HEALTH IMPACT PROJECT

ADVANCING SMARTER POLICIES FOR HEALTHIER COMMUNITIES
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HEALTH IMPACT ASSESSMENT OF PROPOSED CHANGES TO THE SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.

THE PEW CHARITABLE TRUSTS

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Overview

With the current state of the economy, many American families face tough choices about how to spend their resources. Low-income households often lack the funds to meet basic needs, including adequate housing, home energy, health care, and food. The Supplemental Nutrition Assistance Program (SNAP), authorized under Title IV of the U.S. Farm Bill, is the federal government's principal program to help low-income families purchase enough food. The program provides participants with a benefit card that can be redeemed specifically for food purchases. The benefits are intended to lessen the risk of food insecurity (i.e., difficulty obtaining enough to eat) and hunger for low-income families and to support a more nutritious diet by encouraging people to buy foods, or seeds that produce foods, that can be prepared at home.[1] Federal spending on SNAP has grown from $34.8 billion in fiscal year 2007 to $80.4 billion in FY 2012.[2] This growth in spending has been attributed to several factors, including the rise in poverty and unemployment during the Great Recession (leading to higher participation rates); changes in state eligibility practices; and a temporary increase in benefit amounts conferred by the American Recovery and Reinvestment Act (ARRA).[3] The Congressional Budget Office (CBO) predicts that under current policies, SNAP spending will fall in coming years as a result of the expiration of the ARRA benefit increase in November 2013 and continued improvement in the economy.[4] Recent analysis suggests that the number of SNAP participants receiving monthly benefits leveled off in 2011 and 2012, and month-to-month participation declines were reported in 2013 for almost half of all states.[5]

This document summarizes findings from a health impact assessment (HIA) that was conducted in 2012 and 2013 to inform Congressional deliberations on proposed changes to SNAP. The changes were proposed in the 112th and 113th Congresses. This report presents the final findings of the HIA.

The HIA was conducted by the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts. HIAs identify the potential impacts and benefits of a proposed policy, project, or program in order to inform policymakers, those affected by the decision, and others with an interest in the outcome and then offers practical options for maximizing health benefits and minimizing health risks.

Policy changes analyzed in the HIA

In February 2014, Congress passed the Agricultural Act of 2014, also referred to as the 2014 Farm Bill, and it was signed into law shortly after by President Barack Obama. The final bill reduced spending on SNAP by $8 billion over 10 years,[6] including a change to the Low Income Home Energy Assistance Program (LIHEAP) nominal payment, or Heat and Eat. This document looks at the legislative proposals before passage of the bill.

This HIA assessed changes proposed in several bills by the Senate and House during the 112th and 113th Congresses[7] that sought to reduce spending on SNAP by altering how states determine eligibility and benefit levels. Two specific policy changes were considered.

1. **Low Income Home Energy Assistance Program (LIHEAP)[8] nominal payment**: SNAP benefit levels for eligible households are calculated based on the household's net income and by the United States Department of Agriculture's estimate of the minimum cost of a nutritious diet. Some states allow SNAP households that also participate in LIHEAP to use receipt of a LIHEAP payment, even a nominal amount of $1 to $5 per year, as proof of high heating and cooling expenses rather than requiring these households to provide copies of monthly utility bills. These households can claim a heating and cooling standard utility allowance that enables them to deduct a set amount of utility expenses in calculating their net income and therefore receive a higher SNAP benefit amount. To reduce spending, both the House and Senate proposed changes to this nominal payment mechanism, which is commonly termed "Heat and Eat." This HIA considered a proposal to increase the minimum amount for a nominal LIHEAP payment to $10 or $20 per year. According to the CBO, this would reduce states' use of the nominal LIHEAP payment because of the added investment required by states to reach the minimum payment amount, thereby reducing spending on SNAP.

2. **Noncash categorical eligibility:** Categorical eligibility is a policy that allows states to automatically confer eligibility for several assistance programs at once. Most states use it to extend SNAP eligibility for households that qualify for Temporary Assistance for Needy Families (TANF).[9] This HIA considered the proposal by the House to eliminate categorical eligibility for SNAP among households that qualify to receive noncash TANF benefits, such as child care, counseling services, or brochures providing information about other available benefits. States would instead be required to use the federal SNAP income and asset eligibility standards to determine eligibility for households that receive noncash TANF benefits.[10]

This HIA also considered proposed changes intended to improve the food quality standards for retailers that accept SNAP.[*] Interim HIA findings were disseminated to provide timely, accurate health information during the deliberative process. This final report—published after the bill was signed into law—is intended to provide a complete record of the research conducted for this HIA.

This HIA relied on a range of data sources, analytic methods, and stakeholder input to address research questions regarding the potential health implications of changes to SNAP had they been implemented as proposed in 2013. The methods used in this assessment include quantitative analyses by Mathematica Policy Research to produce the eligibility and benefit level estimates utilizing a model developed for the United States Department of Agriculture (USDA) to aid in SNAP administration. A systematic literature review was conducted to inform the assessment of pathways linking policy changes to health outcomes. Interviews and focus groups were conducted with SNAP participants, and interviews were held with SNAP administrators at the state and local levels to better understand the

[*] The impacts described in this HIA, however, do not include an analysis of the proposals introduced in other versions of the bill, such as eliminating states' ability to waive work requirements for able-bodied adults without dependents as proposed by the House (e.g., H.R. 2642). The policy impacts of these proposed changes have been reported elsewhere. (For example, see Dottie Rosenbaum, Stacy Dean, Robert Greenstein. "House Leadership SNAP Proposal Would Eliminate Food Assistance for 4 Million to 6 Million Low-Income People," Center on Budget and Policy Priorities, August 2013, http://www.cbpp.org/cms/?fa=view&id=4002.)

potential impacts for program participants and administrators, respectively. The key findings of these analyses are summarized below and in Appendix D.

Findings: Health impacts of proposed changes

Changes considered to Heat and Eat would lower SNAP benefit amounts for some households. Using a model employed by the USDA to administer SNAP, Mathematica Policy Research conducted an analysis of how many people could lose eligibility or receive lower benefits under the policy changes that were under consideration. The changes that were proposed to the Heat and Eat program would reduce monthly benefits for some households, because states that currently use this mechanism are expected to use this approach less frequently as the cost of conferring nominal LIHEAP payments increases. Specifically, if the minimum LIHEAP payment were raised to $10 per year, it was estimated that between 300,000[11] and 500,000 households[12] would receive lower benefits. *The Agricultural Act of 2014 raised the minimum LIHEAP payment to $20 per year. This change is estimated to reduce the benefit amounts for as many as 850,000 households.[13] All of the affected households would have net incomes below the poverty line, and most would have either children or a disabled or older adult family member.[14]*

Changes considered to noncash categorical eligibility would reduce the number of people eligible for SNAP. Under the change that was proposed to eliminate noncash categorical eligibility, as many as 5.1 million people could become ineligible for SNAP, according to analysis conducted by Mathematica.[15] The people affected by these changes would be low-income Americans: 83 percent of those who would lose eligibility would have net income below the poverty line ($15,130 annual gross income for a family of two, or $23,050 for a family of four) even when counting their SNAP benefits as income. Among populations that have particularly high health risks, roughly 1.4 million children and 876,000 older adults would lose benefits entirely.[16] Those who lose benefits would lose an average of 38 percent of their income.[17] *The Agricultural Act of 2014 did not eliminate categorical eligibility for households that qualify to receive noncash TANF benefits.*

Losing access to SNAP could increase food insecurity, with important implications for health. Research consistently shows that food insecurity increases the risk of diabetes, heart disease, and depression or anxiety in adults; and asthma, cognitive impairment, and behavioral problems in children.[18] Children in food-insecure families are more likely to be hospitalized in early childhood than are those from food-secure households.[19] Medical costs related to food insecurity in the United States amount to as much as $67 billion per year in 2005 dollars.[20]

Under the proposed changes to categorical eligibility, more than half a million people who already experience food insecurity while receiving SNAP benefits would lose eligibility, which would exacerbate their food insecurity. Moreover, as many as 160,000 to 305,000 more individuals who were not food insecure could become food insecure. In addition to the direct effect of losing SNAP benefits, as many as 1.2 million school-age children in households that could lose SNAP eligibility would no longer be able

to directly certify for the school meal program through receipt of SNAP benefits. Making it more complicated to access school meals could exacerbate food insecurity for some children.

In focus groups and key informant interviews conducted for this HIA, SNAP participants noted that even though they receive benefits, they still sometimes do not get enough to eat. This circumstance was particularly common toward the end of the month when benefits were running out. Some recipients also described skipping meals or relying on local food assistance programs. Such experiences reinforce that for some SNAP participants, the level of benefits is already inadequate and that changes to SNAP eligibility or benefit amounts could pose additional challenges in getting enough food to eat.

Losing access to SNAP or receiving lower benefits could increase the risk of many illnesses for low-income Americans. Poverty is a well-recognized risk for many illnesses. As early as the 1800s, physicians observed that the problems associated with poverty—such as substandard housing, insufficient heating, dangerous work, and hunger and malnutrition—contributed to higher rates of illness and death among the poor.[21] A recent meta-analysis found that 133,000 U.S. deaths per year could be attributed to living below the federal poverty line, with an additional 39,000 deaths resulting from living in a neighborhood with a high poverty rate.[22] Poverty is linked to a number of negative outcomes for children, such as completing fewer years of school, working fewer hours and earning lower wages as adults, and a greater likelihood of reporting poor health.[23]

SNAP benefits can improve health by reducing poverty. Children in families receiving SNAP are less likely to have poor health outcomes[24] and more likely to be classified by their parents as being in good health and developing normally compared with children from low-income families that are not receiving SNAP benefits.[25] In focus groups and key informant interviews conducted for this HIA, a few SNAP participants described the additional stress they experienced during periods when they were not receiving SNAP assistance and reported that the increased stress resulted in weight loss, depression, and fear of not being able to feed their children.

Those who would receive lower SNAP benefits under the proposed changes include many seniors and people with disabilities receiving nominal LIHEAP payments. These households frequently subsist on fixed monthly incomes with limited cost-of-living increases and can have difficulty keeping pace with rising energy prices or rent increases. Food insecurity and challenges in paying for housing and energy increase the risk that low-income people will postpone needed medical care, ration or skip taking prescription medications, and rely more on emergency department visits and hospitalizations than regular medical checkups. For example, among low-income households receiving energy assistance, 32 percent with older adults report going without medical or dental care as a result of high home energy bills. [26] In focus groups and key informant interviews, SNAP participants talked about the importance of the energy assistance and some described how when resources were low, they paid only a portion of their heating or cooling bills in order to have cash to purchase food when SNAP benefits ran out.

Increases in poverty resulting from the proposal to eliminate noncash categorical eligibility could have important implications for medical costs. Under the change proposed to categorical eligibility, the U.S. poverty rate could have increased by over half a percent, according to recent research.[27] Our

analysis found that based on recent rates of diabetes in relation to poverty in U.S. communities, this increase in poverty could translate to a growth in government and private-sector medical costs for diabetes alone of nearly $15 billion over 10 years.[28] Thus, diabetes costs could have approached CBO's predicted $20 billion in savings over 10 years from implementing the changes to SNAP eligibility and benefit amounts that had been under consideration; the costs associated with the other diseases that could be affected by increases in food insecurity and poverty were not calculated in this HIA but could add to this amount.[29] These figures must be interpreted with caution: The fact that rates of diabetes correlate with poverty rates does not necessarily prove that a policy that increases poverty will cause an increase in diabetes. Nevertheless, the body of evidence is strong enough to support consideration of the health-related costs as part of policy discussions.

Recommendations

Final decisions on changes to SNAP should take into account the health risks and related potential costs that have been identified in this analysis. Should Congress decide to include changes to eligibility or benefits in its reauthorization of SNAP, the Health Impact Project, based on the findings of its HIA, offers the following recommendations to help address some of the health risks. These actions, however, would not fully mitigate the issues raised by this analysis.

1. Raise the asset limit for SNAP eligibility. A majority of families with incomes below the poverty line who receive SNAP could lose benefits because of their level of assets (such as personal savings). Allowing low-income families to build a small amount of savings or other assets while remaining on SNAP could contribute to better overall health by helping families to move out of poverty and improving their ability to weather unexpected financial emergencies. As described in the HIA findings, as many as 2.7 million low-income households could lose their SNAP benefits if categorical eligibility were to be eliminated. And the loss of SNAP benefits for as many as 2 million of these households could have occurred because they had countable assets over the federal limit, despite having net incomes below the federal poverty line.

