

Understanding the Relationships between SNAP, Food Security, and Health in the National Health Interview Survey

2016 Request for Proposals

Date of RFP Announcement: December 8, 2015

Due Date for Requested Letter of Intent: January 21, 2016

Due Date for Applications: March 3, 2016

Executive Summary

The University of Kentucky Center for Poverty Research (UKCPR), in cooperation with the Economic Research Service (ERS) and the Food and Nutrition Service (FNS) in the U.S. Department of Agriculture, will competitively award grants to qualified individuals and institutions to provide rigorous research that utilizes data from the National Health Interview Survey (NHIS). The funded grants will expand our understanding of (1) the interaction between adult mental and physical health and household food insecurity, (2) SNAP on the health of both family caretaker and children, and (3) food insecurity on health and the possible mediating role of SNAP. It is anticipated that 4 grants of up to \$75,000 each will be awarded.

I. Background and Purpose

In the United States, 14 percent of all households, and 19.2 percent of households with children, were food-insecure in 2014, which the U.S. Department of Agriculture defines as a condition where a household is “unable to acquire adequate food for one or more household members because they had insufficient money or other resources for food.” (Coleman-Jensen, Rabbitt, Gregory, and Singh 2015).

Food insecurity has been associated with a wide array of negative health conditions both among the young and old (Gundersen and Ziliak 2015). These include disability status (Nord 2008; Coleman-Jensen and Nord, 2013), lower nutrient intakes (Cook, et al. 2004; McIntyre, et al. 2003; Gundersen and Ziliak 2013), mental health problems (Heflin, et al. 2005; Heflin and Ziliak 2008), physical health problems (Tarasuk, 2001), depression (Whitaker et al., 2006; Gundersen and Ziliak 2013), diabetes (Seligman et al., 2007), chronic disease (Seligman et al., 2010), birth defects (Carmichael et al., 2007), anemia (Eicher-Miller et al., 2009; Skalicky et al., 2006), greater cognitive problems (Howard, 2011), higher levels of aggression and anxiety (Whitaker et al., 2006), poorer general health (Cook et al., 2006; Gundersen and Kreider, 2009), and higher probabilities of behavioral problems (Huang et al., 2010) and oral health problems (Muirhead et al., 2009).

The Supplemental Nutrition Assistance Program (SNAP) serves as the cornerstone of the food assistance safety net to address food insecurity. Nearly 1 in 7 Americans received benefits from SNAP in 2014, at a cost of \$75 billion. The program has grown dramatically since 2000, and while there is a growing body of research showing that the program reduces food insecurity, there is much less research that has thoroughly investigated the effects of the program on general health and nutrition (Bitler 2015; Gregory and Deb 2015).

In this RFP we seek new research on the causal linkages between food insecurity and health, and the possible mediating role of SNAP using data from the NHIS. In particular we are interested in research that builds on those projects funded in the 2015 grant competition, as summarized here <http://www.ukcpr.org/research/food-assistance/snap>.

A. National Health Interview Survey Data (NHIS)

The NHIS, which is sponsored by the National Center for Health Statistics (NCHS) in the Centers for Disease Control and Prevention (CDC), is the principal data source for information on the health of the civilian non-institutionalized population in the United States. Drawn from each state and DC, the NHIS sample contains approximately 35,000 households and 87,500 persons each year. The dataset can be linked to The National Survey of Family Growth, The Medical Expenditure Panel Survey (MEPS), and the National Death Index. The merged NHIS-MEPS data is managed by the Agency for Healthcare Research and Quality (AHRQ).

The core of the NHIS has four major components: (1) household, (2) family, (3) sample adult, and (4) sample child. The household section collects limited demographic information on all of the individuals living in the home. The family section collects additional demographic information on each member from each family in the house, and collects data on topics that include health status and limitations, injuries, healthcare access and utilization, health insurance, and income and assets. Lastly, the sample adult and sample child components survey one adult and one child (if present) from each family in a household at random to collect basic information on health status, health care services, and health behaviors. Participation in SNAP and WIC is collected in the NHIS, and in 2011, the USDA's 30-day Food Security Supplement was added, and as such, the NHIS is a unique dataset for research studies on programs and policies affecting the health and food security status of Americans.

