retailers to educate consumers about saving behaviors. Some grocery stores have in-store banking services where it could be possible to provide financial education similar to how some pharmacies provide diabetes education.

**Borrowing from health care, examine the use of regular financial checkups and screenings to improve financial literacy.** According to research and the interviews, health care institutions are more predisposed to educate individuals about health care issues than financial institutions are to educate about finances. Most health care institutions, such as doctors' offices, hospitals, and to a certain extent pharmacies, incorporate at least some interaction between experts (i.e., doctors, nurses, pharmacists) and patients. Most individuals report having a regular source of health care, such as a primary care doctor or nurse. Having a fixed source of care increases the likelihood of interacting with a clinical provider who can evaluate their health. Although, even in the case of health care, there is a need for improvement in how clinical providers communicate with patients. In contrast, financial institutions, such as banks and mortgage lenders are less likely to have meaningful or educational interactions with consumers. In these settings, the use of technology (e.g., ATMs) may even prevent interaction, and some individuals have very few or no interactions with banks. In addition, while consumers may see a clinical provider for regular annual checkups

and screenings (although typically at a cost), there is no similar action that consumers can take to regularly monitor their finances. One potential method of obtaining a regular financial check-up is through tax preparation. Free tax preparations are provided through IRS's Volunteer Income Tax Assistance Program (VITA), the IRS's Tax Counseling for the Elderly (TCE) Programs, and AARP's tax aide information, among others. Unless low-income individuals participate in a special program, such as an IDA program, or actively seek out financial education, few local financial institutions provide regular, annual financial check-ins to review overall financial well-being, develop financial goals, solve problems, and otherwise improve financial literacy. Future research could examine the use of long-term, annual, tailored financial education initiatives to improve financial well-being. Future research could also examine alternative methods of disseminating financial education materials and perhaps build on prior initiatives that have proved effective. Examples of effective approaches include targeting information to a specific audience and offering peer mentoring or coaching services. Research could also help establish which venues are most likely to attract the target audience.

**Build more effective evaluations into initiatives.** Interview participants rarely reported evaluations conducted of their initiative(s). More commonly, ongoing monitoring was conducted to determine the progress of an initiative. A few agencies reported that they did not have an opportunity to conduct evaluations because of resource and timing constraints related to the need for government review. Although program officials were satisfied with their initiative's value to consumers, most indicated that an evaluation of their initiative would be valuable for their program's work. Future initiatives, particularly ones with multiple grantees, could include simple evaluation plans from the beginning. Programs could solicit input from new or previous grantees to determine whether such evaluation plans are valid and feasible. Information gained from grantees or outside consultants could inform the process of developing and assessing the validity of evaluation measures. Evaluation plans must be more substantial than simple monitoring of an initiative if they are to gauge the effectiveness of an initiative.

**Expand on traditional forms of research to segment audiences and, ultimately, to customize financial or health literacy initiatives to smaller target audiences.** This research project focused specifically on low-income consumers. However, there are multiple ways of segmenting audiences that may, in turn, help to develop targeted financial and health education initiatives. For example, CMS examines active versus passive information seekers. One method to segment audiences is by using a data on audiences. PRIZM is a database that defines households according to demographically and behaviorally distinct types, or "segments," including demographic, lifestyle, attitudinal, and behavioral characteristics. PRIZM links household- and neighborhood-level segment assignments and can evaluate markets, territories, service areas, and other geographic areas. This can be a valuable tool to understand small target audiences, to develop materials, develop a dissemination strategy, and to examine where people currently go to socialize and/or obtain information.

**Explore new methods of outreach, such as the new forms of online communities.** The literature suggests that peer counseling is effective and that ongoing contact among peers is important. Establishing online discussion groups or other venues for continued peer-to-peer contact could be another area of effective outreach. This may be valuable for "graduates" or "alumni" of programs to remain involved and to reinforce positive behaviors. This format should

be evaluated as a potential method of outreach to low-income individuals who are technologically savvy.