2. Monitor health effects. Because of the strong connections between SNAP and health found in this HIA, the USDA should consider including health effects and related medical costs in implementing current SNAP monitoring and evaluation research, in keeping with the mandate of the National Nutrition Monitoring and Related Research Act of 1990.

Conclusion

The findings of this research and analysis suggest that the policy changes considered for SNAP eligibility and benefits would likely place the health of many low-income Americans at risk. Compared with changes to SNAP benefit calculations for Heat and Eat, the changes considered for SNAP categorical eligibility have the potential to affect far more people—as many as 5.1 million individuals. Both changes considered for eligibility and benefit determination were scored by the Congressional Budget Office to reduce spending on the SNAP program. Yet, as shown in the analysis in this report, the health

impacts identified could also push medical care costs much higher, with implications for state and federal medical spending. These possible costs should be balanced against the projected spending reductions.

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INTRODUCTION

Federal spending on SNAP grew from $34.8 billion in FY 2007 to $80.4 billion in FY 2012.[30] This growth has been attributed to several factors, including the recent rise in poverty and unemployment during the Great Recession; changes to state eligibility practices; and a temporary increase in benefit amounts conferred by ARRA.[31] The Congressional Budget Office predicts that even under current policies, SNAP spending will fall because of the expiration of the ARRA benefit increase in November 2013 and continued improvement in the economy.[32] The policy provisions reviewed as part of this analysis proposed to further reduce spending on SNAP by making changes to both the procedures that states use to determine eligibility for the program and the amount of benefits that participating households receive.

To add more information and another dimension to the debate, the Health Impact Project conducted a rigorous analysis to identify any unintended potential health risks or benefits of the SNAP changes that were proposed. The findings presented here reflect a detailed process that included a systematic literature review; a quantitative analysis using models employed by the USDA to administer SNAP; interviews and focus groups with SNAP participants; and interviews with state and local SNAP administrators to understand how the proposed eligibility and benefit level changes could affect the health of low-income Americans, with an emphasis on three issues:

1. Food insecurity and its impact on the risk of illnesses such as diabetes.
2. Diet, nutrition, and the risk of illnesses related to a poor diet, such as obesity and heart disease.
3. The impact of poverty on health and on people's ability to afford essentials related to health, including housing, home energy, and medical care.

Because medical care is now a leading budget item for states and the federal government, this HIA also analyzed the potential for the policy changes considered to have unanticipated implications for medical costs.

METHODS

As defined in 2011 by the National Research Council of the National Academies, "HIA is a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population. HIA provides recommendations on monitoring and managing those effects." [33]

This section describes the HIA process and summarizes the analysis conducted at each step.

HIA process

An HIA is conducted in six steps.[34] (See Figure 1.) Engaging stakeholders—including policymakers, those potentially affected by a decision, and others with an interest in the outcome—is essential to conducting an HIA and occurs throughout the process.

Overview of HIA steps

Screening. The screening phase determines which policy proposal(s) the HIA will assess. In the case of the Farm Bill, the HIA team sought to pilot the use of the assessment for a major federal policy decision. The anticipated timing of the bill's passage, its potential importance to health, the relevant subject matter, and policy expertise available among Health Impact Project staff and collaborators were among the factors contributing to the choice of the Farm Bill reauthorization.

The Farm Bill was omnibus legislation comprising a wide range of distinct policy topics, and the available staff resources and funding were insufficient to assess the health impacts of the entire bill. Consequently, screening involved selecting appropriate topic areas within the bill. Three topics were initially identified based on early Congressional proposals in 2012:

1. Changes to initiatives that support local food production and seek to increase consumer demand for fruits and vegetables.
2. Changes to the Conservation Title, which provides funding for farm environmental stewardship through programs that improve farm management practices, retire land, and protect farmland and other natural resources.
3. Changes to categorical eligibility and benefits for SNAP.

In June 2012, the Senate passed its version of the Farm Bill during the 112th Congress,[35] and the House Agriculture Committee passed a different version in July 2012.[36] The most substantial differences

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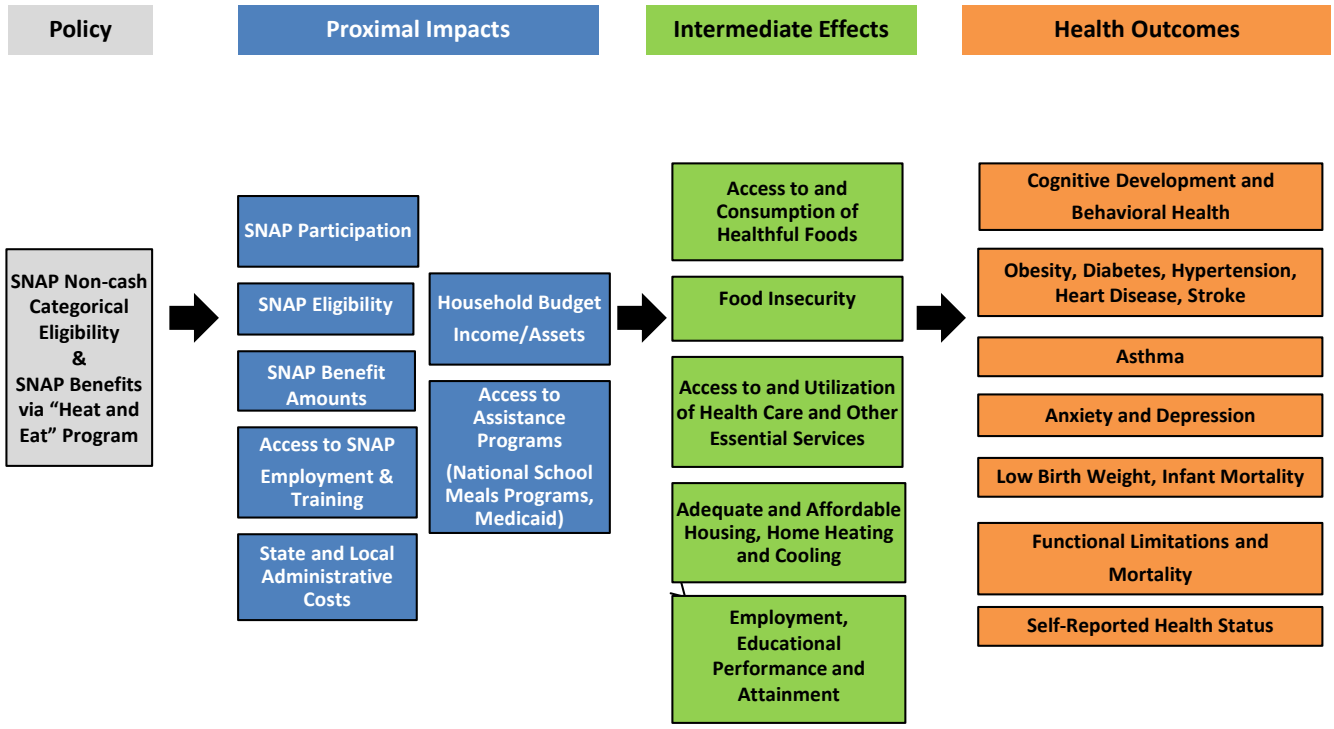
between these two bills were the proposed changes in how states determine eligibility and benefit levels for SNAP. An advisory committee (AC) discussed the appropriate focus for the HIA, and approximately 30 key informants conferred on the scope, timing, feasibility, and utility of the analysis. (See Appendix A and "Stakeholder engagement," Page 16). Using their input, the HIA team decided to focus on the proposed changes to SNAP eligibility and benefit levels.

Scoping. Scoping determines which potential health effects will be considered in the assessment. This step generally starts with a broad consideration of all potential impacts and then narrows to focus on those deemed most likely to have significant effects on health. Scoping for the Farm Bill HIA began with identification of factors important to health that could be affected by SNAP eligibility and benefit changes. In consultation with the AC and key informants (see "Stakeholder engagement"), the HIA team identified three core factors, or health determinants: food insecurity, nutrition, and income. These factors were then used to develop a set of hypothetical pathways through which the proposed SNAP policy changes could affect health (see Figure 2), and these were used to develop a set of detailed research questions. (See Appendix B.)

Figure 2. The Supplemental Nutrition Assistance Program (SNAP) Eligibility, Benefits, and Health Pathway



A pathway diagram is a tool used to display the hypothetical links between a proposed policy and health that is often used in HIA practice to guide research and analysis. This pathway diagram maps out the possible health outcomes that could result from the proposed policy changes.

Assessment. The assessment phase relies on a range of data sources, analytic methods, and stakeholder input to determine the most likely health impacts by analyzing the research questions identified in scoping. Methods used in this assessment included the following:

1. Microsimulation models estimated impacts on eligibility and benefit determination.

To estimate impacts on the number of people eligible for SNAP and the benefits they receive, we contracted with Mathematica Policy Research (Mathematica) to conduct analysis employing two models used by USDA: 1) the Quality Control (QC) Minimodel, which draws on a statistical sample of monthly state participants to assess the accuracy of eligibility determinations and benefit calculations, and 2) the Micro Analysis of Transfers to Households (MATH) SIPP+ microsimulation model, which references data from the Survey of Income and Program Participation (SIPP). Mathematica contracts with USDA to develop and maintain these models, which USDA uses to administer SNAP.

Both models produced estimates of the cost and participation effects of proposed changes to SNAP if they had been implemented in FY2012. The QC Minimodel estimates are based on QC data from actual participants and are compiled for the administrative purpose of tracking eligibility, benefit levels, and error rates for state programs. Therefore, QC data includes only information on asset values counted under state SNAP rules. Because many states do not impose asset tests for many or most applicants, QC data do not include comprehensive information on assets. The MATH SIPP+ database simulates eligibility and participation based on state rules and includes monthly information about assets regardless of whether the assets are used to determine SNAP eligibility.

The MATH SIPP+ microsimulation model was used to predict impacts when the heating and cooling standard utility allowance modified benefit calculations, because the model includes up-to-date state rules for energy assistance programs. For changes connected to categorical eligibility, estimates generated by the QC Minimodel and the MATH SIPP+ model were used to represent the range of potential impacts. Under changes to categorical eligibility, applicants for SNAP benefits would be subject to federal asset requirements: The QC Minimodel lacks complete asset information and may, therefore, underestimate how many people would be affected by the elimination of noncash categorical eligibility. The MATH SIPP+ database may offer a more accurate estimate because it includes information on assets. Therefore, we use the MATH SIPP+ estimates to assess the specific characteristics of households and individuals that could be affected by the proposed changes. Of note, the Congressional Budget Office also estimated changes in eligibility and benefit levels for the policy proposals under consideration. CBO estimates are provided for comparison where available, although its methodology is not publicly available. (See Appendix C for detailed information on the methods, data sources, and findings for this HIA.)

2. Expedited systematic review of the literature estimated health impacts.

The analysis in this HIA draws upon an expedited systematic review of the literature. A brief description of the search strategy, inclusion and exclusion criteria, and approach to reviewing the literature is below. The PubMed, Cochrane, and Campbell databases were searched for systematic reviews or meta-analyses of studies published between Jan. 1, 2000, and May 1, 2013, that

investigated associations between key constructs in our pathways and addressed specific research questions. If systematic reviews or meta-analyses were published within the last five years, the data were summarized for this analysis. If the review was published before Jan. 1, 2008, then the databases were searched for recent research studies subsequent to the end date of the published systematic review search.

If no systematic reviews or meta-analyses were identified, then a systematic search was conducted as follows: PubMed and Google Scholar databases were searched for extant literature published between January 2000 and May 2013. For specific content areas, additional relevant databases were also searched, including the USDA National Agricultural Library and SciVerse Scopus. Also searched were bibliographies of identified reports and reviews for additional references. Articles published in both gray literature and peer-reviewed journals were considered, as were research on hypotheses directly relevant to the pathway under investigation and among study populations within the United States. Studies were excluded from the literature review if they were editorial work, had been withdrawn or the citation information was incorrect, involved nonhuman animal models, or were not published in English.

