

CHARTING THE COURSE



**THE OFFICE OF DISEASE PREVENTION
STRATEGIC PLAN 2014–2018
MID-COURSE REVIEW: JANUARY 2017**



National Institutes of Health
Office of Disease Prevention

OVERVIEW

In February 2014, the Office of Disease Prevention (ODP) released its first strategic plan designed to strengthen existing programs and develop new initiatives and resources to advance the prevention research agenda at the NIH and improve the public health. The ODP Strategic Plan for Fiscal Years 2014–2018 focuses heavily on the development of resources for the NIH prevention community and external stakeholders. As the ODP developed its strategic plan, we listened carefully to our stakeholders to determine how ODP priorities could complement and enhance the work of NIH Institutes and Centers. Six Strategic Priorities (SP) emerged:



- SP I:** Systematically monitor NIH investments in prevention research and assess the progress and results of that research.
- SP II:** Identify prevention research areas for investment or expanded effort by the NIH.
- SP III:** Promote the use of the best available methods in prevention research and support the development of better methods.
- SP IV:** Promote collaborative prevention research projects and facilitate coordination of such projects across the NIH and with other public and private entities.
- SP V:** Identify and promote the use of evidence-based interventions and promote the conduct of implementation and dissemination research in prevention.
- SP VI:** Increase the visibility of prevention research at the NIH and across the country.

To assess progress, the ODP has prepared a mid-course review, which provides an overview of the accomplishments of each Strategic Priority and future opportunities. Highlights of some of the major accomplishments include:

New tools to characterize the NIH prevention research portfolio—Developed a new prevention research taxonomy for coding grant abstracts, along with a detailed protocol that provides instructions, definitions, and examples to ensure consistent application of the prevention research taxonomy across abstracts. Established teams to manually classify NIH awards based on the taxonomy. Developed the Prevention Abstract Classification Tool (PACT) to facilitate the team coding process and data collection. To date, over 7,500 abstracts have been coded.

New assessment of NIH clinical preventive services portfolio and gaps—Designed a new, web-based survey to obtain more comprehensive information from NIH Institutes, Centers, and Offices (ICs) related to the insufficient evidence statements (I statements) released by the U.S. Preventive Services Task Force (USPSTF). The survey includes the provision of research needs/gaps summaries for each I

statement, questions focused on research supported by the NIH intramural and extramural research programs, and planned activities related to Funding Opportunity Announcements (FOAs), contracts, and meetings/workshops/conferences under development. Information from the survey highlights NIH activities relevant to the USPSTF I statements, and provides an opportunity for Institutes and Centers to consider whether their current and planned activities are sufficient, or whether additional activity may be warranted to better inform the development of USPSTF clinical guideline recommendations.

New strategy for enhancing peer review—Developed and launched the Prevention Research Expertise Survey (PRES) to identify methods experts in the extramural community and characterize their level of expertise on a variety of prevention-related design, analysis, and content areas. The results of the survey are housed in a web-based electronic database that will be used by Scientific Review Officers (SROs) at the Center for Scientific Review (CSR) and at the Institutes and Centers to identify prevention science experts able to participate on review panels. The participation of highly qualified methods experts will strengthen the review panels and improve the quality of prevention research supported by the NIH.

These examples represent only a few of the achievements of the ODP over the past 2 years to advance our mission to assess, facilitate, and stimulate research in disease prevention, and disseminate the results of this research to improve public health. Additional highlights are provided in the remainder of the mid-course review.



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STRATEGIC PRIORITY I



Strategic Priority I: Systematically monitor NIH investments in prevention research and assess the progress and results of that research.

The objectives supporting Strategic Priority I focus on the development of new methods to characterize the portfolio of prevention research funded by the NIH. New methods are needed that identify key characteristics of studies—rationale, exposures, outcomes, entities studied, setting, population(s) studied, study design, and prevention research category—to provide the information the ODP needs for program planning and reporting. The Research, Condition, and Disease Categorization (RCDC) system utilizes a broad definition of prevention that does not provide sufficient detail to classify studies into categories of interest to the ODP. A more detailed characterization of the NIH prevention research portfolio, along with further development and refinement of portfolio analysis tools, will enable identification of patterns and trends, as well as research areas that may benefit from targeted efforts by NIH Institutes and Centers. Such categorization will also enable assessment of the progress and changes in prevention research over time.

Strategic Priority I accomplishments and opportunities are outlined below.

ACCOMPLISHMENTS

Objective I.1: Establish a taxonomy for prevention research that the ODP can apply to analyze the NIH prevention research portfolio.

- ✓ Defined the scope of prevention research to be addressed by the ODP, with input from the Prevention Research Coordinating Committee and other IC liaisons. There are two major differences between the ODP definition and the RCDC definition of prevention research: (1) the

ODP limits prevention research to work done in humans, and (2) the ODP definition requires that methodological research must yield products that are directly applicable to prevention research without additional development.