**Examine the knowledge, attitudes, and beliefs of individuals with the lowest financial literacy skills and least interest in financial literacy.** As we noted earlier, many of the financial literacy studies were limited by a self-selection bias to participate in financial education programs. As there is a lack of motivation among very low-literacy audiences to seek financial counseling, many individuals in this priority population may never receive the financial education and support they may need. Examining the knowledge, attitudes, and beliefs of this specific audience would be valuable in determining how to develop appropriate initiatives to reach and motivate the audience.

### Opportunities to Synchronize Initiatives across Agencies and Initiatives

In this section, we provide a description of opportunities for coordinating initiatives and agencies to improve dissemination of initiatives and build on initiatives.

**Link seemingly disparate programs to create a more holistic program.** One current example of program linkage is HUD's Home Equity Conversion Program and AoA's Benefits Enrollment Centers initiative, which together provide financial counseling as part of benefits enrollment. In a similar manner, USDA's cooperative extensions and ACF's Head Start programs could work together to provide financial education at Head Start sites. The State Health Insurance Counseling and Assistance Programs (SHIPs), which provide counseling for Medicare beneficiaries, could be linked with other initiatives in order to help consumers facing financial challenges.

**Imbed programs for older adults into programs for younger adults.** The interviews suggested the need to incorporate financial education throughout the lifespan. Most financial education initiatives at the local level are aimed at people with disabilities or older adults, yet young people are disproportionately affected by poverty. For example, ACF's Head Start program and AoA's Aging Disability and Resource Centers could work together to provide education for parents of children at Head Start locations. Head Start could also work with AoA's NCBOE to provide benefits information to parents or incorporate WISER as an education initiative.

**Provide critical information, as well as reminders, throughout the lifecycle, particularly at moments of significant life transitions.** Many low-income Medicare beneficiaries remain unaware that they are eligible for the low-income subsidy, which would pay for a prescription drug benefit. Information that may substantially affect individuals needs to be disseminated and discussed. One method to disseminate this information is through common community-based organizations that already interact with low-income individuals. For example, traditional organizations include schools, senior centers, and food banks, but alternative organizations, such as state departments of motor vehicles, churches, or even hairdressers could be included. In addition, engaging individuals at key financial or health decision-making points, such as buying a first home or having a child, may motivate individuals to consider health and financial issues and ultimately make better decisions that will help them later in life.

**Consider a single vehicle for managing information needs.** There are several programs that seek to help consumers make sense of very confusing information, and it could be helpful to link these programs more effectively. For example, to obtain information on long-term care insurance and benefits there are SHIPs at the state level, Medicare's toll-free line, the Social Security Administration's toll free line, AAAs, AoA's Aging and Disability Resource Centers, and AoA's Benefits Enrollment Centers, to name a few.