In total, 892 sources were reviewed. They consisted of 316 reports; 564 peer-reviewed articles (including 35 systematic reviews or meta-analyses and 12 reviews), conference papers, books, and other electronic resources such as fact sheets and websites. These sources were reviewed, and key findings related to the specific research questions were extracted. No attempt was made to critically analyze the quality of the included studies, and all that met the criteria were included, even if they presented conflicting evidence.

3. Key informant interviews assessed potential administrative impacts.

Semi-structured key informant interviews with state and local SNAP administrators regarding the impacts on program administration were conducted to address research questions that were not covered in the literature, such as administrative costs or changes in participant behavior to access essential services.

A purposeful sample of administrative staff from seven state and local SNAP programs participated in semi-structured interviews by phone. State and local (county or city) SNAP programs were selected for the sample based on the following criteria: The SNAP programs utilize the categorical eligibility policy option and/or have a Heat and Eat component, and they represent programs operating in a range of geographic regions in the United States. Semi-structured interviews were conducted by two HIA team members whenever possible, and notes were taken during each interview. The notes were de-identified and read, and a code book was developed using an iterative process in which codes were applied, revised, and then finalized. Thematic data analysis was conducted to identify the key themes and constructs across the entire sample. A summary of the data and individual quotes that were extracted were reviewed by participating SNAP administrators to verify the accuracy of key findings. The findings were fact-checked by a member of the Pew research team.

The Johns Hopkins Bloomberg School of Public Health Institutional Review Board approved these data collection procedures.

4. Qualitative research to assess impacts on SNAP participants

Interviews and focus groups with SNAP participants were conducted to learn about the role of SNAP benefits in their lives, especially the impact on food insecurity and nutrition, household spending, and access to ancillary assistance programs, as well as possible ways to strengthen SNAP. Qualitative data were included as part of this HIA to supplement the quantitative data and provide a full picture of the experiences of and potential impacts on SNAP participants. Specifically, the qualitative data allowed for exploration of context, meaning, and depth of the SNAP participant experience beyond that found in the existing secondary data used in this HIA. Data collection occurred in partnership with the Minneapolis Medical Research Foundation because of its previous experience conducting similar research as a site for Children's HealthWatch.[37] The Minneapolis Medical Research Foundation at the Hennepin County Medical Center Office of Human Subjects Research approved these data collection procedures.

Participants who were at least 18 years of age and who spoke and read English were recruited from the outpatient clinics (Pediatric, Medicine, Coordinated Care, and Specialty) at the Hennepin County Medical Center. Research assistants approached patients in the clinic waiting room while they were waiting to be seen, briefly described the study, determined potential study eligibility, and collected the interested participants' contact information to remind them of the focus group and interviews two days before the scheduled date. Clinic case managers also provided referrals to the study. Stratified purposeful sampling[38] was used to assure that participants for key informant interviews represented important demographic categories within the SNAP population. Of the 10 key informants, six were female, four were parents or guardians of school-age children, and the average age was 43 years old (age range 29 to 60 years). At the time of the interview, participants had been on SNAP two to 13 years, and one participant had received SNAP intermittently for about 30 years. The reasons many of the participants received SNAP included filing for disability, losing their jobs, or becoming single parents. Also conducted were four focus groups of SNAP participants from demographic groups that were underrepresented in the sample of participants for the key informant interviews. The focus groups were composed of eight employed or employable men, nine employed or employable women, eight parents or grandparents with school-age children, and eight older adults at least 55 years of age. Approximately 22 percent of the work-eligible SNAP participants included in the qualitative data collection were employed.[39]

Each participant gave written informed consent before commencement of the interview or focus group. Remuneration for each participant consisted of $50, a bag of groceries, and transportation to and from the interview site when needed. Two members of the Health Impact Project team conducted the interviews and focus groups, which lasted approximately 60 to 90 minutes and were recorded and transcribed. Although an interview guide was used to facilitate the direction of the interviews and focus groups, discussions also included unexpected yet related topics and experiences.

Data analysis consisted of reading each transcript and developing a code book. Atlas.ti, a qualitative data management and analysis software, was used to identify the major themes for each of the HIA pathways across the interviews and focus groups. Topic coding,[40] which is a detailed review of the text that aims to identify categories of content related to the research questions, guided the analytic approach. Since these interviews were in-depth and semi-structured, the qualitative data are not enumerated according to the frequency of people who expressed each statement being shared. Instead, the frequency of each topic was described qualitatively to present common themes and unexpected experiences. To ensure that the collected data were valid, this aspect of the research was guided by the concepts of credibility, confirmability, and transferability, the latter of which is similar to generalizability when discussing the external validity of quantitative data.[41] Demographic data captured from participant data sheets were entered into a database and transferred to the statistical software STATA 13 for analysis.

Recommendations. The recommendations phase identifies possible actions to be taken by decision-makers that could minimize identified risks and maximize potential benefits. (See Appendix D for a summary of the impacts identified during the assessment.) Based on these impacts, the HIA team consulted with the AC and key informants to identify actions to minimize the health risks identified with changes to the SNAP program.

The interviews and focus groups with SNAP participants occurred after the initial assessment and recommendations had been drafted. The key themes identified in our analysis of interview and focus group data supported the findings of the assessment of the health effects, and the proposed recommendations.

Reporting. The reporting phase involves creation of an HIA report and broad dissemination of its information to a wide range of stakeholders. Reporting occurs throughout the process and is not limited to the publication of the final report. According to the National Research Council's guidance on HIAs, it is "in the interest of decision-makers and the HIA team to keep in constant communication throughout the HIA process so that emerging results can be incorporated into the policy."[42]

The HIA team engaged in these efforts through interactions with the AC, key informants, and other stakeholders and by public dissemination of the findings at various junctures throughout the reauthorization debate to ensure the timely distribution of findings that could inform the policy discourse.

In the case of this HIA, an initial findings document was released on the Health Impact Project website and emailed to Congress and stakeholders in January 2013, and input was sought from policy experts and stakeholders to inform the final HIA. Then a white paper was released following the same protocol in July 2013. This HIA is updated to include the newly available SNAP participant data, acknowledge stakeholder participation, and incorporate the final HIA steps.

Monitoring and evaluation. The final phase of monitoring and evaluation includes evaluating the HIA according to accepted standards of practice and ongoing monitoring and evaluation of the impact the

HIA had on the decision it seeks to inform. An evaluation of process and outcomes is ongoing to identify opportunities for improvement in HIA practice and potential influences of the HIA, respectively. Tracking the changes in health indicators of a newly implemented policy as suggested in the recommendations of this assessment will support efforts to monitor and evaluate the potential health impacts of proposed changes to SNAP.

Stakeholder engagement

Stakeholder engagement continues throughout an HIA and is important for informing all steps of the assessment. Several components of stakeholder engagement were conducted for this HIA.

a. **Advisory committee.** The HIA team convened an advisory committee made up of five participants selected for their relevant expertise in public health and farm policy and for their ability to speak to a diverse range of political perspectives on food and agricultural policy. The AC met in person during screening and scoping. Thereafter, the HIA team sought input from the AC at key points in the process. The AC was not a decision-making body, although its input and advice carried substantial weight. The team had final authority and responsibility for the HIA process, findings, and recommendations.
b. **Expert consultation.** Key informants on food, agricultural economics, hunger and nutrition, political sciences, food systems, and farm policy were selected and engaged via in-person and/or telephone conversations. These experts shared their insights on the policy debate, offered suggestions on the HIA's scope and analyses, and provided feedback before the release of assessment findings.
c. **Policymaker consultation.** The HIA team consulted Congressional staff involved in the Farm Bill. Legislative staff members from both Democratic and Republican offices in the House and Senate agriculture committees were consulted. The HIA team also consulted staff in USDA's Food and Nutrition Service.
d. **State and local SNAP administrator interviews.** Interviews with a sample of state and local SNAP administrators were conducted during the assessment step of the HIA, and they provided insight into how the proposed policy change to categorical eligibility and LIHEAP would affect program administration and integrity as well as SNAP participants. Notes were assembled, read, and coded by two members of the team to enhance reliability. Thematic data analysis was conducted to identify the main themes and constructs across the entire sample of SNAP administrative staff. These themes were integrated into the HIA baseline and impact analyses.
e. **SNAP participant interviews and focus groups.** Semi-structured key informant interviews and focus groups were conducted with SNAP participants to learn about their experiences with SNAP regarding the health indicator pathways explored in this HIA. These data, collected by two members of the team during the assessment phase, were transcribed and coded. Data analysis was conducted to identify main themes related to the research questions for the entire sample of SNAP participants. These themes were integrated into the HIA current conditions and impact analyses.

Background on policy and program participants

Policy context

SNAP became a point of contention during the Farm Bill reauthorization debate. Some members of Congress expressed concern that growth of the program had been unchecked.[43] Categorical eligibility rules, which allow states to enroll people in SNAP based on a determination of eligibility for other public support programs such as Temporary Assistance for Needy Families (TANF), were under scrutiny as a reason for the expansion.[44]

Of the SNAP changes proposed in Senate and House legislation during 2012 and 2013,[45] the largest spending adjustments would come from two modifications to the rules used by states to determine SNAP eligibility and benefit levels.

Low Income Home Energy Assistance Program[46] nominal payment. The amount of SNAP benefits that eligible households receive is determined by the household's net income and by the USDA's estimate of the minimum cost of a nutritious diet. At the time this HIA was conducted, 14 states and the District of Columbia permitted SNAP households to use receipt of a LIHEAP payment, even a nominal amount of $1 to $5 per year, in lieu of copies of monthly utility bills as proof that they have high heating and cooling utility costs.[47] These households can then claim a heating and cooling standard utility allowance, which lowers their net household income. This Heat and Eat mechanism allows a household to receive higher monthly SNAP benefits. The minimum LIHEAP payment required to claim an allowance would have increased to $10 per year under Senate proposals and $20 per year under House proposals.[48] *The Agricultural Act of 2014 includes the proposed change to raise the minimum LIHEAP payment to $20 per year.*

Noncash categorical eligibility. Households in which all members receive cash TANF, Supplemental Security Income (SSI), or state General Assistance are categorically eligible for SNAP. In addition, under current law, states may confer SNAP eligibility to households that have been determined to be eligible to receive noncash TANF-funded benefits according to the state's TANF eligibility criteria.* States have various gross income thresholds for eligibility for noncash TANF benefits, ranging from 130 percent of the federal poverty level (consistent with federal income eligibility standards for SNAP) to as high as 200 percent, and 12 states apply an asset test. Regardless of state *gross* income and asset eligibility criteria to receive benefits, households must have a *net* income (income after offsetting for allowable deductions) below 100 percent of the federal poverty level to receive benefits.[49] There are some federal and state exceptions for people with disabilities and adults ages 60 or older.[50] House proposals would eliminate noncash categorical eligibility, which would require states to use the federal SNAP income and asset limits. Senate proposals did not include changes to

* TANF's noncash benefits include, for example, child care, counseling services, or brochures providing information about other available benefits.

categorical eligibility.[51] *The final bill as adopted by Congress and signed into law did not include a change to categorical eligibility.*

According to the CBO, increasing the nominal LIHEAP payment to $10 per year as proposed by the Senate (S. 954) would result in a SNAP spending reduction of $4.1 billion over 10 years. Together, the changes to categorical eligibility and raising the nominal LIHEAP payment to $20 per year as proposed by the House (H.R. 2642) would result in a SNAP spending reduction of $20.5 billion over 10 years.[52]

Other proposed changes

This analysis also considered proposed changes intended to improve the food quality standards for retailers that accept SNAP. Under these changes, stores that are permitted to receive SNAP benefits would be required to offer at least three categories of perishable foods (the previous standard was two categories).