- ✓ Developed a prevention research taxonomy for coding grant abstracts, along with a detailed protocol that provides instructions, definitions, and examples to ensure consistent application of the prevention research taxonomy across abstracts. The taxonomy consists of eight categories: study focus (composed of study rationale, exposure variables, and outcome variables), entities studied, study setting, population focus, study design, and prevention research category. Within each category are topics; one or more topics may be selected for any given abstract.
- ✓ Participated in ongoing discussions regarding revisions to the RCDC Prevention Fingerprint and clarified how the RCDC effort relates to the ODP effort in defining the scope of prevention research and prevention categories. ODP staff established a collaborative relationship with RCDC coordinators to provide feedback on non-RCDC grants that should be coded as prevention-focused research.

Objective I.2: Develop, test, and implement portfolio analysis tools to classify NIH awards based on the taxonomy for prevention research.

- ✓ Identified all type 1 R01 abstracts identified as prevention by RCDC and awarded in FY 2010–2015. Also identified a random sample of 5% of the remaining type 1 R01s from the same period. The two sets of awards were combined and selected in random order for coding within fiscal year.
- ✓ Established teams to manually classify NIH awards based on the taxonomy. Abstracts are coded using a team-based, consensus-driven approach. First, three research analysts (RAs) independently, but concurrently, read an abstract and select the applicable topics to characterize the research. Once each member of the team has made their selections, the team members discuss their coding and reconcile any differences to generate a consensus set of codes for each abstract. To ensure accurate coding across a wide range of prevention research topics, all RAs and SP I team members are required to complete an extensive training program and meet individual performance criteria on a standard set of abstracts.
- ✓ Developed the Prevention Abstract Classification Tool (PACT) to facilitate the team coding process and data collection. PACT is a custom, web-based software tool that records team membership, assigns abstracts to teams for coding, captures individual and consensus coding selections, and provides quick access to the coding protocol. PACT is also integrated with SAS to calculate interrater reliability.
- ✓ Developed a quality control process for the coding whereby a team from the ODP independently codes 15–20% of the abstracts coded by our RAs each week. The PACT tool uses SAS to calculate interrater reliability, which averaged 0.85 during the first full year of coding.
- ✓ Collaborated with the Office of Portfolio Analysis (OPA) to build a machine learning approach that will automate the majority of the coding process and is in line with the ODP definition of prevention research. OPA has developed iPROVE (Prevention Research Output Validation Engine), which is an interface combining PACT data and IMPAC II data. iPROVE allows users to query the two databases to retrieve relevant grants and award details. The system will be integrated with a machine learning framework that will allow for easy execution of multiple algorithms or other customizable classifiers in order to construct models that can accurately identify characteristics of prevention research grants. Early results indicate that the machine learning tool achieved 89% accuracy for discriminating prevention versus non-prevention awards.

OPPORTUNITIES

Extending the Portfolio Analysis to Other Mechanisms

Thus far, the portfolio analysis has examined type 1 R01 grants only. In 2017, with input from the NIH Institutes and Centers, the ODP will expand the scope of the project to include other funding mechanisms that support prevention research across the NIH.

Assessing the Progress and Results of NIH Prevention Research

The ODP plans to focus on the development and implementation of a process to regularly assess the progress and results of NIH investments in prevention research. Related activities will include determining the best and most informative metrics to assess progress and results. Examples may include the number of publications per grant, bibliometric analyses, major research findings, trends in awards and dollars, etc. Input from NIH subject matter experts will be needed to refine the process and to identify metrics. The ODP may also use the historical and prospective data from the portfolio analysis results to analyze the progress of prevention research. Software recently developed by OPA will also be used.

Collaborations

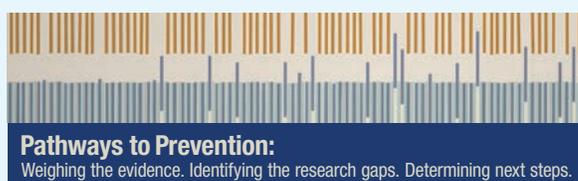
Given the information currently available from the manual coding process and information that is anticipated from the machine learning tool, the amount of data that will be available holds tremendous promise in terms of guiding ODP-directed collaborations. For example, members of the Strategic Priority I team are working with Strategic Priority II to identify and validate grants for the Annual USPSTF I Statement Survey. Information related to the NIH prevention research portfolio has already been leveraged to inform efforts in Strategic Priority III, including the use of the PACT data to identify prevention research principal investigators who could be encouraged to participate in the [Prevention Research Expertise Survey](#) (PRES).