For more information about the NHIS survey, see <http://www.cdc.gov/nchs/nhis.htm>

Public release versions of the NHIS do not contain geographic identifiers below the broad Census region level. This limits the use of the public data for nonexperimental evaluations using cross-state (or sub-state), time-varying policies, economic conditions, the food environment, health care access, and other factors. Restricted access NHIS includes information on the state, county, tract, and block of residence; state (or country) and year of birth; and immigration information. Additionally, the NHIS can be linked to the MEPS in order to follow respondents for two full calendar years, making it possible to examine the relationship between changes in respondent health, health care utilization and costs, employment and income after onset of food insecurity. There is a need for such research using the NHIS and NHIS linked to MEPS, and thus applicants are encouraged to apply for access to restricted versions of the NHIS. These restricted versions are subject to award and approval and are available through several access modes including NCHS Research Data Centers, Census Research Data Centers, and remote access. All linked NHIS-MEPS data, **even those using public files of NHIS and MEPS**, can only be accessed at the AHRQ Data Center or a Census Research Data Center. For further details please see http://meps.ahrq.gov/mepsweb/data_stats/download_data_files_detail.jsp?cboPufNumber=NHIS%20Link.

For more information on accessing restricted access NHIS, see <http://www.cdc.gov/rdc/index.htm>, and for more information on accessing linked NHIS-MEPS, http://meps.ahrq.gov/mepsweb/data_stats/onsite_datacenter.jsp.

Applicants wishing to utilize the restricted access NHIS data must submit **both** the full proposal described below **along with** the CDC Proposal Format (and RDC-Student-Advisor Agreement as applicable) found here: <http://www.cdc.gov/rdc/b3proposal/pp300.htm>.

Applicants wishing to use linked NHIS-MEPS data must likewise submit a full proposal to us as described below **along with** the necessary application forms from AHRQ described in the section titled "Application Procedure and Form" found here: http://meps.ahrq.gov/mepsweb/data_stats/onsite_datacenter.jsp.

Proposals requiring restricted access data will go through a two-step process. The first step is review and recommendation by the UKCPR review team, and if approved, then a second step batch submission by ERS to NCHS or AHRQ for restricted access approval. Prior NCHS or AHRQ approval of proposals is not recommended.

B. Priority Research Areas

We seek innovative research using the NHIS, or linked NHIS-MEPS, that may focus on one or more of the following general topics. The associated research questions are illustrative and not exhaustive:

1. The interaction between adult mental and physical health (including, but not limited to, disability, depression, ADLs, and substance use) and food insecurity in households with and without children:
 - What is the influence of adult health on the likelihood of food insecurity in households with and without children?
 - How do the relationships between food insecurity, physical and mental health, and health care utilization vary across geography due to differences in economic, social or political conditions?
 - Does food insecurity cause poor health, or does poor health cause food insecurity?
2. The effect of SNAP on health of both adults and children:
 - What is the effect of SNAP (both participation and duration) on household food insecurity?
 - What is the effect of SNAP (both participation and duration) on adult and child health, and health care utilization?
 - What is the effect of food insecurity on the health and health care utilization of adults and children, and does SNAP mediate that linkage contemporaneously or over time (e.g. in linked NHIS-MEPS data)?
 - How do the relationships between SNAP, food insecurity, and physical and mental health vary across geography due to economic, social or political conditions?

II. Award Information

A. Award Summary

We anticipate funding approximately 4 grants at a maximum of \$75,000 per award. Cost reimbursable contracts will be established between the University of Kentucky Research Foundation (UKRF) and the grantee institution or organization.

Underwriting for awards made under this announcement is provided by a cooperative research agreement between the University of Kentucky Research Foundation and the Economic Research Service, U.S. Department of Agriculture (CFDA No. 10.253, Agreement Number 58-5000-3-0066). As per 7 U.S.C. 3318(b), indirect cost recovery is not allowed for land-grant or state cooperative institutions, and is limited to 10% of direct costs for non-state cooperative institutions. Tuition is not a reimbursable expense for land-grant or state cooperative institutions. See 7 Federal Register, Vol. 73, No. 183/Friday September 19, 2008, CFR Part 550, Section 550.14 for explanation.