## References

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behavior* (pp. 11-39). Heidelberg: Springer.
- Applied Research and Consulting, LLC. (2009). *Financial capability in the United States: Initial report of research findings from the 2009 national survey. A component of the National Financial Capability Study*. A report prepared for the Financial Industry Regulatory Authority Investor Education Foundation. Retrieved on August 23, 2010, from <http://www.finrafoundation.org/web/groups/foundation/@foundation/documents/foundation/p120536.pdf>
- Baker, D. W., Wolf, M. S., Feinglass, J., Thompson, J. A., Gazmararian, J. A., & Huang, J. (2007). Health literacy and mortality among elderly patients. *Archives of Internal Medicine*, 167(14), 1503–1509.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.
- Berkman, N. D., DeWalt, D. A., Pignone, M. P., Sheridan, S. L., Lohr, K. N., Lux, L., Sutton, S. F., Swinson, T., & Bonito, A. (2004). *Literacy and health outcomes* (AHRQ Publication No. 04-E007-2). Retrieved August 27, 2010, from <http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=hserta&part=A128577>
- Brown, R., Carlson, B. L., Dale, S., Foster, L., Phillips, B. & Schore, J. (2007). *Cash And Counseling: Improving the lives of Medicaid beneficiaries who need personal care or home- and community-based services*. Princeton, NJ: Mathematica Policy Research, Inc.
- Carman, K. L., Maurer, M., Yegian, J. M., Dardess, P., McGee, J., Evers, M., et al. (2010). Evidence that consumers are skeptical about evidence-based health care. *Health Affairs*, 29 (7), 1-7.
- Champion, V. L., Springston, J. K., Zollinger, T. W., Saywell, R. M., Monahan, P. O., Zhao, Q., & Russel, K. M. (2006). Comparison of three interventions to increase mammography screening in low income African American women. *Cancer Detection and Prevention*, 30, 535–544.
- Chang, Y. & Lyons, A. C. (2008). Are financial education programs meeting the needs of financially disadvantaged consumers? *Journal of Personal Finance*, 7 (2), 84-109.
- Christie, J., Itzkowitz, S., Lihau-Nkanza, Castillo, A., Redd, W., & Jandorf, L. (2008). A randomized controlled trial using patient navigation to increase colonoscopy screening among low-income minorities. *Journal of the National Medical Association*, 100 (3), 278–284.
- Collins, J. M. (2010). Effects of mandatory financial education on low-income clients. *Focus*, 27(1), 13-18.

- Counsell, S.R., Callahan, C.M., Clark, D.O., Tu, W., Buttar, A.B., et al. (2007). Geriatric care management for low-income seniors: a randomized controlled trial. *JAMA*, 298 (22), 2673-4.
- Courchane, M., Gailey, A., Zorn, P. (2007). Consumer credit literacy: At what price perception? *Journal of Economics and Business*, 60(1-2), 125–138.
- Courtney, M. E., Zinn, A., Zielewski, E. H., Bess, R. J., Malm, K. E., et al., (2008). Multi-site evaluation of foster youth programs: Evaluation of the life skills training program Los Angeles County, California. Washington DC: The Urban Institute.
- Curley, J., Ssewamala, F., & Sherraden, M. (2009). Institutions and savings in low income households. *Journal of Sociology and Social Welfare*, 36, 9–32.
- Customer Care Measurement & Consulting (2006). Eldercare Locator Evaluation: Key Findings & Recommendations from Surveys of Callers & Area Agencies on Aging. Unpublished report provided by Administration on Aging interview participant.
- Dansinger, M. L., Gleason, J. A., Griffith, J. L., Selker, H. P., & Schaefer, E. J. (2005). Comparison of the Atkins, Ornish, Weight Watchers, and Zone Diets for Weight Loss and Heart Disease Risk Reduction. *JAMA*, 293:43-53
- Dellavigna, S., & Paserman, M. D. (2005). Job Search and Impatience. *Journal of Labor Economics* 23(3): 527-588.
- DeMarco, D., Mills, G., & Ciurea, M. (2008). Assets for Independence Act Evaluation, Process Study: Final Report. A report prepared for the Administration for Children and Families under contract # 233-02-0088. Cambridge, MA: Abt Associates.
- Dobson, K. A., Black P. L., & Hein, M. L. (n.d.). Microenterprise Lending: A Cookbook for Mutual Success. A report to Office of Refugee Resettlement. Washington, DC: ISED Solutions.
- Drago, L. (2009). Diabetes education program in health center waiting room improves health literacy. *AHRQ Health Care Innovations Exchange*. Retrieved August 25, 2010 from <http://www.innovations.ahrq.gov/content.aspx?id=2120>
- Ell, K., Vourlekis, B., Xie, B., Nedjat-Haiem, F. R., Lee, P., Muderspach, L., et al. (2009). Cancer treatment adherence among low-income women with breast or gynecologic cancer: A randomized controlled trial of patient navigation. *Cancer*, 115(19), 4606–4615.
- Elliehausen, G., Lundquist, C. E., & Staten, M. E. (2007). The impact of credit counseling on subsequent borrower behavior. *The Journal of Consumer Affairs*, 41(1), 1–28.
- Federal Deposit Insurance Corporation. (2007). A longitudinal evaluation of the intermediate-term impact of the money smart financial education curriculum upon consumers' behavior and confidence. Washington, DC: Federal Deposit Insurance Corporation,
- Federal Deposit Insurance Corporation. (2009). FDIC national survey of unbanked and underbanked households. A report. Washington DC: Federal Deposit Insurance Corporation.