The data from the manual coding and from the machine learning tools will be of help to other activities within the ODP. For example, they will help the Office identify NIH research that addresses research gaps and identify areas where there is limited evidence that may warrant consideration of new Funding Opportunity Announcements. There are many opportunities to collaborate with other NIH components to advance these areas of research.

Coding Basic/Preclinical Prevention Abstracts

The ODP will evaluate the grants that are coded as basic or preclinical which are not presently coded using the existing system. The ODP will further classify these awards as basic/preclinical prevention research or basic/preclinical non-prevention research. The former classification will include basic or preclinical awards that have apparent downstream implications for prevention, while the latter classification will include discovery research with no apparent downstream implication for prevention.

STRATEGIC PRIORITY II



Strategic Priority II: Identify prevention research areas for investment or expanded effort by the NIH.

Identifying research gaps can lead to increased efforts and new research that ultimately improves public health. To achieve this aim, Strategic Priority II focuses on the identification of needs in prevention research, a comparison of those needs with the current NIH portfolio, and collaboration with stakeholders to identify opportunities in prevention research for additional investment. The success of Strategic Priority II requires developing and sustaining partnerships with program and scientific staff in NIH Institutes, Centers, and Offices, as well as key external stakeholders such as the U.S. Preventive Services Task Force (USPSTF) and the Community Preventive Services Task Force (CPSTF). Strategic Priority II team members also work closely with the Office of Disease Prevention and Health Promotion (ODPHP), HHS, to provide advice and research direction for the national Healthy People initiative.

Strategic Priority II accomplishments and opportunities are outlined below.

ACCOMPLISHMENTS

Objective II.1: Work with stakeholders to identify needs in prevention research.

- ✓ Coordinated NIH subject matter expert review of and input related to the USPSTF's topic prioritization process, research plans, evidence reports, and recommendation statements. Improved engagement in these activities has highlighted the importance of this partnership. The USPSTF is a major consumer of the research supported by the NIH, as that research provides much of the evidence that is synthesized in their systematic evidence reviews and serves as the foundation for most of the Task Force's preventive services recommendations.
- ✓ Developed several new modes for disseminating information regarding prevention research gaps, including an annual newsletter, "Partners for Prevention," that is distributed among NIH Institutes, Centers, and Offices and other federal stakeholders to highlight prevention research gaps identified by the USPSTF and the CPSTF as well as NIH activities related to the Healthy People initiative. Additional activities included working with Strategic Priority VI to develop [a new section of the ODP](#)

[website presenting current USPSTF insufficient evidence statements, or I statements](#), along with a description of research needs and gaps. These statements are issued when the evidence base summarized in systematic reviews conducted by the Task Force is insufficient to enable the USPSTF to make a recommendation for or against a preventive service. Sharing this information with the scientific community highlights the need for additional research in these areas.

- ✓ Partnered with the HHS ODPHP to support ongoing implementation of the Healthy People program. The ODP provided advice on numerous Healthy People activities to ensure that agency priorities are appropriately represented, and the Office also served as a liaison to staff from NIH Institutes and Centers co-leading Healthy People topic areas. For the first time in several years, ODP staff conducted in-person meetings with all NIH co-leads for 18 Healthy People topic areas to identify how best the Office can support staff coordinating program planning activities while also helping address challenges presented with the implementation of Healthy People topic areas.
- ✓ Provided the leadership, funding, and coordination necessary to conduct the [Pathways to Prevention \(P2P\) program](#). The P2P program develops and convenes workshops that identify research gaps in a selected area of prevention science, identify methodological and scientific weaknesses in that area, suggest research needs, and move the field forward through an unbiased, evidence-based assessment of a complex public health issue. Completed workshops have focused on topics such as the role of opioids in the treatment of chronic pain, advancing research on myalgic encephalomyelitis/chronic fatigue syndrome, Total Worker Health®, and the prevention of youth suicide.

Objective II.2: Compare those needs to the current NIH portfolio to identify gaps in prevention research (i.e., those areas that are not being addressed or have insufficient funding).

- ✓ Designed a new, web-based USPSTF Annual I Statement Reporting Survey to obtain more comprehensive information from NIH Institutes, Centers, and Offices related to 47 I statements. The revamped survey included the provision of research needs/gaps summaries for each I statement, questions focused on research supported by the NIH intramural research program, and planned activities related to Funding Opportunity Announcements, contracts, and meetings/workshops/conferences under development. Information from the survey highlights NIH activities relevant to the USPSTF I statements, providing an opportunity for Institutes and Centers to consider how their current and planned activities are sufficient, or whether additional activity may be warranted to better inform the development of USPSTF clinical guideline recommendations. A summary of the survey results was shared with NIH Institutes, Centers, and Offices, and with the Agency for Healthcare Research and Quality (AHRQ) and the USPSTF.

Objective II.3: Collaborate with Strategic Priority IV and the NIH Institutes and Centers to identify prevention research gaps and opportunities for investment or expanded effort.