This HIA does not include an analysis of the proposals introduced as a part of Farm Bill deliberations in 2013, such as eliminating states' ability to waive work requirements for able-bodied adults without dependents as proposed by the House (e.g., H.R. 2642). The policy impacts of these proposed changes have been reported elsewhere.[53]

Characteristics of the SNAP program and participants

Under federal rules, households eligible for SNAP have gross incomes at or below 130 percent of the federal poverty level (except households that include elderly people or adults with disabilities).[54] However, the vast majority of SNAP households (approximately 97.3 percent) have net incomes at or below the poverty line.[55] More than 42 percent of SNAP households live in "deep poverty," with gross monthly incomes at or below 50 percent of the federal poverty level. (See Table 1.) For a family of four in 2012, that equaled $960 or less per month.[56]

Table 1: Monthly Income According to 2012 Federal Poverty Guidelines

	Gross monthly income			
Federal poverty level	1 person	2 people	3 people	4 people
50% ("deep poverty")	$465	$630	$795	$960
100%	$931	$1,261	$1,591	$1,921
130%	$1,211	$1,640	$2,069	$2,498

Source: U.S. Department of Health and Human Services, "2012 Poverty Guidelines," http://aspe.hhs.gov/poverty/12fedreg.shtml. Calculation for adjusted figures available upon request. Note: USDA used the 2012 guidelines through September 2013.

On average, SNAP provided benefits each month to more than 43.2 million people living in more than 20.1 million households in 2012.[57] Of these participants, more than 18 million (42 percent) were children and nearly 4 million (9 percent) were seniors.[58] Fifty-three percent of households self-identified as white, 22 percent as African American, 19 percent as Hispanic,

and 6 percent as being from other racial and ethnic categories.[59] More than 45 percent of participating households included children, and about half of these households were headed by a single parent.[60] Seventeen percent of households included a nonelderly adult family member with a disability, and 18 percent had an elderly family member living in the home.[61]

Health-related costs for SNAP participants

SNAP households have limited monthly budgets and spend a large share of their income on basic needs such as food, housing, and home heating and cooling. For more than a third of SNAP households, these expenses make up more than 50 percent of their gross income.[62] Evidence shows that a substantial proportion of SNAP households face high housing and utility costs, which can limit the income participants have available to purchase food.[63] Medical expenses constitute a significant budget item for many households as well. For example, among SNAP households with seniors or disabled members, more than 1.4 million spend more than 10 percent of their gross income on medical expenses.[64]

Participation in the National School Meals Programs and Medicaid

Children in households that receive SNAP benefits are directly enrolled in the National School Lunch Program (NSLP) and School Breakfast Program to ensure that they receive adequate nutrition during the school day. Directly certifying these children streamlines state administration of these programs and ensures timely access to school meals. In 2012, 12.1 million SNAP participants were school-age children.[65] Nearly all of these children (99.9 percent) also qualified for free or reduced-price school meals based on their households' gross incomes.[66]

How much do people on SNAP receive?

Because SNAP is intended to allow low-income families to purchase enough food, USDA relies on an estimate of the minimum cost of a nutritious diet to determine how much people with various incomes require in additional support. Specifically, USDA uses the "Thrifty Food Plan,"[67] a prototype meal plan defined as "a national standard for a nutritious diet at a minimal cost."[68] USDA expects that households eligible for SNAP will spend 30 percent of their monthly net income on food.[69] To calculate each household's benefit amount, 30 percent of the household's net income is subtracted from the maximum monthly allotment for a household of that size. The maximum monthly allotment is calculated based on costs for a family of four under the Thrifty Food Plan and then adjusted for differing household sizes. (See Table 2.) For

Table 2: Example of monthly SNAP benefit calculation for a four-person household in the contiguous U.S., FY 2013

Household gross income	$1120
Household net income*	$960
Max. allotment for a household of 4	$668
Subtract 30% of net income (.3 x $960)	-$288
Household monthly SNAP benefit	=$380

*Net income is calculated by subtracting certain deductions, such as a heating and cooling standard utility allowance, from a household's countable gross income.

Note: Deductions used to calculate net income include a standard deduction, an earned income deduction, and deductions for specific expenses, such as medical expenses for seniors or disabled household members, child or dependent care, and shelter costs. The deductions used to calculate net income for SNAP benefits are different than those used for federal tax purposes. Shelter deductions were capped at $459 a month in FY 2012 except in households that included elderly people or adults with disabilities. The Congressional Budget Office estimated $4.30 per person per day in FY 2011, which amounts to $1.43 per person per meal.

Source: Congressional Budget Office, "An Overview of the Supplemental Nutrition Assistance Program," accessed June 2013, http://www.cbo.gov/publication/43175.

example, a four-person household with a net monthly income of $960 would receive a monthly SNAP benefit of $380 as calculated in Table 2, or roughly $1.50 per person, per meal.[70]

Limitations of the SNAP benefit amount

The proposed policy changes occurred in an environment in which SNAP was already under scrutiny for its ability to help low-income families purchase enough food. USDA recently asked the Institute of Medicine (IOM) and the National Research Council (NRC) to evaluate the adequacy of the SNAP benefit amount.[71] The IOM/NRC committee concluded that certain factors—shelter or medical costs, time to prepare purchased food, barriers to accessing food outlets, or geographic food price variation—may not be sufficiently accounted for in the current benefit allotment.[72] Thus, for many SNAP households, benefit amounts may not be sufficient. Of note: In 2009, as part of the ARRA, the monthly benefits for SNAP increased by an average of 15 percent,[73] but this temporary increase ended Oct. 31, 2013. A substantial proportion of SNAP households face high housing costs in excess of the current cap on the shelter deduction (capped at $459 a month in FY 2012), which results in overestimation of the income participants have available to purchase food.[74]

Who would lose benefits and who would lose eligibility under the proposed changes?

Raising the nominal LIHEAP payment to $10

According to Mathematica's analysis using the SIPP+ database, raising the minimum nominal LIHEAP payment to $10, as was proposed by the Senate, would reduce monthly benefits for an estimated 304,000 current SNAP households (Table 3).[75] Under CBO's estimate—the methodology for which is not public—approximately 500,000 households would receive lower benefits.[76] These impacts would all occur in the 14 states (and the District of Columbia) currently implementing the Heat and Eat program.[77]

Table 3: Raising the LIHEAP Nominal Payment to $10 Which households would see benefits reduced? (per SIPP+ model)

Total individuals	499,000
Total households	304,000
Share of SNAP households	1.5%
Households with:	
Children	93,000 (31%)
Elderly individuals	88,000 (29%)
Disabled nonelderly	98,000 (32%)
Gross income at or below poverty	268,000 (88%)
Net income at or below poverty	304,000 (100%)
Any earned income	67,000 (22%)

- The monthly SNAP benefit for households in those states would decrease by an average of $67 according to Mathematica's estimate,[78] or $90 according to CBO.[79] On average, the benefit reduction would be 6.7 percent of the household's monthly income, inclusive of SNAP benefits.
- A majority of households that would receive lower benefits have children (31 percent of affected households) or a nonelderly disabled (32 percent of affected households) or senior member (29 percent of affected households). Households receiving Supplemental Security Income (SSI) in the affected states would lose 7.8 percent of their income when including their SNAP benefit, while households receiving Social Security would lose 7.4 percent.

- All of the households that would see a benefit reduction have take-home pay (net income) below the poverty line, and most (88 percent of affected households) are in deep poverty (below 50 percent of the poverty line).

Eliminating noncash categorical eligibility and raising the nominal LIHEAP payment to $20

As considered by the House, the elimination of noncash categorical eligibility could cause between 1.6 million and 5.1 million individuals to lose eligibility for SNAP (Table 4).[80] Households with gross income above 130 percent of the federal poverty level (except in households that include elderly people or adults with disabilities),[81] more than $2,000 in assets ($3,250 for those with a disabled member or adult age 60 or older), or more than one car per adult would be ineligible, as these federal thresholds defined under SNAP law would replace state limits allowed when states use noncash categorical eligibility.[82] Using a model that does not account for household assets (QC), Mathematica estimates that as many as 686,000 households—1.6 million individuals—could lose benefits, mainly because they exceed the income threshold.[83] Using a model that accounts for SNAP participants' assets (SIPP+), however, Mathematica estimates that as many as 2.7 million households, or 5.1 million individuals, could lose benefits. For comparison, the CBO has estimated that 1.8 million individuals could lose benefits.[84] These impacts would all occur in the 43 states currently utilizing a noncash categorical eligibility policy.[85]

Table 4: Eliminating Noncash Categorical Eligibility
Which households would lose eligibility? (per SIPP+ model)

Total individuals	5.1 million
Total households	2.7 million
Share of SNAP households	13%
Households with:	
Children	810,000 (30%)
Elderly individuals	771,000 (29%)
Disabled nonelderly	318,000 (12%)
Gross income at or below poverty	1,660,000 (62%)
Net income at or below poverty	2,207,000 (82%)
Any earned income	952,000 (36%)
Reason for ineligibility:	
Fail the asset test	2,024,000 (76%)
Fail the income test	561,000 (21%)
Fail both	90,000 (3%)

Of the households projected to lose SNAP benefits using the SIPP+ model, most (76 percent) would lose eligibility for exceeding the assets threshold; 21 percent would lose eligibility because their income is over the federal limit (a gross income higher than 130 percent of poverty or a net income higher than 100 percent of poverty), while 3 percent would lose eligibility for having both income and assets over the federal limits.

- Ineligible households would lose an average of $228 a month in benefits, approximately 38.1 percent of their monthly income, inclusive of SNAP benefits.[86]
- Of the 5.1 million individuals projected to lose eligibility, roughly 83 percent live in households that have take-home pay (net income) below the poverty line. Indeed, more than two-thirds (69 percent) have take-home pay less than half of the poverty line ($465/month). Of these 2.2 million households with net income below the poverty line, approximately:
    - 75 percent have gross income below poverty.
    - 38 percent have earnings (in most cases, indicating that they are working).
    - 18 percent have an able-bodied adult not currently employed and expected to work under SNAP requirements.

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- 65 percent have household heads with educational attainment beyond a high school or general equivalency diploma.
- 59 percent pay more than half of their total monthly income on housing and utilities.
- 10 percent receive insufficient SNAP benefits to fully alleviate food insecurity.

In addition to changes considered for categorical eligibility, legislation proposed by the House also included revisions to Heat and Eat, such as raising the nominal LIHEAP payment to $20. The Agricultural Act of 2014 includes this proposed change. It is estimated that this change would reduce benefit amounts by an average of $90 a month for 850,000 low-income households.[87]

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Health impacts of proposed changes in SNAP eligibility and benefit levels

The following sections consider the available evidence to determine how the changes to categorical eligibility and benefit determination considered by Congress could affect the health of SNAP participants through three principal pathways: 1) food insecurity (i.e., difficulty obtaining enough to eat), 2) diet and nutrition, and 3) poverty and the ability to afford essentials important to health, such as housing, home heating and cooling, medications, and medical care. Finally, the analysis also briefly considers the impact of the proposed changes on health through implications for employment and program administration.

How would the proposed changes in SNAP eligibility and benefit levels affect health through their impacts on food insecurity?

Background and current conditions

Food insecurity refers to difficulty getting enough to eat and is common in the United States. Rates of food insecurity are measured by answers to a standard questionnaire developed by the federal government. Questions seek to identify households that are having difficulty meeting basic food needs over the course of a year, and ask about going hungry, running out of food, and/or not having money to buy more.[88] In 2012, almost 15 percent of U.S. households (17.6 million) were classified as food insecure on the basis of this national survey.[89]

Receiving SNAP benefits reduces the prevalence of food insecurity. Studies have shown that SNAP reduces household food insecurity between 18 percent and 30 percent and reduces the likelihood of a household having very low food security (meaning that members of the household do not have enough to eat at times) by 20 percent or more.[90] A recent study found short-term participation in SNAP can have impacts on food insecurity. Participating in SNAP for about six months was associated with a 4 to 10 percent decrease in the share of SNAP households that were food insecure.[91] Nevertheless, nearly half of the households participating in SNAP will still qualify as food insecure at some point in the year.[92] These estimates suggest that even at present levels, SNAP benefits are not sufficient.

A majority of SNAP participants engaged in interviews and focus groups were food insecure.[93] These individuals described difficulties in getting enough to eat, typically at the end of the benefit month. In these instances, SNAP participants skipped meals; consumed low-cost, unhealthy foods, such as frozen dinners, boxed macaroni and cheese, or instant noodles; or sought assistance from food shelves/pantries, food banks, or social service programs that offered free meals. Several focus group participants described ways in which they used community food service programs (which typically allow visits only once per month) to augment what they are able to afford with SNAP. For example, one participant said:

> "I would always save my trip to the food shelf for the week before I would get my food stamps because they allowed me [to get] meat or cheese or other necessities, tuna fish. So I could stretch that last week before my food stamps would come in."