- Fox, J., Bartholomae, S., & Lee, J. (2005). Building the case for financial education. *The Journal of Consumer Affairs*, 39(1), 195–214.
- Gatti, M. E., Jacobson, K. L., Gazmararian, J. A., Schmotzer, B., & Kripalani, S. (2009). Relationships between beliefs about medications and adherence. *American Journal of Health-System Pharmacy*, 66, 657–664.
- Glanz, K., Rimer, B.K. & Lewis, F.M. (2002). *Health Behavior and Health Education. Theory, Research and Practice*. San Francisco, CA: Wiley & Sons.
- Gonyea, J. G. (2007). Improving the retirement prospects of lower-wage workers in a defined-contribution world. *Families in Society: The Journal of Contemporary Social Services*, 88(3), 453–462.
- Grinstein-Weiss, M., Curley, J., & Charles, P. (2007). Asset building in rural communities: The experience of individual development accounts. *Rural Sociology*, 72(1), 25–46.
- Grinstein-Weiss, M., Yeo, Y. H., Despard, M. R., Casalotti, A. M., & Zhan, M. (2010). Does prior banking experience matter? Differences of the banked and unbanked in individual development accounts. *Journal of Family Economic Issues*, 31:212–227.
- Grumbach, K., Bodenheimer, T., & Grundy, P. (2009). The outcomes of implementing patient-centered medical home interventions: A review of the evidence on quality, access and costs from recent prospective evaluation studies. Washington, DC: Patient-Centered Primary Care Collaborative.
- Han, C. (2007). *Savings in individual development accounts: Multilevel analyses of institutions*. Retrieved January 24, 2010 from ProQuest Digital Dissertations. (3299956)
- Han, C. K., & Hong, S. I. (2006, May). *Institutions and asset accumulation: A longitudinal data analysis*. Paper presented at the annual meeting of the American Sociological Association, Montreal, Canada.
- Hartarska, V. & Gonzales-Vega, C. (2006). Evidence on the effect of credit counseling on mortgage loan default by low-income households. *Journal of Housing Economics*, 15(1), 63-79.
- Hathaway, I. & Khatiwada, S. (2008). Do financial education programs work? *Federal Reserve Bank of Cleveland*. Retrieved August 24, 2010 from [www.clevelandfed.org/research/workpaper/2008/wp0803.pdf](http://www.clevelandfed.org/research/workpaper/2008/wp0803.pdf)
- Hein, M. L. (2006). The Office of Refugee Resettlement's Individual Development Account (IDA) Program: An Evaluation Report. A report to Office of Refugee Resettlement. Washington, DC: ISED Solutions.
- Helman, R., Greenwald, M., Copeland, C., & VanDerhei, J. (2006). Will more of us be working forever? The 2006 Retirement Confidence Survey. *EBRI Issue Brief*, 292, 1–28.
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, 89(7), 7–20.