- ✓ Utilized results from the USPSTF I Statement Reporting Survey to identify prevention research gaps that are of interest to multiple NIH Institutes and Centers. One research area addresses child preventive services, for which there are numerous USPSTF I statements. ODP staff have met with the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) and other relevant Institutes and Centers to discuss how these research gaps might be addressed through collaborative efforts. The results were also leveraged to inform the identification of new ODP-coordinated prevention Scientific Interest Groups currently under development by Strategic Priority IV.

OPPORTUNITIES

Validate Information From Survey

The USPSTF I Statement Reporting Survey captured nearly 600 grants from 17 NIH Institutes and Centers. Strategic Priority II team members have undertaken a pilot project to validate the information. Results of this validation effort will be used to refine the process by which the ODP obtains grant information relevant to USPSTF I statements. Additionally, as portfolio analysis capacity and accuracy increases, assistance from Strategic Priority I in conducting analyses of the NIH prevention research portfolio may help to reduce the burden and improve the accuracy of grant reporting for Institutes and Centers when participating in the survey.

Develop Tools for Monitoring Emerging Areas

The development of automated, systematic approaches for monitoring recently published reviews that are relevant to the NIH would facilitate the identification of prevention research gaps. Strategic Priority II has spent a significant amount of time working with AHRQ and Centers for Disease Control and Prevention (CDC) staff who support the USPSTF and the CPSTF, respectively, to gain a better understanding of the prevention research gaps identified by those groups. However, additional attention is needed to provide a more complete picture of needs and opportunities across the spectrum of prevention research.

Sharing Results and Collaborations

Strategic Priority II has shared the results of the 2016 I Statement Reporting Survey with NIH Institutes and Centers and with Strategic Priority IV to inform program decisions, including the development of Funding Opportunity Announcements, workshops, etc. Opportunities exist to highlight how these ODP efforts have helped to inform the evolution of the NIH prevention research portfolio over time. Additional plans are in place to identify research gaps in 3–5 key areas that warrant further consideration and support from the NIH. These projects will be completed in partnership with Strategic Priority IV, which focuses on the development of collaborative prevention research projects. Strategic Priority II has also shared the results of the survey with AHRQ and the USPSTF to inform decisions about topic prioritization and to increase knowledge and awareness of current NIH research. Lastly, Strategic Priority II plans to develop manuscripts that examine how NIH-funded research has informed USPSTF and CPSTF systematic reviews used to inform the development of guidelines for clinical and community preventive services.

STRATEGIC PRIORITY III



Strategic Priority III: Promote the use of the best available methods in prevention research and support the development of better methods.

To enhance the quality of prevention research at the NIH, Strategic Priority III aims to promote the use of the best available methods in prevention research and support the development of prevention science tools that focus on methods, measures, and analytic techniques. The best available methods in prevention research should be utilized to move the state of the science forward. Increased awareness of and training in the use of newer and more efficient approaches for research design, intervention development, measurement, and analysis are needed to improve both the quality and success of prevention research applications submitted to the NIH.

Strategic Priority III accomplishments and opportunities are outlined below.

ACCOMPLISHMENTS

Objective III.1: Develop a list of existing NIH and other federal resources pertaining to prevention science methodology.

- ✓ Completed a [database of NIH prevention methods training opportunities](#) and posted material on the [Resources for Researchers section of the ODP website](#). NIH training opportunities in prevention research methodology focus on study design, intervention design, data analysis, and measurement methods. Examples of training formats include lectures, webinars, and workshops.

Objective III.2: Provide training in prevention science methods to NIH program and review staff and to extramural investigators.

- ✓ Developed and launched the [Prevention Research Expertise Survey](#) (PRES). The PRES evolved from a partnership with the Society for Prevention Research and the Association of Schools and Programs of Public Health to identify methods experts in the extramural community and characterize their level of expertise on a variety of prevention-related design, analysis, and content areas. The results of the survey are housed in a database accessed via a web-based tool that will be used by Scientific Review Officers at the Center for Scientific Review to identify prevention science experts they may wish to invite to participate on review panels. The participation of highly qualified methods experts will strengthen the review panels and improve the quality of prevention research supported by the

NIH both directly and through the training that the methods experts will provide to the other panel members. The ODP anticipates that the web-based tool will be launched in 2017.