For the purposes of this award, the budget period will commence on August 15, 2016 and conclude on February 14, 2018. Grant awards do not allow for reimbursement of pre-award costs.

B. Eligibility

Proposed principal investigator(s) for grants must hold a Ph.D. or equivalent academic degree, and be employed at a college, university, or research organization. Members of minority and underrepresented groups are strongly encouraged to apply. Recipients of prior UKCPR-sponsored NHIS or NHIS-MEPS competitions are not eligible.

C. Disqualification Factors

Applications that exceed the budget ceiling amount, that do not utilize the NHIS data, that do not address the topical domains, or that otherwise disregard RFP application guidelines will be considered non-responsive and not eligible for funding under this mechanism.

III. Application Submission Information

A. Letter of Intent to Submit an Application

If you plan to submit an application, we request, but do not require, a letter of intent to be submitted via email by January 21, 2016. The letter should only contain the names and contact information of any principal investigator and co-investigators, the title of the planned project, and the name of the college/university/organization that will serve as the point of contact for award administration. This letter is not mandatory and is only to be used for planning purposes for grant reviews. Please submit the letter of intent as a Word or PDF document to the Program Manager, ukcpr@uky.edu.

B. Submission of Full Proposals

An original plus 5 hard copies of the completed application must be received by 5:00pm EST on March 3, 2016. Submit applications to the University of Kentucky, Center for Poverty Research, 550 South Limestone Street, Lexington, KY 40506-0034. For express mail delivery additional contact information is phone: (859) 257-7641; and email: ukcpr@uky.edu. **In addition to the paper copies one complete application must be sent electronically as a PDF document to ukcpr@uky.edu by 5:00pm EST on March 3, 2016.** Email acknowledgement of receipt of all application materials will be provided on or about the close of business on March 10, 2016.

C. Content and Format of Grant Applications

Applicants must limit their project narrative to no more than 5 pages. For the purposes of this announcement the narrative begins with the Research Question and Policy Relevance section and ends with the Key Staff, Budget Narrative, and Timeline. This page limit excludes appendices and front matter such as cover page, table of contents, and project summary. The narrative must be double spaced, 1 inch margins on all sides, and standard 12 pt font. Front matter and appendices may be single spaced but must adhere to other requirements on font size and margins.

UKCPR seeks applications from institutions that can demonstrate the capacity to undertake rigorous research projects, both administratively and technically. Applicants should specify in the project narrative how they will be able to fulfill the project goals described in the RFP. In addition applicants must specify administrative arrangements that will minimize start-up costs. If funding under this mechanism is to be used in conjunction with funds from other sources then the applicant must specify the sources and duration of those other funds and how the additional resources in this competition will be leveraged to accomplish project goals.

Each application must contain the following components in order

1. *Cover Page*

Each application must contain a cover page with the title of the proposed research; applicant's name and institutional affiliation (if multiple investigators, a PI must be identified); and contact information including full mailing address, email address, phone and fax numbers. The name and contact information of the institutional research representative should also be identified.

2. *Table of Contents*

The table of contents must identify the page location of each major section and subsection, beginning with the Research Question and Policy Relevance.

3. *Project Summary*

A key component of the successful application will be a non-technical one page summary containing the objectives, methods, data (NHIS or NHIS-MEPS), policy implications, budget request, and timeline of the proposed project. The project title and PI(s) should be listed at the top of the page. The Project Summary of each grantee will be posted on the UKCPR web page.
4. *Research Question and Policy Relevance*

The application shall present an analysis of key trends and past research on the focal area of interest in the proposed project. The background motivation should demonstrate the applicant's command over the policy and research significance of trends in the topic of interest. The section should also demonstrate how the proposed research expands upon the corpus of knowledge on the topic, including beyond those awarded by UKCPR in 2015. Please see <http://www.ukcpr.org/research/food-assistance/snap> for a listing of 2015 awards.
5. *Research Design*

The application shall present a research design for the 18-month performance period. This prospectus should identify key research questions, conceptual and theoretical foundations of the focal hypotheses to be tested, key variables in the NHIS (and MEPS if applicable) data, and statistical methods of analysis. The research design shall also contain a detailed timeline of project goals and deliverables.