- Himmelstein, D. U., Warren, E., Thorne, D., & Woolhandler, S. (2005). Illness and injury as contributors to bankruptcy. *Health Affairs*, web exclusive, W5-W6.
- Hostetter M. (2008). Case study: reducing hospital readmissions among heart failure patients at Catholic Healthcare Partners. Retrieved August 25, 2010 from <http://www.commonwealthfund.org/Content/Innovations/Case-Studies/2008/Mar/Case-Study--Reducing-Hospital-Readmissions-Among-Heart-Failure-Patients-at-Catholic-Healthcare-Partn.aspx>
- Institute of Medicine. (2004). *Health Literacy: A Prescription To End Confusion*. In L. Nielsen-Bohlman, A. M. Panzer, D. A. Kindig (Eds.) . Washington, DC: National Academies Press.
- Kagawa-Singer, M., Tanjasiri, S. P., Valdez, A., Yu, H., & Foo, M. A. (2009). Outcomes of a breast health project for Hmong women and men in California. *American Journal of Public Health*, 99 (S2), S467–S473.
- Khankari, K., Mickey E., Osborn C. Y., Makoul G., Clayman M., Silvia S., et al. (2007). Improving colorectal cancer screening among the medically underserved: A pilot study within a federally qualified health center. *Journal of General Internal Medicine*, 22 (10), 1410–1414.
- Kreuter, M. E., & Skinner, C. S. (2000). Tailoring: What's in a name? *Health Education Research*, 15 (1), 1-4.
- Kutner, M., Greenberg, E., Jin, Y., & Paulsen, C. (2006). *The Health Literacy Of America's Adults: Results From The 2003 National Assessment Of Adult Literacy* (NCES 2006-483). Washington, DC: National Center for Education Statistics.
- Loibl, C., Red Bird, B., Grinstein-Weiss, M., & Zhan, M. (2008). *Yes, the poor can be taught to save—Evidence from a survey of IDA program participants*. Paper presented at the annual conference of the Association for Consumer Research, San Francisco, CA.
- Lorig, K. R., Ritter, P., Stewart, A. L., Sobel, D. S., Brown, B. W., Bandura, A. et al. (2001). Chronic disease self-management program: 2-year health status and health care utilization outcomes. *Medical Care*, 39(11),1217-1223.
- Lorig, K. R., Sobel, D. S., Ritter, P. L., Laurent, D., & Hobbs, M. (2001). Effect of a self-management program on patients with chronic disease. *Effective Clinical Practice*, 4(6),256-262.
- Lorig, K. R., Sobel, D. S., Stewart A. L., Brown Jr, B. W., Ritter P. L., González, V. M., et al. (1999). Evidence suggesting that a chronic disease self-management program can improve health status while reducing utilization and costs: A randomized trial. *Medical Care*, 37(1):5-14.
- Lusardi, A. (2008). *Financial literacy: An essential tool for informed consumer choice?* (NBER Working Paper No. 14084). Retrieved August 23, 2010 from [http://www.dartmouth.edu/~alusardi/Papers/Lusardi\\_Informed\\_Consumer.pdf](http://www.dartmouth.edu/~alusardi/Papers/Lusardi_Informed_Consumer.pdf)