- ✓ Hosted 12 [Medicine: Mind the Gap webinars](#) exploring research design, measurement, intervention, data analysis, and other methods of interest to prevention science. To date, there have been over 2,500 views both live and through the NIH VideoCast archive. Examples of topics include design and analysis of studies to evaluate multilevel interventions in public health and medicine; use of taxonomies and frameworks of behavior change; time-varying effect modeling to study developmental and dynamic processes; and N-of-1 and novel within-subject trial methods. A special 3-part series on disease prevention screening topics was also presented.
- ✓ Partnered with the extramural community to support workshops and preconference sessions focused on prevention research methods. Collaborated with the Center for AIDS Research Social and Behavioral Science Research Network to develop a mixed-methods satellite training meeting for the organization's annual meeting. Events are being planned with the American Association for Cancer Research, the Society for Prevention Research, and the Society for Behavioral Medicine. These activities are supported in collaboration with NIH Institutes and Centers via the NIH Research Conference Grants funding mechanism (R13).
- ✓ Developed [an online course on Pragmatic and Group-Randomized Trials in Public Health and Medicine](#). After reviewing offerings by major research universities and online course vendors, the ODP determined that there was no online course available in the United States that addressed pragmatic and group-randomized trials. These trials are increasingly common in public health and medicine, with more than 1,100 articles published in 2015. To fill this gap, Strategic Priority III developed a seven-part free course and posted it on the ODP Resources for Researchers website. Each segment includes a 25- to 35-minute video presentation, accompanied by a reading list, suggested activities, an answer key for the activities, the slides for the presentation, and a transcript. Participants are able to email the ODP with questions.

Objective III.3: Develop NIH Funding Opportunity Announcements that encourage innovative and improved approaches to prevention science.

- ✓ Identified [current Funding Opportunity Announcements related to prevention science methods](#) and posted them in the Resources for Researchers section of the ODP website. In addition to reviewing material posted on the NIH website, Strategic Priority III team members interviewed NIH methods experts to identify funding opportunities that may have been missed via the initial search. Information from these interviews will also be used to identify potential topics that might become the focus of ODP-coordinated prevention methods initiatives.
- ✓ Provided subject matter expertise related to design and analytic methods during the development of new NIH-supported workshops and FOAs. Areas under consideration included methods in dietary patterns research; effects of a Mediterranean dietary pattern on cardiovascular and other diseases in the United States; evaluation of mind-body interventions for youth; and activities associated with the Health Care Systems Research Collaboratory.

Objective III.4: Work with stakeholders to identify and disseminate “best practices” in prevention science methods.

- ✓ Established the [ODP Early-Stage Investigator Award](#) to recognize early-career prevention scientists who have already made substantial, outstanding research contributions to their respective fields and are poised to become future leaders in prevention research. Nominees must have demonstrated

innovative and significant research accomplishments in areas relevant to the ODP's mission; evidence of highly collaborative research projects, especially those bridging disciplines or fields to offer new paradigms of thinking in disease prevention research; and evidence of a strong trajectory of career development and leadership. The first awardee will be announced in 2017.

- ✓ Provided continued administrative support for the [Robert S. Gordon, Jr. Lecture](#), which was established in tribute to Dr. Gordon for his outstanding contributions to the field of epidemiology and for his distinguished service to the NIH. The award is made annually to a scientist who has contributed significantly to the field of epidemiology or clinical trials research. The Lectureship is awarded by the NIH on the advice of the ODP and the recommendation of the Epidemiology & Clinical Trials Interest Group.