Several of the parents who participated in the interviews or focus groups also reported going hungry or skipping meals to ensure that their children had food to eat.[94]

Food insecurity puts people at risk for a range of serious illnesses. A wide range of research has shown food that insecurity increases the risk of diabetes, heart disease, and depression or anxiety in adults; and asthma, cognitive impairment, or behavioral problems in children.[95] The total cost for mental health services and poor health related to hunger and food insecurity has been conservatively estimated at $67 billion per year in 2005 dollars.[96] Evidence suggests that those who have experienced episodes of food insecurity may change their diets to avoid future episodes of having trouble getting enough to eat. For example, there is evidence to suggest that food insecurity may increase an individual's preference for less nutritious "junk foods," which may contain more calories but less nutritional value; in turn, some who are food insecure may have higher body fat and face diet-related health risks.[97]

Adults living with the most severe levels of food insecurity have more than twice the risk of diabetes compared with adults who have access to enough food.[98] Diabetic adults who do not have enough to eat need more medical attention, have fair or poor health, and have more difficulty following a diabetic diet than those who did have enough to eat.[99] Further, compared with diabetic adults who have enough to eat, those who are food insecure are twice as likely to delay paying for testing supplies and diabetes medications, and more than twice as likely to report having low blood sugar.[100] A recent study found that low-income diabetics had a higher risk of hospital admissions because of low blood sugar at the end of the month, a time when food budgets typically run short, which highlights the impacts on health that can result from insufficient food budgets.[101] According to data collected in focus groups and interviews with SNAP participants conducted for this HIA, taking medication with food as prescribed by a doctor to manage a chronic condition, such as diabetes, was challenging for some SNAP participants, particularly those who were food insecure.[102]

Food insecurity places children at particularly high risk. For example, food-insecure children have significantly higher odds of being hospitalized in early childhood than those from food-secure households of comparable income levels.[103] Research has also shown that food insecurity affects children's mental health and well-being, as measured by educational performance, rates of behavior problems, aggression, and anxiety.[104] Kindergartners from food-insecure households experienced smaller gains in reading and math scores over time, relative to children from food-secure households.[105] For example, children in kindergarten whose families were not food insecure had an average gain of 84 points in reading scores by the third grade, compared with a 73-point gain among children who were food insecure.[106] These impacts are relevant because of education's important influence on health later in life.[107]

Receiving SNAP benefits lessens the risk of illnesses related to food insecurity. Because of the well-demonstrated improvements in food security among SNAP participants, there is strong evidence that SNAP benefits health, particularly among children.[108] A study of families during the Great Recession

highlights this conclusion: In the two years after the increase to SNAP benefits contained in ARRA, children in families receiving SNAP were nearly 1¼ times more likely to be classified by their parents as being in good health and developing normally, compared with children from families eligible for, but not receiving, SNAP.[109]

Impacts to food insecurity of the SNAP changes considered

The changes to categorical eligibility and benefits levels considered by Congress would increase food insecurity among low-income Americans. Roughly 357,000 households that would receive lower benefits or lose eligibility for SNAP under the changes considered by Congress to Heat and Eat and noncash categorical eligibility were food insecure.[110] These food-insecure households would lose as much as $310 per month—a third of their monthly income inclusive of SNAP benefits.[111] USDA estimates of how SNAP households adjust their food purchases with a change in SNAP benefits indicate that households losing benefits under the policy changes considered would likely spend 17 percent to 47 percent less on food and therefore have a higher risk of food insecurity.[112] More than half a million food-insecure individuals would lose eligibility, and as many as 160,000[113] to 305,000[114] more individuals could become food insecure because of the elimination of noncash categorical eligibility.

During focus groups and key informant interviews conducted for this HIA, SNAP participants also described the anxiety and stress they would feel if their benefits were reduced. Specifically, parents and guardians described their worries related to feeding their children. This experience was captured by a parent who shared the following:

> "The other point was, who eats, me or the kids? There was many a day I would wait and make sure that they ate. If there were leftovers, that was my dinner. I can remember skipping meals to make the budget last longer. It wasn't a lot of meals, because I'm really good at stretching that dollar, but there were times."

Under the changes considered to categorical eligibility, school-age children could face additional food insecurity risks. Mathematica projects that as many as 1.2 million school-age children eligible for free or reduced-price school meals would lose SNAP eligibility, and the estimated 1.04 million of these children in households that could lose SNAP eligibility would still qualify for a free lunch (because their household income is at or below 130 percent of the federal poverty line) but would no longer be able to directly certify for the school meal program through receipt of SNAP benefits.[115]

Requiring additional documentation of income with school meal program applications is likely to reduce access to the program among eligible households.[116] Therefore, the elimination of categorical eligibility would result in an estimated 156,000 [117] to 210,000 (based on CBO estimates)[118] school-age children not receiving free school meals for which they are eligible.

In focus groups and interviews with parents and guardians of school-age children conducted for this HIA, SNAP participants noted the importance of the school meals programs for their children. Some parents and guardians described how the availability of one or two meals at school for their children was important to stretching the monthly SNAP allotment. For example, when the school meals

programs were not available, such as during holidays or summer months, these parents described the challenges of feeding their children additional meals with the same SNAP benefit amount. During a focus group with parents and guardians of school-age children conducted for this HIA, an exchange between two parents provides an example of how some SNAP participants may experience this issue:

> Female 1: "You do better when school is in with the kids, because the school feeds them a little bit, but during the summertime … the stamps, like, they shrink, because they eat more and then they are running and playing and they go running stuff out and come back in and want something else."
> Female 2: "Right, they burn up energy, and they have to—the kids do have to eat. And the main thing I think SNAP is for the children, right."
> Female 1**:** "Yeah. I think they should raise them in the summer, though. Because the school is out. Then they have the lunch programs [summer lunch programs]. Everybody can't get to the lunch program. They're not in every neighborhood. So this is what I think. I think they should just give you a little more the summertime."

Food insecurity is a serious health problem that increases the risk of many illnesses for millions of Americans.[119] The changes to categorical eligibility and to benefit determination for LIHEAP households that were proposed by Congress would reduce or eliminate SNAP benefits and increase food insecurity, which could in turn have negative health implications for low-income children and adults.

How would the changes considered for SNAP eligibility and benefit levels affect health through their impacts on diet and nutrition?

Background and current conditions

Policymakers and researchers have wondered whether receiving SNAP affects how people eat, and some have raised concerns that SNAP may contribute to diet-related illnesses such as obesity because participants can purchase "junk" foods with their benefits. The research on how SNAP affects diet and diet-related health problems is complex: The systematic literature review conducted for this HIA found that studies have sometimes produced inconclusive or conflicting results. People make food choices based on many factors, including food price, personal preferences, social norms, and the types of food most readily available in the neighborhood. Although the cost of eating a healthy diet has received much attention, the available research suggests that other considerations, such as taste or convenience, may play a more important role.

The majority of Americans, including SNAP participants, fail to meet the federal guidelines for a healthful diet. Most research finds that SNAP participants have an overall diet quality comparable to people with similar income and demographic characteristics who do not participate in SNAP.[120] Failure to meet dietary guidelines can increase the likelihood of obesity and related health risks such as certain

cancers, diabetes, high blood pressure, and cardiovascular disease. Some studies have found that for certain components of their diet, such as fruits and vegetables, SNAP participants fare worse than the general population.[121]

Many low-income Americans, including SNAP participants, live in areas that lack easy access to fresh, healthy, and affordable food. More than 29.7 million Americans live in low-income neighborhoods without supermarkets or grocery stores within a mile of their homes.[122] These neighborhoods are also more likely to have higher concentrations of fast food restaurants and convenience stores that may not stock fruits and vegetables.[123] Although there are limitations to assessing how these environments may affect health, most studies report that living in an environment with limited access to healthful foods can increase the risk for diet-related illnesses.[124] An IOM committee exploring the adequacy of SNAP benefits reported that limited availability of healthy foods, greater availability of highly processed foods, and limited access to outlets that offer a variety of food choices may all be important environmental influences on food purchasing power for SNAP participants.[125] Around the country, programs have been implemented to increase access to and consumption of fresh and healthy foods among SNAP participants. Preliminary results from USDA's Healthy Incentives Pilot, which provides an incentive of 30 cents for every dollar that SNAP participants spent on targeted fruits and vegetables, indicates that participants' intake of targeted fruits and vegetables increases when there is improved availability of healthful foods in the retail market and they have the financial resources.[126]

Nearly all of the SNAP participants engaged through interviews or focus groups for this HIA reported barriers to accessing healthy foods, most notably related to lack of transportation to food stores with low-cost, healthful foods. Most did not own a car and described getting rides or having to take the bus to a grocery store in order to access high-quality produce, because the stores near their homes offered limited options for buying more nutritious foods. Individuals who encountered transportation barriers described having to purchase food from the closest stores, which reportedly often had higher prices and lower-quality produce than the stores they would prefer to use. In addition to transportation barriers, several SNAP participants described other barriers to accessing and eating healthy foods. One participant who had hypertension said the following about the challenges of eating well:

> "Fresh produce, fresh meats, fresh dairy, those things tend to cost more than to go into the center aisles and buy a box of macaroni and cheese, or a can of soup or package mix, baking mix, something like the starchy foods. That's what I prefer to call them. Those things are cheap but they're not good for a person who has my health issues. Those prepackaged things always have more preservatives. They have more salt. They have more sugar. It would be nice to have enough money to buy the fresh [foods]."

Impacts to diet and nutrition of the SNAP changes considered

With reduced benefits, SNAP households would be even less likely to achieve recommended diets. Like a majority of Americans, most SNAP participants fail to meet dietary guidelines.[127] Those who would receive lower benefits or lose benefits altogether would have less money available for adequate and healthful food purchases and a higher likelihood of experiencing food insecurity. Research studies

suggest that this can have harmful effects on the quality of people's diets.[128] Data also suggest that low-income neighborhoods are less likely to have stores that stock a full range of nutritious foods;[129] transportation time and cost have also been suggested as barriers to accessing foods necessary to meet dietary guidelines for a healthy diet.[130] Considering that roughly two out of three adults and one out of three children receiving SNAP benefits are overweight or obese,[131] this impact could exacerbate the already substantial risk of diet-related health problems, particularly for this sub-population of SNAP participants.

New standards considered for retailers that accept SNAP present an opportunity to improve the quality of food available to participants. New requirements considered by the Senate and House would require SNAP retailers to offer at least three categories of perishable foods (previously two). This could have a favorable impact on diet and nutrition for SNAP participants by increasing the number of retail outlets in underserved communities with the capacity to provide both perishable and staple foods.[132] With little progress in 2013 to Congressional deliberations on the Farm Bill, USDA moved forward on this issue and from August to October sought public comments to inform rules governing SNAP retailers. The proposed rules strengthen requirements for stores to offer healthy food choices in order to receive authorization to accept SNAP benefits.[133] *The Agricultural Act of 2014 includes requirements for SNAP retailers to stock more perishable foods, which could improve access to healthy food options.*

How would the changes considered for SNAP eligibility and benefit levels affect health through their impacts on poverty and budgeting for essentials?

It has long been recognized that hardships such as poor-quality and overcrowded housing, insufficient heating, dangerous work conditions, and hunger and malnutrition contribute to higher rates of illness and death among the poor.[134] Although SNAP benefits may be used only for food purchases, they add to the overall income available to support other basic needs and cover essential expenses as well.

This section explores three aspects of poverty as they relate to the changes proposed to eligibility and benefit determination and the implications for public health. Section A considers the relationship between income and health and forecasts how the proposed policy changes would affect poverty rates, the risks of illness, and certain medical costs. Section B focuses on "material hardship," or the tradeoffs that low-income families make among food, heating, medical expenses, and housing. Finally, Section C analyzes the links between "asset poverty"—defined as not having enough savings to allow a household to subsist at the federal poverty line for three months—and health.

A. SNAP and Poverty

Background and current conditions

Poverty is common: Nearly half of all Americans have experienced being poor at some point.[135] In 2012, 15 percent of Americans, or 46.5 million people, lived in poverty as defined by the U.S. Census Bureau.[136] While poverty is prevalent in the United States, studies suggest that a majority of poor individuals remain poor for only short periods of time.[137] This is consistent with the fact that nearly one

in five Americans has received SNAP benefits in his or her lifetime.[138] The average length of time a new participant receives SNAP benefits is eight to 10 months.[139] Therefore, SNAP's impact should be evaluated not only by how the program affects diet and food security but also by how receiving benefits may influence health through their function as supporting income.