- Lusardi, A., Keller, A. & Keller, P. (2009). Increasing the effectiveness of retirement saving programs for females and low income employees: A marketing approach. A report prepared for the National Endowment for Financial Education. Denver, CO: NEFE.
- Lusardi, A., Keller, P. & Keller, A. (2008). New ways to make people save: a social marketing approach. In Lusardi, A (Ed.), *Overcoming the saving slump: How to increase the effectiveness of financial education and saving programs* (209-236). Chicago: University of Chicago Press.
- Lusardi, A., & Mitchell, O. (2006). *Financial literacy and planning: Implications for retirement wellbeing*. A report funded from a grant from the Social Security Administration. Retrieved August 30, 2010 from <http://www.dartmouth.edu/~alusardi/Papers/FinancialLiteracy.pdf>
- Lusardi, A., & Mitchell, O. (2009, May). Financial literacy: Evidence and implications for financial education. *Trends and Issues*. Retrieved August 23, 2010 from [http://www.tiaa-crefinstitute.org/articles/ti\\_financialliteracy0509.html](http://www.tiaa-crefinstitute.org/articles/ti_financialliteracy0509.html)
- Lyons, A. C., Palmer, L., Jayaratne, K. S. U., & Scherpf, E. (2006). Are we making the grade? A national overview of financial education and program evaluation. *The Journal of Consumer Affairs*, 40(2), 208–235.
- Lyons, A., Chang, Y., & Scherpf, E. (2006). Translating financial education into behavior change for low-income populations. *Financial Counseling and Planning*, 17(2), 27–45.
- Mallach, A. (2001). Home ownership education and counseling: Issues in research and definition. Discussion Paper. Philadelphia, PA: Federal Reserve Bank of Philadelphia.
- Martin, M. A., Catrambone, C. D., Kee, R. A., Evans, A. T., Sharp, T. et al. (2009). Improving asthma self-efficacy: Developing and testing a pilot community-based asthma intervention for African American adults. *Journal of Allergy Clinical Immunology*, 123(1), 153–159.
- Meier, S., & Sprenger, C. (2009). *Discounting financial literacy: Time preferences and participation in financial education programs* (IZA Working Paper 3507). Retrieved August 29, 2010 from <http://ftp.iza.org/dp3507.pdf>
- Mills, G., Lam, K., DeMarco, D., Rodger, C. & Kaul, B. (2008). Assets for Independence Act evaluation, impact Study: Final report. A report prepared for Administration for Children and Families under contract # 233-02-0088. Cambridge, MA: Abt Associates.
- Montz, E., & Seshamani, M. (n.d.). *A success story in American health care: Community based prevention in Nebraska*. Retrieved August 25, 2010 from [http://www.healthreform.gov/reports/success\\_nebraska/nebraskasuccessstory.pdf](http://www.healthreform.gov/reports/success_nebraska/nebraskasuccessstory.pdf)
- National Council on Aging. (2007). *Harnessing the power of partnerships: Lessons learned from My Medicare Matters*. Washington DC: National Council on Aging.
- O’Keeffe, J. (2009). Implementing Self-Direction Programs with Flexible Individual Budgets: Lessons Learned from Cash and Counseling Replication States. Retrieved August 23, 2010 from <http://www.cashandcounseling.org/resources/20090202-101712>