OPPORTUNITIES

Expansion and Validation of Prevention Research Expertise Survey Database

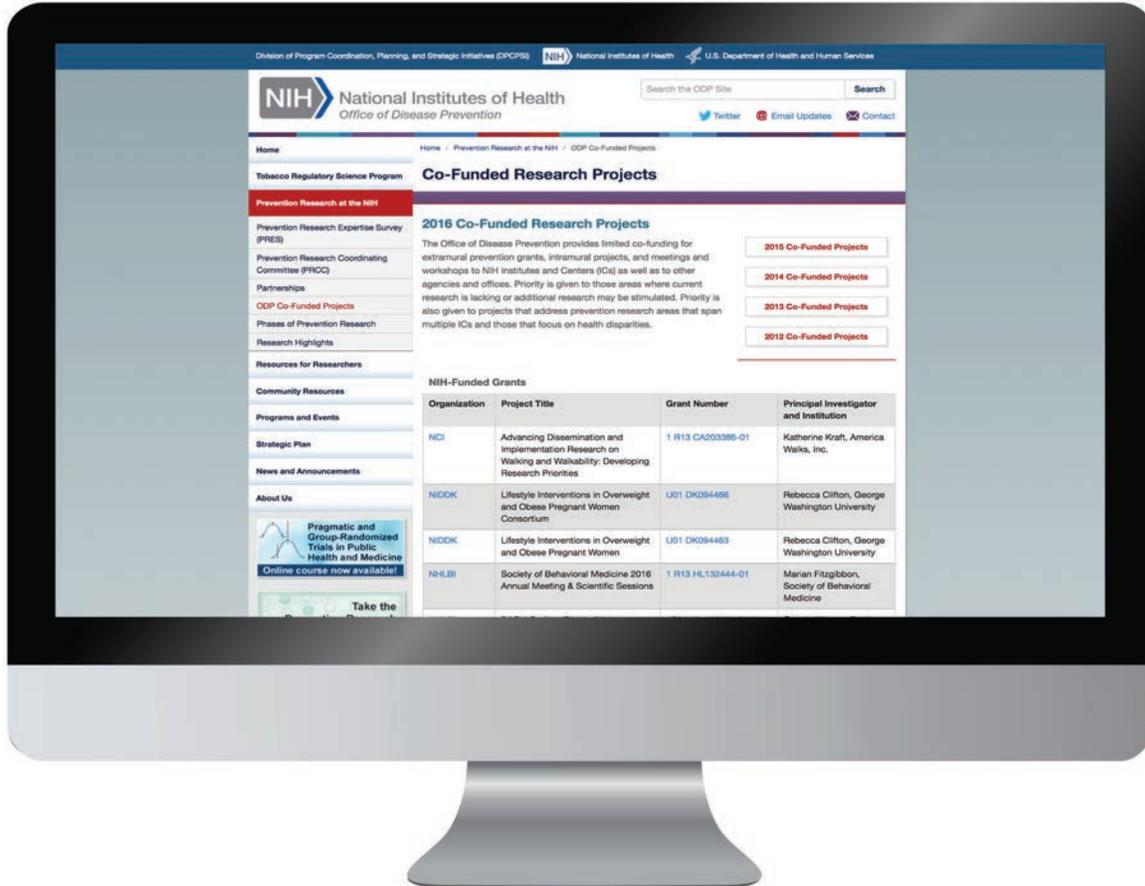
Designing and obtaining Office of Management and Budget approval for the Prevention Research Expertise Survey was a major success for the ODP. The corresponding electronic database that contains results from the survey represents over 900 respondents. The development and pilot testing of the web-based tool to be used by SROs at CSR and elsewhere is another important success. A short-term goal is to expand the PRES database so it will be sufficiently helpful to the SROs. The goal is to have 5,000 respondents. In addition, efforts will be launched soon to validate the existing PRES entries. The latter process will be labor intensive, but an important step in ensuring that the PRES directory remains a valuable resource to the scientific review community.

Strategic Priority III is developing a separate version for NIH methods experts. This database and web-based tool will be shared with all of the participants in order to stimulate interaction among methodologists who are often isolated in their Institutes and Centers. It will also be used to identify topics for future trainings and webinars.

Create a New NIH Methods Special Interest Group

Strategic Priority III team members have spent considerable time identifying and meeting with prevention experts across the NIH to gather input on numerous methods-related projects. Through this effort, SP III has identified a need for a forum to promote ongoing and organized communication among these subject matter experts. To address this need, the ODP is considering the development of a new NIH Methods Special Interest Group (SIG), or the reinvigoration of an existing group such as the Epidemiology and Clinical Trials SIG, the Statistics SIG, or the NIH Biostatistics SIG.

STRATEGIC PRIORITY IV



Strategic Priority IV: Promote collaborative prevention research projects and facilitate coordination of such projects across the NIH and with other public and private entities.

Strategic Priority IV encourages coordination of prevention research across the NIH, throughout government, and with the private sector to identify common or crosscutting topic areas and research questions; creates an environment of collaboration; and improves complementary and collaborative efforts to enhance the return on investment for prevention research at the NIH. Strategic Priority IV also leverages the results of portfolio analyses from Strategic Priority I and the identification of needs and gaps by Strategic Priority II to develop targeted collaborative prevention research activities (e.g., trans-NIH, HHS, and public/private partnerships).

Strategic Priority IV accomplishments and opportunities are outlined below.

ACCOMPLISHMENTS

Objective IV.1: Identify, document, and share best practices for research collaborations within the NIH and with other stakeholders.

- ✓ Identified five successful models of collaborative research that were used in restructuring the [Prevention Research Coordinating Committee](#) (PRCC) and to foster the formation, structure, and activities of new prevention Scientific Interest Groups. Team members completed interviews, examined challenges, and reviewed program history, organizational structure, management approaches, and best practices, and summarized in overviews available for NIH groups.

Objective IV.2: Establish or promote infrastructures and processes to foster research coordination and collaboration across the NIH and with other public and private entities.