All proposals must contain a timely plan for obtaining Institutional Review Board (IRB) approval or exemption for human subjects research. Typically secondary data analysis is eligible for exemption approval. The University of Kentucky Research Foundation will not execute subcontracts without such approval.
6. *Expected Results and Impact*

The applicant shall describe the type of information expected to result from the effort and link it to potential policy and scientific relevance in advancing our understanding of SNAP, food security, and health.
7. *Key Staff, Budget Narrative, and Timeline*

The application shall identify all key personnel involved in the project, including principal investigators(s), co-investigators, and senior staff. The applicant's budget and budget narrative must link the research to the funding requested, including the appropriateness of the level and distribution of funds to the successful execution of the project. This narrative includes identifying the distribution of effort of all key personnel to the project. *Applicants wishing to use restricted NHIS or linked NHIS-MEPS data should include a budget for any costs associated with data access.* As stipulated in Section II.A of the RFP, indirect cost recovery is not allowed for land-grant or state cooperative institutions, and is limited to no more than 10% of direct costs for all other institutions. Tuition is also not an allowable expense for land-grant or state cooperative institutions. Any cost normally treated as an indirect cost being budgeted as a direct cost will require budget narrative justification. The availability, or potential availability, of additional funds to be used in conjunction with those requested in this announcement should be made clear here, and the uses of those additional funds identified. All awardees are required to attend and should budget for one trip to Washington, DC for a one-day progress workshop in September 2017.
8. *Curriculum Vitae*

Curriculum Vitae of principal investigators(s) and co-investigators shall be included in the appendices. The CV should include highest educational degree and institution, current and past employment and professional appointments, concurrent and prior funded grants, and a listing of reports and publications in the past 5 years that are pertinent to the research proposed herein.

IV. Application Review Information

Applications will be initially screened for relevance to the subject areas described above, academic qualifications of the principal investigator, the ability of the applicant institution to administer a grant, inclusion of requested proposal sections, and adherence to RFP guidelines, such as the budget ceiling and page limits. Those requesting access to restricted-use NHIS or any linked NHIS-MEPS data must also include the appropriate NCHS or AHRQ application with the submission in order to be considered for funding. Those proposals not passing the initial screen will be notified to that effect in writing. Those proposals passing the initial screen will undergo a full review by a Technical Review Panel consisting of nationally recognized experts. Technical Review Panel members are not eligible for funding under this mechanism and extreme care will be taken to avoid potential conflicts of interest.

Proposals will be evaluated based upon a 100 point scale across several factors, including:

- **Research Merit** (40 points): Among other criteria, proposals will be scored based on the importance and relevance of the proposed project to research foci identified in this announcement, the clarity of the questions posed, how the research expands on the existing literature, and, most critically, how it assists USDA in meeting its strategic goal of improving the nation's nutrition and health.
- **Methodology** (30 points): Proposals will be judged based upon the appropriateness of the proposed research design for the questions being posed, the feasibility of the methodology given the NHIS or NHIS-MEPS data, and the applicant's grasp of the significance of past research and the extent to which the proposed methods expand upon prior studies.
- **Personnel** (20 points): Reviewers will judge the proposed key personnel for the necessary skills, experience, and track record to produce an excellent product. Included in this will be the time commitment of senior personnel to the project in relation to the proposed budget and other funded projects.
- **Budget and Workplan** (10 points): Among other criteria, proposals will be judged based on the feasibility of the timeline proposed, the reasonableness of the budget, and the quality of infrastructure at the PI's institution to successfully execute the proposed project.

In addition to the points awarded above, reviewers will weigh proposals based on overlap with ongoing projects, the extent to which the proposal integrates with the other highly scored proposals to form a more cohesive portrait, and potential future research and policy benefits.