- Organisation for Economic Co-Operation and Development. (2005). *Improving financial literacy: Analysis of issues and policies*. Retrieved August 29, 2010 from [http://www.oecd.org/document/2/0,3343,en\\_2649\\_15251491\\_35802524\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/2/0,3343,en_2649_15251491_35802524_1_1_1_1,00.html)
- Percac-Lima, S., Grant, R. W., Green, A. R., Ashburner, J. M., Gamba, G., Oo, S., Richter, J. M., & Atlas, S. J. (2008). A culturally tailored navigator program for colorectal cancer screening in a community health center: A randomized, controlled trial. *Journal of General Internal Medicine*, 24(2), 211–217.
- Piatt, G.A., Orchard, T.J., Emerson, S., Simmons, D., Songer, T.J., et al., (2006). Translating the chronic care model into the community: results from a randomized controlled trial of a multifaceted diabetes care intervention. *Diabetes Care*, 29 (4), 811-7.
- Prochaska, J.O. & DiClemente, C.C. (1984) *The Transtheoretical Approach: Crossing Traditional Boundaries Of Therapy*. Homewood, IL: Dow Jones-Irwin.
- Resnick, B., Shaughnessy, M., Galik, E., Scheve, A., Fitten, R., Morrison, T., et al. (2009). Pilot testing of the PRAISED intervention among African American and low-income older adults. *Journal of Cardiovascular Nursing*, 24(5), 352–361.
- Retirement security for American families*. (n.d.). Retrieved August 20, 2010, from the United States White House Web site: [http://www.whitehouse.gov/assets/documents/Retirement\\_Savings\\_Fact\\_Sheet.pdf](http://www.whitehouse.gov/assets/documents/Retirement_Savings_Fact_Sheet.pdf)
- Rimsza, M. E., Butler, R. J., & Johnson, W. G. (2007). Impact of Medicaid disenrollment on health care use and cost. *Pediatrics*, 119, e1026–e1032. Retrieved August 18, 2010 from <http://pediatrics.aappublications.org/cgi/reprint/119/5/e1026>.
- Rochon, D. (2007). *Health literacy: A system approach to improve health*. A presentation at the IOM Roundtable on March 23, 2007. Retrieved August 23, 2010 from <http://iom.edu/Activities/PublicHealth/HealthLiteracy/2007-MAR-29.aspx>
- Rudd, R. (2004). *Communicating health: Priorities and strategies for progress: Objective 11-2. Improvement of health literacy*. Retrieved August 29, 2010 from <http://odphp.osophs.dhhs.gov/projects/healthcomm/objective2.htm>
- Sarkar, U., Fisher, L., & Schillinger, D. (2006). Is self-efficacy associated with diabetes self-management across race/ethnicity? And health literacy? *Diabetes Care*, 29 (4), 823–829.
- Seidman, E., Hababou, M., & Kramer, J. (2005). A financial services survey of low- and moderate-income households. *The Center for Financial Services Innovation*. Retrieved August 29, 2010 from [http://www.cfsinnovation.com/system/files/imported/managed\\_documents/threecitysurvey.pdf](http://www.cfsinnovation.com/system/files/imported/managed_documents/threecitysurvey.pdf)
- Shieh, C., Mays, R., McDaniel, A., & Yu, J. (2009). Health literacy and its association with the use of information sources and with barriers to information seeking in clinic-based pregnant women. *Health Care for Women International*, 30, 971–988.

- Shieh, C., McDaniel, A., & Ke, I. (2009). Information-seeking and its predictors in low-income pregnant women. *American College of Nurse-Midwives*, 54(5), 364–372.
- Smith, B. (2007). “Social Marketing: Making it Fun, Easy, and Popular.” 2nd National Social Marketing Conference, National Social Marketing Centre. September 24th – 25th, 2007. Oxford, England.
- Smith, S. A., & Wollesen, L. (2009). Home visits using reflective approach improve functional health literacy among low-income pregnant women and new parents. AHRQ Innovations Exchange. Retrieved August 25, 2010 from <http://www.innovations.ahrq.gov/content.aspx?id=2533>
- Sudore, R. L., & Schillinger, D. (2009). Interventions to improve care for patients with limited health literacy. *Journal of Clinical Outcomes Management*, 16(1), 20–29.
- U.S. Department of Health and Human Services, Administration of Children and Families, Office of Refugee Resettlement. (2008). Who we serve. Retrieved on August 30, 2010 from <http://www.acf.hhs.gov/programs/orr/about/whoweserve.htm>
- U.S. Department of Health and Human Services, Administration on Aging. (2009). AoA.gov and Eldercare.gov Usability Tests Report. A report provided by an AoA interview participant.
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (2009a). *Improving health literacy for older adults: Expert panel report 2009*. Retrieved August 31, 2010 from [www.cdc.gov/healthmarketing/healthliteracy/reports/olderadults.pdf](http://www.cdc.gov/healthmarketing/healthliteracy/reports/olderadults.pdf)
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (2009b). *The power of prevention: Chronic disease...the public health challenge of the 21<sup>st</sup> century*. Retrieved on September 1, 2010 from <http://www.cdc.gov/chronicdisease/pdf/2009-Power-of-Prevention.pdf>
- U.S. Department of Health and Human Services, Centers of Disease Control and Prevention, National Center for Health Statistics. (2010). *National Health Interview Survey, 1997–September 2009, combined sample adult and sample child core components*. (Data are based on household interviews of a sample of the civilian noninstitutionalized population.) Retrieved on August 3, 2010 from [http://www.cdc.gov/nchs/data/nhis/earlyrelease/201003\\_02.pdf](http://www.cdc.gov/nchs/data/nhis/earlyrelease/201003_02.pdf)
- U.S. Department of Health and Human Services, National Cancer Institute, Division of Cancer Control and Population Sciences, Behavioral Research Program. (2009). Health Information National Trends Survey (HINTS), 2003-2007. Retrieved on August 3, 2010 from <http://hints.cancer.gov/questions/allyears-chart.jsp?qid=672>
- U.S. Department of Health and Human Services, National Institutes of Health. (2006). *Surgeon General's workshop on improving health literacy*. Retrieved February 4, 2010 from [www.surgeongeneral.gov/topics/healthliteracy/pdf/panel3.pdf](http://www.surgeongeneral.gov/topics/healthliteracy/pdf/panel3.pdf)
- U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2005a). Health literacy is crucial to good health. *Prevention Report*.