- ✓ Completed an assessment of and summarized ODP staff participation on relevant collaborative workgroups and committees to identify areas where additional ODP participation in trans-NIH activities was warranted and participation needed.
- ✓ Developed and conducted a PRCC collaborative research topics survey to identify collaborative prevention research gap areas. This work led to the identification of five topics—childhood screening; adult screening; genetics of prevention; evaluation of environmental, policy, and systems-level interventions; and interventions to prevent or delay onset of multiple comorbid conditions. To support the development of collaborative prevention initiatives in each area, five new trans-NIH Scientific Interest Groups are being developed. Additionally, the ODP will leverage the existing infrastructure of two NIH Scientific Interest Groups to explore prevention activities related to physical activity and tobacco. In total, the ODP will be providing the infrastructure and organizational support for seven Scientific Interest Groups and related activities over the next 12 months. Anticipated products may include but are not limited to Funding Opportunity Announcements, workshops, identification of relevant research resources, and enhancement of the ODP website to highlight prevention research in these areas.
- ✓ Enhanced the [ODP co-funding portfolio](#) by streamlining the scope, as well as the submission, tracking, and review processes. Updated submission forms clarifying that ODP co-funding support focuses on the top 10 contributors to morbidity and mortality, screening for diseases or health conditions, and efforts to improve methods for conducting prevention research. Funding for domestic research was prioritized over international research. These improvements, along with more consistent requests for applications, have led to a co-funding portfolio that is more aligned with ODP priorities.

Objective IV.3: Coordinate NIH Funding Opportunity Announcements to address areas of need in prevention research.

- ✓ Led the development and release of two FOAs on the design and testing of health-enhancing physical activity interventions, and compiled frequently asked questions addressing the issues of design and analysis. In four application rounds, 35 applications were reviewed (2 awards) in 2015 and 37 were reviewed (4 awards) in 2016. This represents the first time the ODP has coordinated the development of a Funding Opportunity Announcement. Since 2015, the ODP signed onto 15 FOAs across the NIH that include research related to Alzheimer's Disease, Big Data, Data Repositories, Dissemination and Implementation, Measures and Methods in Behavioral Research, Environmental Child Health Outcomes, Obesity Policy and Evaluation, Rehabilitation, Sex and Gender Differences,

and Effects of E-Cigarette Aerosol Mixtures. The ODP worked with the National Center for Complementary and Integrative Health (NCCIH) to develop the third reissuance of the Health Care Systems Collaboratory FOAs; the ODP language encourages investigators to consider addressing the USPSTF Insufficient Evidence Research Gaps.

- ✓ Provided input on strategic planning activities by NIH Institutes, Centers, and Offices to enhance prevention components, including the NIH-Wide Strategic Plan, FY 2016–2020: Turning Discovery Into Health and new plans developed by the National Heart, Lung, and Blood Institute (NHLBI), NCCIH, NICHD National Center for Medical Rehabilitation Research (NCMRR), and the Office of Behavioral and Social Science Research (OBSSR). Strategic Priority IV staff also contributed to major federal reports and other related planning activities in the areas of nutrition (National Nutrition Research Roadmap and the 2015 Dietary Guidelines for Americans) and physical activity (2018 Physical Activity Guidelines for Americans—in progress). Participation in these activities has elevated the focus on prevention and has ensured that the NIH perspective has been appropriately integrated.
- ✓ Worked closely with Strategic Priority II to identify prevention research gaps that could be advanced through ODP-coordinated efforts. Strategic Priority IV team members have participated in Pathways to Prevention workshops, as well as the federal partners meetings that serve as a venue for relevant federal agencies to review the panel’s final report and identify possible opportunities for collaboration and next steps. Results from the USPSTF Annual I Statement Reporting Survey developed by Strategic Priority II were also leveraged during the identification of collaborative prevention research activities.

OPPORTUNITIES

Implement New Scientific Interest Groups

Strategic Priority IV received a larger-than-anticipated response from the NIH prevention research community related to participation in the new ODP-coordinated prevention Scientific Interest Groups. This suggests that the ODP has identified areas of need and interest among NIH staff. In FY 2017, a major area of opportunity for Strategic Priority IV is the successful implementation of these collaborative groups. Progress is already being made in the area of child health. One of the Scientific Interest Groups will be focused on this topic, and some preliminary discussions have begun regarding efforts to explore how to better define outcomes for child health that may have relevance for research to advance evidence in this area.