Poverty is linked to a number of negative outcomes for children, with lifelong impacts on health. Research has shown that children from low-income households are likely to complete fewer years of school, work fewer hours, and earn lower wages as adults than their peers from higher-income households, and these impacts translate into a greater likelihood of being in poor health.[140] With almost one in five American children living in households that have income below the federal poverty line, it is estimated that living in poverty as a child costs our nation at least $170 billion per year in lost productivity and poorer health.[141] The deleterious effects of poverty on health are evident even for those above the federal poverty line: Middle-income people are less healthy than those with high incomes.[142]

Receiving SNAP benefits improves health by reducing poverty. SNAP benefits, when counted as income, reduce the number of Americans in poverty by more than 4 percent, according to a recent USDA study.[143] In 2011, SNAP lifted more children—1.5 million—out of severe poverty than any other federal program.[144] Research has shown direct health benefits related to SNAP's anti-poverty effects. One study found that low birth weight and infant mortality were less probable outcomes for infants whose low-income mothers received food stamps (SNAP's predecessor) during pregnancy.[145] In another study, children whose mothers received food stamps or SNAP benefits while pregnant or while those children were very young were shown to have less risk of obesity, diabetes, high blood pressure, and heart disease as adults.[146]

Impacts of the SNAP changes considered

Under changes considered to categorical eligibility, the number of Americans in poverty could increase. If SNAP benefits are included in the poverty measure, eliminating noncash categorical eligibility as was proposed by Congress could increase the U.S. poverty rate by more than half a percent overall, and increase the poverty rate for children by nearly 1 percent among the 43 states implementing this eligibility policy, according to a recent study.[147] This is equivalent to at least 237,000 more individuals living in poverty, including at least 140,000 more children.[148]

Under changes considered to categorical eligibility, the changes in poverty rates could increase medical care expenditures substantially. The following analysis presents an example of the potential impact on medical costs of the changes considered to categorical eligibility drawn from a single disease—diabetes. Because poverty increases the risk of many diseases, the total impact on medical spending could be substantially higher.

A model based on current state and county diabetes rates predicts how diabetes cases and associated costs might change over time as the poverty rate changes.[149] According to this model, an increase in the U.S. poverty rate of half a percent, as predicted with the elimination of noncash categorical

eligibility,[150] would correlate with approximately $1.5 billion in additional diabetes-related public-sector and private-sector medical costs per year, or nearly $15 billion over 10 years.

Given that an increase of $15 billion in medical care costs on diabetes alone approaches the CBO's projection of $20 billion in expected savings from the SNAP changes considered, and that poverty and food insecurity affect the rates of many diseases beyond diabetes, the health-related costs could well exceed estimated program savings.[151] That said, these figures must be interpreted with caution: The fact that rates of diabetes correlate with poverty rates does not necessarily prove that a policy that could increase poverty in the United States will cause an increase in diabetes. These limitations make it difficult to state conclusively that the SNAP eligibility changes considered would increase diabetes-related or other medical costs, but the body of evidence strongly supports considering health and related cost implications alongside projected savings of proposed policy changes.

According to this model, an increase in the U.S. poverty rate of 0.5 percent, as predicted with the elimination of noncash categorical eligibility, would correlate with approximately $1.5 billion in additional diabetes-related government and private-sector medical costs per year, or nearly $15 billion over 10 years.

B. SNAP and household budget tradeoffs

Background and current conditions

Poor households must make tradeoffs between basic needs important to health, such as food, housing, and home heating and cooling. This problem—known as material hardship—can require low-income households to make tradeoffs in a variety of ways. For example, low-income families eat less food during seasonal spikes in home energy costs,[152] and seniors and children in low-income households are at greater risk of going hungry during the winter or summer months, when home energy bills are highest.[153] Beyond these nutritional impacts, poverty also increases the risk of dying during heat waves or cold snaps, because people may not be able to afford adequate home heating or cooling. Seniors and the very young are at particularly high risk for this problem.[154] High housing costs, home energy costs, and food insecurity also increase the risk that low-income people will postpone needed medical care, ration or skip taking prescription medications, and rely more on emergency department visits and hospitalizations.[155] More than half of SNAP households are considered housing cost burdened (spending more than 30 percent of their income on housing).[156] Adults who have unstable housing (who are behind on their mortgages, in foreclosure, or homeless) are more likely to report being in fair or poor health and to experience anxiety or depression than those who have stable housing.[157] Food insecurity among children who are not stably housed is linked to delaying medical care, postponing taking medications, and not receiving recommended well-child care visits.[158] Among households receiving energy assistance, 32 percent of those that have elderly members report going without medical or dental care as a result of high home energy bills.[159]

SNAP participants involved in qualitative data collection for this study faced many financial hardships and reported that any potential changes to SNAP could have a considerable impact on

their household spending. Many individuals reported that when SNAP runs out, most often during the second half of the month, they have to shift their limited resources to pay for food or seek assistance from community resources (e.g., food pantries, food shelves). SNAP participants described tough decisions they made regarding which bills to pay each month, noting that they often paid only a portion of their electricity bills, especially during the hot summers and cold winters. When they were short on cash, paying the rent was prioritized in order to keep their housing stable for themselves and their families. As a result of that choice, several instances were described in which electricity or phone service was cut off. For several of these SNAP participants, housing costs were high in proportion to their incomes a situation that often resulted in unstable housing and bouts with homelessness.

Impacts of the SNAP changes considered

Losses in income under changes to eligibility and benefit determination considered by Congress could increase material hardship and health risks. According to Mathematica's estimates, those affected by the policies considered to raise the nominal LIHEAP payment would lose an average of $67 per month; those affected by elimination of noncash categorical eligibility would lose an average of $228 per month. These changes translate to losses of 6.7 percent and 38.1 percent of household income inclusive of SNAP benefits, respectively.[160] The implications for spending changes on categories important to health are significant. For example, SNAP household spending on housing and utilities could decrease by as much as $75 per month.[161] This is nearly equivalent to an average monthly electric bill in the Midwest.[162] Losing SNAP benefits could make it harder for households to afford basic needs. Specifically, the changes considered to eliminating noncash categorical eligibility could increase the risk of falling behind on the rent or mortgage by more than 41 percent, the risk of falling behind on utility bills by more than 53 percent, and the risk of medical hardship (inability to meet medical care expenditures) by more than 73 percent.[163] Households losing SNAP eligibility could therefore face immediate health risks, ranging from increased food insecurity, anxiety, and depression to more emergency department visits and hospitalizations. When asked in focus groups or interviews conducted for this HIA about what a reduction or loss of benefits would mean for their households, all SNAP participants stated that without SNAP benefits, they would have difficulty getting enough to eat.

The benefit reduction as anticipated under the SNAP changes raising the nominal LIHEAP payment would affect a population already at risk for poor health because of material hardship. A majority of households receiving nominal energy assistance that are projected to experience a reduction in benefits under the changes considered to Heat and Eat would be vulnerable to both economic hardship and health risks, including those with children, nonelderly disabled, or seniors.[164] Many seniors and disabled people at risk subsist on fixed monthly incomes with limited cost-of-living increases that may not keep pace with rising energy prices or rent increases. Nearly 10 percent of affected households would have housing and utility costs amounting to more than half of the household's income, and twice as many would be housing cost burdened.[165] High housing and home energy costs increase the risk that low-income people will experience food insecurity and may postpone needed medical care, ration or skip taking prescription medications, or experience greater health risks during heat waves or cold weather.[166]

C. SNAP and Household Assets

Background and current conditions

Financial assets, which can help households weather financial emergencies, are also important to health. Research shows that families with fewer assets are at greater risk for homelessness, hunger, and inability to pay for essential expenses such as home heating and cooling and medications.[167] Assets protect families from becoming food insecure or losing housing in case of an income shock,[168] such as the loss of a job or a serious illness.[169] Research also shows that people with higher assets—independent of their incomes—have better self-rated health and are at lower risk of mortality as well as many medical problems, including obesity, stroke, and functional limitations.[170] Assets are a particularly important factor in health outcomes among seniors, because they are likely to have less income.[171]

"Asset poverty" is defined by not having enough resources, such as bank and retirement accounts and home equity, to live at the federal poverty level for three months.[172] For a family of four in 2012, this amounted to $5,763. Financial experts recommend that households save at least three months of basic living expenses in case of an emergency, such as losing a job.

Disparities exist between households of similar income in whether they have assets to assist them through financial downturns. Black and Latino households may be at particularly high risk because they have, on average, fewer assets.[173] Among white households that experienced a period of unemployment between 1999 and 2009, for example, the median level of wealth[174] was at least seven times greater than that of unemployed black households during the same period.[175]

Table 5. Eliminating Noncash Categorical Eligibility
Which households would fail the asset test vs. the income test? (per SIPP+ model)

Income ineligible	
Total individuals	1 million
Total households	0.5 million
Share of SNAP households	3%
Households with:	
Children	142,000 (25%)
Elderly individuals	142,000 (25%)
Disabled nonelderly	214,000 (38%)
No countable assets	342,000 (61%)
Any earned income	258,000 (46%)
Asset ineligible	
Total individuals	3.9 million
Total households	2 million
Share of SNAP households	10%
Households with:	
Children	647,000 (32%)
Elderly individuals	592,000 (29%)
Disabled nonelderly	78,000 (4%)
Gross income below poverty	1,660,000 (82%)
Any earned income	664,000 (33%)

*Tabulations do not include an estimated 90,000 households that would fail both the income and asset tests.

Building assets can contribute to better overall health by allowing families to move out of poverty. Because poverty is a risk factor for many diseases, it is relevant to consider the role that assets such as personal savings and retirement accounts play in alleviating the risk of poverty. Research suggests that having assets promotes upward economic mobility for low-income households.[176] For example, adults who were in the bottom income quartile from 1984 to 1989 were more likely to move into a higher income quartile by 2003 to 2005 if their initial savings were high compared with those adults who had low initial savings. [177] Furthermore, children in low-income families with minimal resources are less

likely to move out of poverty than are children of low-income families with higher assets.[178] For low-income families, upward economic mobility can mean opportunities and resources for socioeconomic, occupational, or educational advancement that are fundamental to health.[179]

Impacts of the SNAP changes considered

Under the policy change considered to eliminate noncash categorical eligibility, as many as 3.9 million individuals would become ineligible for SNAP because of federal asset limits. Under changes to noncash categorical eligibility, federal asset requirements would supersede current state policies regarding assets. Using the SIPP+ model, Mathematica estimated that these changes could result in as many as 2 million SNAP households, or nearly 3.9 million individuals, losing eligibility for SNAP because they have countable assets over the federal limit (Table 5). An additional 90,000 households (172,000 individuals) would lose eligibility based on both income and assets.[180]

According to interviews with SNAP administrators, many households that lose eligibility because of the asset test would have assets that are not far above the current limit. Similar findings were reported by the Government Accountability Office (GAO) based on data collection among SNAP administrators regarding household assets of SNAP participants.[181] SNAP administrators noted that reinstating the asset test would cause many working families that have some savings and are currently eligible to lose their eligibility.