- Retrieved August 22, 2010 from  
<http://odphp.osophs.dhhs.gov/pubs/prevrpt/Volume19/issue4pr.htm>
- U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2005b). *Plain language: A promising strategy for clearly communicating health information and improving health literacy*. Retrieved August 16, 2010 from <http://www.health.gov/communication/literacy/plainlanguage/IssueBrief.pdf>
- U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion ( n.d.). *Quick guide to health literacy*. Retrieved August 24, 2010 from <http://www.health.gov/communication/literacy/quickguide/>
- U.S. Department of Health and Human Services. (2000). *Healthy People 2010* (2nd ed.) With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Labor, Bureau of Labor Statistics, (2010). *Occupational Outlook Handbook, 2010-11 Edition*, Health Educators. Retrieved August 24, 2010 from <http://www.bls.gov/oco/ocos063.htm>
- U.S. Government Accounting Office (2006). *Financial literacy and education commission: Further progress needed to ensure effective national strategy*. Retrieved on August 12, 2010 from <http://www.gao.gov/new.items/d07100.pdf>
- Valente, S., & Murray, L. P., Fisher, D. (2007). Nurses improve medication safety with medication allergy and adverse drug reports. *Journal of Nursing Care and Quality*, 22 (4), 322-327.
- Wagner, E. H. (1999). Care of older people with chronic illness. In Calkins, E., Boulton, C., & Wagner, E. H. (eds). *New Ways To Care For Older People: Building Systems Based On Evidence*. New York, NY: Springer.
- Westat.(2000). Pension Counseling Feasibility Study. Rockville, MD: Westat.
- Williams, M. V., & Maleque, N. (2009). Discharge education program increases patient understanding of treatment and follow up care. *AHRQ Health Care Innovations Exchange*. Retrieved on August 19, 2010 from <http://www.innovations.ahrq.gov/content.aspx?id=2294>.
- Wiltshire, J. C., Roberts, V., Brown, R., & Sarto, G. E. (2009). The effects of socioeconomic status on participation in care among middle-aged and older adults. *Journal of Aging and Health*, 21(2), 314–335.
- Wolf, M. S., Gazmararian, J. A., & Baker, D. W. (2005). Health literacy and functional health status among older adults. *Archives of Internal Medicine*, 165, 1946–1952.
- Zhan, M., Anderson, S. G., & Scott, J. (2006). Financial knowledge of the low-income population: Effects of a financial education program. *Journal of Sociology and Social Welfare*, 33(1), 53–74.

- Zhan, M., Anderson, S., & Scott, J. (2009). Banking knowledge and attitudes of immigrants: Effects of a financial education program. *Social Development Issues*, 31(3), 15–32.
- Zun, L. S., Downey, T., & Downey, L. (2006). English-language competency of self-declared English-speaking Hispanic patients using written tests of health literacy. *Journal of the National Medical Association*. 98 (6), 912-917.