For projects requesting access to restricted NHIS or any linked NHIS-MEPS data, proposals will be scored based on the above criterion, and if selected, will be forwarded to NCHS for approval (AHRQ for NHIS-MEPS projects). Only those proposals that meet NCHS or AHRQ approval will be eligible for funding.

Reminder: Applicants wishing to utilize the restricted access data must submit to us with the full proposal the NCHS Proposal Format (and RDC-Student-Advisor Agreement as applicable) found here:

<http://www.cdc.gov/rdc/b3prosal/pp300.htm>

or the necessary application forms from AHRQ described in the section titled "Application Procedure and Form" found here: http://meps.ahrq.gov/mepsweb/data_stats/onsite_datacenter.jsp

V. Award Administration Information

A. Award Notices

Applicants will be notified of grant award on or about July 15, 2016. The extended review period is due to the two-stage process for restricted-use data applications. Due to the anticipated volume of proposals we will not guarantee detailed written comments to applicants not funded.

B. Contact Information

Questions relating to this announcement should be directed to the UKCPR Program Manager via E-mail at ukcpr@uky.edu.

C. Reporting requirements

The awardee shall submit three reports during the duration of the grant:

- (i) a progress report no later than May 1, 2017 summarizing progress toward completion, especially highlighting the achievement of key milestones set out in the Workplan. Changes in personnel and in budget allocation across categories, and challenges and how they were overcome should be included in the progress report.
- (ii) a draft research report containing all the components listed below two weeks prior to the conference in fall 2017 held in Washington, DC.
- (iii) a final report due no later than February 14, 2018. The report shall include the following components: Title Page, Acknowledgement, 250-word Abstract, a 3-5 page Executive Summary, Introduction, Research Methods, Data, Results, Discussion, and Conclusion.

Submit progress reports as a Word document to UKCPR Program Manager at ukcpr@uky.edu.

D. Invoicing

The Awardee shall submit quarterly cost reimbursable invoices. The invoice shall include a brief description of work and expenses incurred, and include the contract number. UKCPR reserves the right to withhold payment in the event of inadequate progress. Final invoices will not be paid until final reports are received.

E. Terms and Conditions

1. Award Terms

UKCPR reserves the right to negotiate with the project investigators and/or their institutional representatives regarding the scope of work proposed, including funding level and project duration.

2. Publication

- (i) The report and any attendant work products produced as a result of this award shall contain the following:

“This project was supported with a grant from the University of Kentucky Center for Poverty Research through funding by the U.S. Department of Agriculture, Economic Research Service and the Food and Nutrition Service, Agreement Number 58-5000-3-0066. The opinions and conclusions expressed herein are solely those of the author(s) and should not be construed as representing the opinions or policies of the sponsoring agencies.”
- (ii) UKCPR intends to self-publish edited versions of the reports in a collected volume available free of charge to the public at <http://www.ukcpr.org/> Grantees retain publication rights to their projects for peer-reviewed outlets.

F. Disclaimer

Nothing in this announcement should be construed as to obligate the University of Kentucky or the Economic Research Service to make any awards whatsoever. Awards are contingent upon funding availability and research needs.

Applicant Checklist

Full Proposals should include:

1. Cover Page
 - a. Title of proposed research
 - b. PI name, Organization, & contact information
 - c. Authorized representative & contact information
2. Table of Contents
3. Project Summary (1 page, single spaced)
(Note: Sections 4-7 are to be double spaced; 5 pages max)
4. Research Question and Policy Relevance
5. Research Design
- 6 Expected Results and Impact
7. Key Staff, Budget Narrative, and Timeline
8. Curriculum Vitae
9. Appendices (e.g. bibliography, letters of support, Restricted Use NHIS or AHRQ application)

Reminder: Applicants wishing to utilize the restricted access NHIS data must submit to us with the full proposal the NCHS Proposal Format (and RDC-Student-Advisor Agreement as applicable) found here: <http://www.cdc.gov/rdc/b3prosal/pp300.htm> or the necessary application forms from AHRQ for linked NHIS-MEPS described in the section titled "Application Procedure and Form" found here: http://meps.ahrq.gov/mepsweb/data_stats/onsite_datacenter.jsp

The University of Kentucky is an equal opportunity institution.

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