Requiring people with savings or other resources in excess of $2,000 ($3,250 for households with seniors) to deplete them to qualify for SNAP benefits would also increase the chance of problems that create health risks, such as losing one's home, going hungry, having the electricity turned off, or having to skip medications, in case of a financial emergency.[182]

Effectively reinstating the federal asset test as was proposed under categorical eligibility changes may create health risks by providing a disincentive for people to save. Because eliminating noncash categorical eligibility would effectively reinstate federal asset standards, this policy change could create a disincentive for low-income households to save. In focus groups and interviews conducted for this HIA, some SNAP participants stated that they had no savings but were aware that their benefits would be reduced if they accumulated resources beyond a certain amount. As previously discussed, multiple studies have shown that possessing assets contributes to better overall health and lower risk for many illnesses. Moreover, having low assets limits access to resources and opportunities for socioeconomic, occupational, or educational advancement, all of which are important to good health.[183]

Recent reforms to SNAP have attempted to remove a disincentive to save by excluding certain categories of assets from consideration under the asset test, such as education and retirement accounts that limit a household's tax liability (e.g., 403b retirement or 529 college savings accounts). The degree to which these changes will affect SNAP participants is not known. Some evidence suggests, however, that in general, these types of accounts are not commonly used among low-income households, because these households have no need to pursue ways to limit their tax liability, and unlike checking and savings, such accounts are not easily accessed during financial emergencies.[184]

Although many low-income households could be affected, this HIA suggests that the impact on low-income seniors could be disproportionate. Reinstatement of the asset test, as proposed during Farm Bill deliberations in 2012 and 2013, would make seniors with accumulated assets over $3,250 ineligible for SNAP benefits. In interviews conducted for this HIA, several SNAP administrators reported that seniors who would be asset ineligible live on a fixed income. Seniors with net incomes below the poverty line who could become ineligible because of assets would lose $227 in SNAP benefits on average—as much as a quarter of their average incomes, inclusive of SNAP.[185] For such seniors, assets may be the only source of funds available to cover unanticipated expenses such as high utility bills or costly medical events. In a focus group of SNAP participants at least 55 years of age, many respondents noted that the federal asset limit was too low to allow for adequate resource accumulation to cover a financial emergency such as seasonally high utility bills or unexpected medical expenses.

Other health-related considerations related to SNAP policy changes considered by the House and Senate

This section considers two additional issues that bear on the health of SNAP participants: workforce education and training for SNAP participants, and the impacts on how states administer the program.

Workforce education and training for SNAP able-bodied adults

Background and current conditions

Employment is a critically important path out of poverty. Having a stable job with safe working conditions may generate income and benefits that positively contribute to health.[186] In turn, education and training can improve an individual's opportunities for finding a good job and moving out of poverty; this is particularly true in the current job market, in which many well-paying jobs require at least some postsecondary education or training.[187] A GAO report found that limited education and work histories make it hard for some SNAP participants to obtain employment.[188] In 2012, roughly half of SNAP household heads did not have education beyond high school.[189]

Less than 30 percent of SNAP participants are considered eligible for work (defined as nondisabled adults age 18 to 49 not living with children under 5). Data indicate that an estimated one-third of these participants, accounting for more than half of SNAP households with a work-eligible adult, are currently employed.[190] The employment rates are higher for households with children—more than 60 percent work while receiving SNAP, with almost 90 percent employed in the previous or subsequent year.[191] Although the number of SNAP households has increased with the recent recession, research indicates that the mix of participating households has changed. For example, households with work histories and earnings have become a larger segment of the SNAP caseload.[192] During a recession, the increase in the number of SNAP households that have earnings while participating in SNAP may be a result of the rise in under-employment.[193]

Impacts of the SNAP changes considered

Senate and House proposals would fund pilot employment and training programs that could improve opportunities for current SNAP participants to find work. The SNAP Employment & Training (SNAP E&T) program promotes self-sufficiency and assists SNAP participants in obtaining employment. This program is particularly important because of the lingering effects of the recession. People who are considered eligible for work (i.e., able-bodied adults without dependents) must comply with program work requirements in order to maintain eligibility for SNAP benefits.[194] For SNAP participants considered eligible for work, both bills proposed to allocate funds for USDA to work with states to pilot innovative practices in the SNAP E&T program and to monitor the program's impact and return on investment. *The Agricultural Act of 2014 includes several initiatives to prioritize employment and training services and program outcomes within SNAP, such as pilot programs to help people secure employment through job training and additional funds to support E&T services.*

In the focus groups and interviews conducted for this HIA, SNAP participants reported mixed feelings about the employment requirements because of the difficulty in obtaining employment in the current economic climate. SNAP participants supported the notion of self-sufficiency and the desire to work instead of receiving benefits. Nearly all participants expressed interest in an employment and training program that would provide practical and technical skill training to help them seek and successfully acquire employment, such as developing a résumé or becoming computer proficient. The need for well-paying jobs was also emphasized; many said the employment and training program should prepare SNAP participants for occupations beyond low-wage employment, such as work in fast food establishments. Given the well-established links between employment and health, these pilot programs, if successful, would also be expected to contribute to better health for SNAP participants.

SNAP participants who would lose eligibility for SNAP under the changes considered to categorical eligibility, however, would no longer be eligible for SNAP E&T. According to Mathematica's estimate, as many as 1.2 million individuals considered eligible for work would no longer have had access to this program.[195]

Impact on SNAP administration

Background and current conditions

According to SNAP administrators, categorical eligibility improves efficiency and reduces bureaucracy. SNAP administrators interviewed for this research reported that states chose to adopt categorical eligibility to create consistency across programs, especially between SNAP and Medicaid (which does not have an asset test). Every SNAP administrator interviewed for this assessment reported that the lack of an asset test for SNAP (because of the use of noncash categorical eligibility) significantly reduces application processing time. This was especially important when the number of applications rose during the recession. One administrator stated that in his/her state, productivity rose approximately 5 percent annually once options to simplify eligibility were implemented—the equivalent of an estimated two workweeks of time saved per caseworker—resulting in financial

savings to the program. SNAP administrators also noted that streamlining programs shortened the time for applicants to receive needed help.

Impacts of the SNAP changes considered

The changes considered to categorical eligibility could lead to longer delays in receiving benefits. Under the changes considered, SNAP administrators would have had to determine eligibility for SNAP separately from other programs, such as TANF, Medicaid, and the national school meals programs. Reintroducing administrative procedures such as an asset test could delay the start of benefits for people who need them, and in turn could increase food insecurity, particularly among children who are eligible for free meals at school.

Delaying the receipt of benefits could also increase the risk of families experiencing other material hardships, such as falling behind on the rent or utility bills or an inability to pay for necessary medications.

Conclusion

The findings of this health impact assessment suggest that many of the SNAP policy changes considered to modify how eligibility or benefit levels are determined would likely place the health of low-income Americans at greater risk. The changes considered to eliminate categorical eligibility would affect far more people—as many as 5.1 million individuals, most of whom would have net incomes below the federal poverty line. The changes that were considered to eligibility and benefit determination were intended to reduce the deficit and federal spending. As shown in the analysis above, it is possible that the identified health risks could increase medical care costs and ultimately have implications for state and federal medical spending. This possibility should be considered in interpreting the projected budget savings of proposed policies.

Recommendations

Final decisions on changes to SNAP should take into account the health risks and related potential costs that have been identified in this analysis. The Health Impact Project offers the following recommendations to help address some of the health risks identified in this HIA. However, there is no evidence that these actions would fully mitigate the health risks discussed in this analysis.

1. **Raise the asset limit for SNAP eligibility.** The asset limit of $2,000 for SNAP participation has not been adequately adjusted for inflation in more than two decades and has fallen 48 percent in inflation-adjusted terms since 1986. The analysis found that a majority of families with incomes below the poverty line could lose benefits because of modest assets. A limited amount of personal savings is an effective way to prevent poverty and reduce the need for public assistance. Raising the current asset limit would remove disincentives to save and promote economic mobility and self-sufficiency for low-income families. The asset limit should be raised

to a level that allows SNAP participants to save enough to weather a financial emergency and to move out of poverty over the longer term. As described in the HIA findings, as many as 2.7 million low-income households could lose eligibility for SNAP if noncash categorical eligibility is eliminated. As many as 2 million of these households would lose SNAP eligibility because they possess countable assets over the federal limit, despite having net incomes below the federal poverty line.

2. **Monitor health effects.** If any policy changes considered for the SNAP program, including current eligibility or benefit levels, are enacted, it will be important to conduct evaluation research to aid efforts to improve the effectiveness and efficiency of the program. USDA should consider including health effects and related medical costs in implementing current monitoring such as that mandated under the National Nutrition Monitoring and Related Research Act of 1990.

APPENDICES

Appendix A. Acknowledgments, HIA Team Members, Advisory Committee Members, and Informants

Appendix B. Research Questions for the Health Impact Assessment of Proposed Changes to SNAP Eligibility and Benefit Determination

Appendix C. Mathematica Policy Research Report: Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants

Appendix D. Summary of Impacts for Changes Considered for the Nominal LIHEAP Payment Amount and Elimination of Noncash Categorical Eligibility

Appendix A. Acknowledgments, HIA Team Members, Advisory Committee Members, and Informants

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Appendix B. Research Questions for the Health Impact Assessment of Proposed Changes to SNAP Eligibility and Benefit Determination

Overarching questions on health and SNAP policy changes

- How does participation in SNAP affect the health of low-income children, seniors, nonelderly disabled individuals, and families?
- How does reduced access to SNAP (i.e., changes in eligibility or benefit levels) affect health? What is the distribution of these health impacts?
- What might be the implications of access to SNAP in early childhood for development and health outcomes over the life course?
- What are the societal or medical care costs associated with the potential health impacts?

Food insecurity

- How does participation in SNAP affect the prevalence of food insecurity? How might reduced access to SNAP or a change in household income affect food insecurity?
- How does food insecurity relate to health conditions including self-rated health, life expectancy, mortality, birth outcomes (birth weight, infant mortality), mental or behavioral health, and cognitive development among children?
- How does food insecurity influence the purchase/consumption of healthful foods?
- What is the correlation between food insecurity and chronic illnesses such as obesity and diabetes, or the physiological precursors for these illnesses (e.g., hypertension)?
- What are the societal or medical care costs associated with these outcomes linked to food insecurity?

Access to and consumption of healthful foods

- How does SNAP affect access to, and consumption of, an adequate and nutritious/healthful diet (including fruit and vegetables)?
- How do SNAP-eligible and participating households compare with regard to food purchasing behaviors? How might a benefit/income reduction influence food purchases among SNAP-eligible or participating households?
- What is the relationship among SNAP-eligible or participating individuals between diet and chronic illnesses such as obesity and diabetes, or the physiological precursors for these illnesses (e.g., hypertension)?

Income and asset poverty and household budget: Economic tradeoffs

- How does participation in SNAP affect the prevalence or severity of income or asset poverty? How might reduced access to SNAP affect these measures of poverty and opportunity for economic mobility?
- How do SNAP-eligible or participating households budget for basic needs such as food, rent, utilities, transportation, and medical care? How might reduced SNAP access change the way low-income families budget for these basic needs?
- How do SNAP participating or eligible households manage their assets? How might this change with benefit or income loss?
- What are the societal or medical care costs associated with health outcomes linked to poverty?

Housing and home energy

- How does participation in SNAP affect a household's ability to attain stable and adequate housing or home heating and cooling? How might reduced access to SNAP or a reduction in monthly income change this relationship?
- How does inadequate or unstable housing, or unsafe heating/cooling practices, affect the likelihood of health risks and related health outcomes, including asthma, mental health, self-rated health, hypo/hyperthermia, cardiac events, and death?
- What kind of medical care utilization (hospitalizations, ER visits) is associated with these health risks?

Access to and utilization of health care and other programs and services (NSLP, Medicaid)

- How does participation in SNAP affect the likelihood of underutilized or inadequate medical care? How might reduced access to SNAP or a reduction in monthly expenditures affect this relationship?
- How does the likelihood of underutilized or inadequate medical care affect health conditions, including self-rated health, disability, life expectancy, or mortality?
- How does underutilized, inadequate, or forgone medical care affect the development or maintenance of illnesses such as diabetes or cardiovascular disease?
- How does participation in SNAP affect access to other federal programs (NSLP, Medicaid, LIHEAP) or state-level ancillary services? How might reduced access to SNAP change access to these programs?
- How does the NSLP affect access to, and consumption of, an adequate and nutritious/healthful diet?

Employment

- What types of employment and training resources do states provide to SNAP participants?
- How does employment affect economic mobility and health of SNAP participants?

SNAP administration

- How might the proposed changes to eligibility or benefit policies affect the efficiency and program integrity of state and local SNAP administration?
- What might be the health implications for SNAP applicants or current participants resulting from these administrative impacts?

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Appendix C. Mathematica Policy Research Report:

Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants

Available at:

http://mathematica-mpr.com/publications/PDFs/Nutrition/SNAP_Analysis_Health_Impact.pdf

Appendix D. Summary of Impacts for Changes Considered for the Nominal LIHEAP Payment Amount and Elimination of Noncash Categorical Eligibility.

Summary of Impacts: Raising the Nominal LIHEAP Payment to $10

Health issue	Direction of impact	Likelihood of impact	Summary of findings	Strength of evidence
Pathway 1: Food insecurity (i.e., difficulty obtaining enough to eat)				
Food insecurity and associated health risks, including the risk of diabetes, heart disease, and depression or anxiety in adults; and asthma, cognitive impairment, or behavioral problems in children	Negative	Likely	The risk for food insecurity would increase because of reduced benefits among 304,000 to 500,000 low-income households. Adults living with the most severe levels of food insecurity have more than twice the risk of diabetes compared with adults who have access to enough food.	High: Strong and consistent quantitative research, supported by the qualitative research conducted for this study, demonstrating improvements in food security among SNAP participants.
Pathway 2: Diet and nutrition				
Diet-related health problems, such as overweight and obesity and related health risks such as certain cancers, diabetes, high blood pressure, and cardiovascular disease	Negative	Likely	Reduced benefits could exacerbate the already substantial risk of diet-related health problems.	Moderate: The research on how access to SNAP affects diet and diet-related health problems is complex; studies have sometimes produced inconclusive or conflicting results.
Access to higher quality food through new standards for SNAP retailers	Positive	Likely	The proposed changes could increase the number of retail outlets in underserved communities with the capacity to provide both perishable and staple foods. Those still receiving SNAP may benefit from increased access to perishable and staple foods.	Moderate-high: Although there are limitations to assessing how these environments may affect health, most studies report that living in an environment with limited access to healthful foods can increase the risk for diet-related illnesses. Qualitative data collected for this study were consistent with the

Health issue	Direction of impact	Likelihood of impact	Summary of findings	Strength of evidence
				existing literature and highlighted barriers, such as transportation, that SNAP participants face in accessing healthy foods.
Pathway 3: Poverty and the ability to afford essentials important to health				
Material hardship and associated health risks ranging from increased food insecurity, anxiety, and depression to more emergency department visits and hospitalizations	Negative	Likely	The 304,000 to 500,000 households affected by the proposed changes would lose an average of $67 per month, which translates to a loss of 6.7 percent of household income inclusive of SNAP benefits. All affected households would have net incomes below the federal poverty level. A majority of households receiving nominal energy assistance whose benefits would decrease would be vulnerable to both economic hardship and health risks, including those with children, nonelderly disabled, or seniors.	High: Strong and consistent quantitative research, supported by the qualitative research conducted for this study demonstrating connections between material hardship and health outcomes.

LEGEND
Direction of impact:

- **Positive = Changes that may improve health**
- **Negative = Changes that may detract from health**
- **Uncertain = Unknown how health will be affected**
- **No effect = No effect on health**
- **Mixed = Changes that may both improve and detract from health**

Likelihood of impact:

- **Likely = It is likely that impacts will occur as a result of the proposed changes**
- **Possible = It is possible that impacts will occur as a result of the proposed changes**
- **Unlikely = It is unlikely that impacts will occur as a result of the proposed changes**
- **Uncertain = It is unclear if impacts will occur as a result of the proposed changes**

***Estimates for the magnitude of impacts on health care costs for diabetes alone as a potential health risk**

Health issue	Direction of impact	Likelihood of impact	Summary of findings	Strength of evidence
were generated using data from the Virginia Commonwealth University Center on Human Needs **Strength of evidence:** • **High: Multiple peer-reviewed studies provide consistent support for the finding; evidence from other sources (for example, qualitative data, modeling, and gray literature) is consistent with peer reviewed studies and supports the finding.** • **Moderate-high: Fewer peer-reviewed studies are available, but the available studies support the finding and are consistent with evidence from other sources.** • **Moderate: Some peer-reviewed studies are available but provide inconclusive or conflicting support for the finding; other sources of evidence generally support the finding and are consistent with basic public health principles.** • **Low: Limited or conflicting evidence.**				

Summary of Impacts: Eliminating noncash categorical eligibility and raising the nominal LIHEAP payment to $20

Health issue	Direction of impact	Likelihood of impact	Summary of findings	Strength of evidence
Pathway 1: Food insecurity (i.e., difficulty obtaining enough to eat)				
Food insecurity and associated health risks, including the risk of diabetes, heart disease, and depression or anxiety in adults; and asthma, cognitive impairment, or behavioral problems in children	Negative	Likely	More than 500,000 food-insecure individuals would lose eligibility, and 160,000 to 305,000 more individuals could become food insecure.	High: Strong and consistent quantitative research, supported by the qualitative research conducted for this study, demonstrating improvements in food security among SNAP participants and links between food insecurity and health.
Access to free or reduced-price school meals among low-income school-age children	Negative	Likely	156,000 to 210,000 school-age children would not receive free school meals despite being eligible.	High: Strong and consistent quantitative evidence, supported by the qualitative research conducted for this study, between food insecurity and children's health.
Pathway 2: Diet and nutrition				
Diet-related health problems, such as overweight and obesity	Negative	Likely	Roughly two out of three adults and one out of three children receiving SNAP	Moderate: The research on how SNAP affects diet and diet-related health

Health issue	Direction of impact	Likelihood of impact	Summary of findings	Strength of evidence
and related health risks such as certain cancers, diabetes, high blood pressure, and cardiovascular disease			benefits are currently overweight or obese; reduced benefits could exacerbate the already substantial risk of diet-related health problems for this subpopulation of SNAP participants.	problems is complex; studies have sometimes produced inconclusive or conflicting results.
Access to higher quality food through new standards for SNAP retailers	Positive	Likely	The proposed changes could increase the number of retail outlets in underserved communities with the capacity to provide both perishable and staple foods. Those still receiving SNAP may benefit from increased access to perishable and staple foods.	Moderate: Although there are limitations to assessing how these environments may affect health, most studies report that living in an environment with limited access to healthful foods can increase the risk for diet-related illnesses. Qualitative data collected for this study were consistent with existing literature and highlighted barriers, such as transportation, that SNAP participants face in accessing healthy foods.
Pathway 3: Poverty and the ability to afford essentials important to health				
Poverty and associated health outcomes, such as diabetes, heart disease, low birth weight and infant mortality, and depression	Negative	Likely	The proposed changes could result in at least 237,000 more individuals living in poverty, including at least 140,000 more children. Taking the example of just one disease that could be affected—diabetes—an increase in the U.S. poverty rate of 0.5 percent, as predicted under the enactment of H.R. 1947, would correlate with	High*: Strong and consistent quantitative evidence, supported by the qualitative research conducted for this study, demonstrating connections between poverty and health; strong and consistent quantitative evidence, supported by the qualitative research

Health issue	Direction of impact	Likelihood of impact	Summary of findings	Strength of evidence
			approximately $1.5 billion in additional diabetes-related public-sector and private-sector medical costs per year, or nearly $15 billion over 10 years.	conducted for this study, demonstrating that SNAP benefits improve health by reducing poverty because receiving SNAP allows low-income families to spend less on food and have more money for other essential goods and services important to health.
Material hardship and associated health risks ranging from increased food insecurity, anxiety, and depression to more emergency department visits and hospitalizations	Negative	Likely	As many as 2.7 million households affected by the proposed changes would lose benefits—an average of $228 per month, which translates to a loss of 38.1 percent of household income inclusive of SNAP benefits. The proposed changes could increase the risk of falling behind on the rent or mortgage by more than 41 percent; the risk of falling behind on utility bills by more than 53 percent; and the risk of medical hardship (inability to meet medical care expenditures) by more than 73 percent.	High: Strong and consistent quantitative research, supported by the qualitative research conducted for this study demonstrating connections between material hardship and health outcomes.
Access to assets and savings to help weather financial emergencies and promote upward economic mobility	Negative	Possible	Effectively reinstating the federal asset test could create health risks by providing a disincentive for people to save or requiring people to deplete assets in order to qualify for SNAP. Seniors with net incomes below poverty who become ineligible because of assets would lose $227 in	High: Strong and consistent quantitative research, supported by the qualitative research conducted for this study, demonstrating connections between assets, savings, and health.

Health issue	Direction of impact	Likelihood of impact	Summary of findings	Strength of evidence
			SNAP benefits on average—as much as a quarter of their average incomes, inclusive of SNAP. For such seniors, assets may be the only source of funds available to cover unanticipated expenses such as high utility bills or costly medical events.	
Other health-related impacts				
Access to employment and training programs	Mixed	Possible	Given the well-established links between employment and health, these pilot programs, if successful in helping SNAP participants secure employment, would also be expected to contribute to better health for SNAP participants. However, as many as 1.2 million individuals considered eligible for work would no longer have access to the SNAP E&T program.	High: Strong and consistent quantitative research, supported by the qualitative research conducted for this study, demonstrating associations between employment and health.
Timely start of benefits for those eligible	Negative	Possible	Reintroducing eligibility requirements, such as an asset test, could increase the administrative burden and delay the start of benefits for people who need them. In turn, this could increase food insecurity and the risk of families experiencing other material hardships, such as falling behind on the rent or utility bills, or an inability to pay for necessary medications.	Moderate-high: Consistent findings among SNAP administrators interviewed for this research that not having an asset test significantly reduces application processing time.

LEGEND
Direction of impact:

- **Positive = Changes that may improve health**

Health issue	Direction of impact	Likelihood of impact	Summary of findings	Strength of evidence

- **Negative = Changes that may detract from health**
- **Uncertain = Unknown how health will be affected**
- **No effect = No effect on health**
- **Mixed = Changes that may both improve and detract from health**

Likelihood of impact:

- **Likely = It is likely that impacts will occur as a result of the proposed changes.**
- **Possible = It is possible that impacts will occur as a result of the proposed changes.**
- **Unlikely = It is unlikely that impacts will occur as a result of the proposed changes.**
- **Uncertain = It is unclear whether impacts will occur as a result of the proposed changes**

***Estimates for the magnitude of impacts on health care costs for diabetes alone as a potential health risk were generated using data from the Virginia Commonwealth University Center on Human Needs.**

Strength of evidence:

- **High: Multiple peer-reviewed studies provide consistent support for the finding; evidence from other sources (for example, qualitative data, modeling, and gray literature) is consistent with peer reviewed studies and supports the finding.**
- **Moderate-high: Fewer peer-reviewed studies available, but the available studies support the finding and are consistent with evidence from other sources.**
- **Moderate: Some peer-reviewed studies are available but provide inconclusive or conflicting support for the finding; other sources of evidence generally support the finding and are consistent with basic public health principles.**
- **Low: Limited or conflicting evidence**

ENDNOTES

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[4] Congressional Budget Office, *The Supplemental Nutrition Assistance Program* (Washington, D.C.: April 2012), http://www.cbo.gov/sites/default/files/cbofiles/attachments/04-19-SNAP.pdf.

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[8] The Low Income Home Energy Assistance Program is a federal block grant that assists eligible low-income households with their heating and cooling energy costs.

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[10] To receive benefits, in most cases, households must have a gross income at or below 130 percent of the federal poverty level and net income (income after deductions) at or below 100 percent of the federal poverty level. Households may have $2,000 in countable resources, such as a bank account or at least the fair market value of one vehicle ($4,650). There are some federal and state exceptions for adults aged 60 or older and the disabled. For example, there is no federal gross income test for these households and the countable resource limit is $3,250 if at least one person is age 60 or older, or is disabled. U.S. Department of Agriculture, Food and Nutrition Service, *Fact Sheet on Resources, Income, and Benefits,* http://www.fns.usda.gov/snap/applicant_recipients/fs_Res_Ben_Elig.htm (accessed June 2013).

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Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," prepared by Mathematica Policy Research for The Pew Charitable Trusts, Report No. 40181.700, http://mathematica-mpr.com/publications/PDFs/Nutrition/SNAP_Analysis_Health_Impact.pdf.

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http://www.gpo.gov/fdsys/pkg/BILLS-113s954pcs/pdf/BILLS-113s954pcs.pdf.; H.R. 1947 (rejected in a full House vote on June 20, 2013); H.R.3102 (the Nutrition-Only Farm Bill) passed by the House on September 19, 2013; H.R. 2642 (merger of H.R. 3102 with H.R. 2642, the Agriculture-Only Farm Bill, on Sept. 28, 2013). House Farm Bill: http://www.gpo.gov/fdsys/pkg/BILLS-113hr1947ih/pdf/BILLS-113hr1947ih.pdf.

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