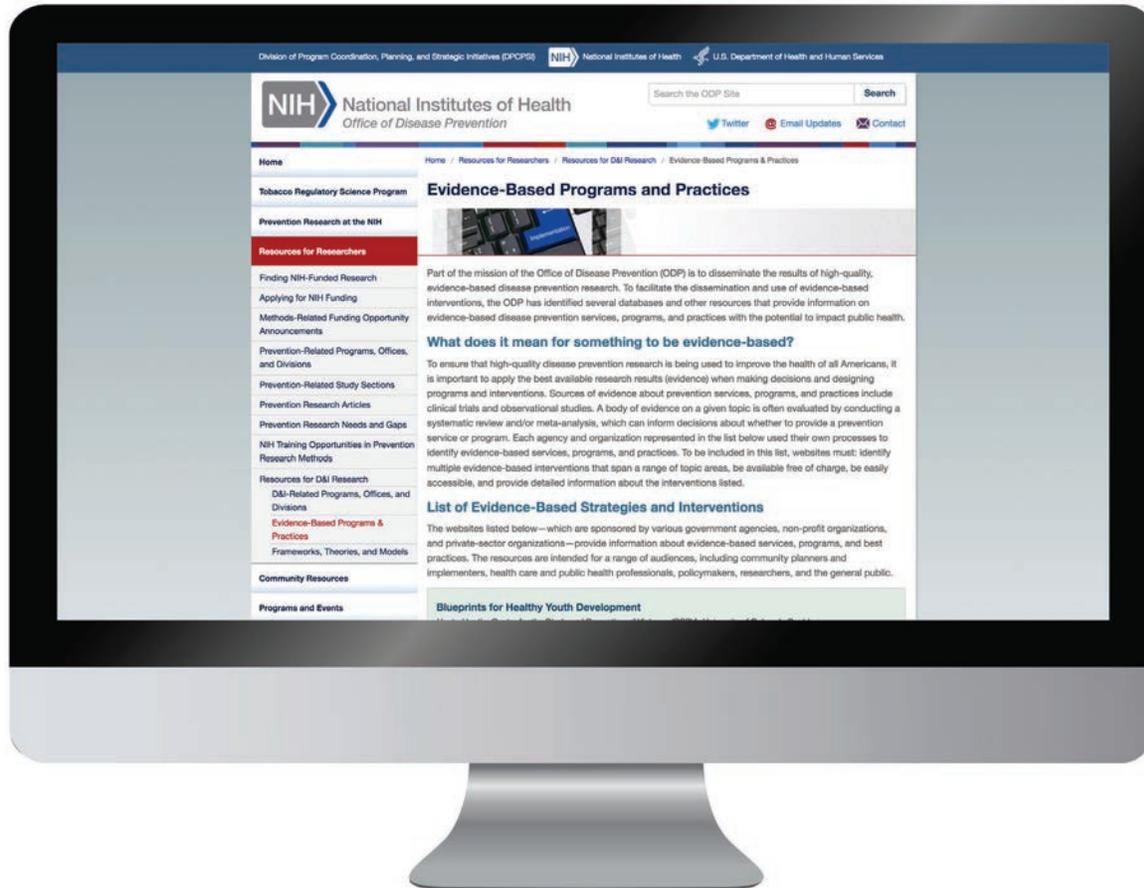
Promote Existing Prevention-Related Funding Opportunity Announcements

Working closely with Strategic Priority VI, Strategic Priority IV team members have developed [a list of active FOAs](#) that have been posted in the Resources for Researchers section of the ODP website and will be updated regularly. Currently, the list includes over 120 FOAs in a range of prevention categories including the top 10 leading causes of death, risk factors, screening, and methods research. This easy-to-reference list will allow prevention investigators to identify opportunities more efficiently.

Leveraging Outputs From Strategic Priorities I and II

Strategic Priority IV will benefit from the results of ODP-coordinated portfolio analysis activities (Strategic Priority I) and the ongoing identification of prevention gaps (Strategic Priority II). Working closely with other ODP components, Strategic Priority IV will be well positioned to inform trans-NIH prevention research activities.

STRATEGIC PRIORITY V



Strategic Priority V: Identify and promote the use of evidence-based interventions and promote the conduct of implementation and dissemination research in prevention.

Dissemination and implementation (D&I) research seeks to promote and rigorously evaluate strategies for integrating evidence-based approaches into clinical and diverse community settings via public health practice, health care delivery, and health care policy. Strategic Priority V activities focus on the identification and promotion of the use of evidence-based interventions and conduct of D&I research in disease prevention. These efforts are helping to integrate scientific evidence, practice, and policy with the ultimate goal of improving disease prevention and promoting health across individual, organizational, and community levels. As the NIH continues to expand its focus on D&I research, the ODP is enhancing partnerships to increase the visibility of prevention in D&I research and promote dissemination of evidence-based interventions across the NIH.

Strategic Priority V accomplishments and opportunities are outlined below.

ACCOMPLISHMENTS

Objective V.1: Identify evidence-based interventions for disease prevention and present them in an organized structure.

- ✓ Developed criteria for the selection of resources and articles relevant to the ODP prevention research community. Strategic Priority V team members worked with NIH staff and other federal partners to refine the selection criteria and to identify additional resources for presentation on the ODP website. A new PubMed search tool was also employed to identify research articles that met the identified criteria.
- ✓ Developed and updated several new webpages to provide D&I-related information, tools, and other resources to assist a variety of stakeholders. A new [Research Highlight was developed to feature D&I prevention research](#) activities, scientific advances, and resources from the NIH and other federal partners. The Prevention Research Articles section now contains a selection of recent, peer-reviewed articles on D&I research. The Evidence-Based Programs and Practices section identifies several databases and other resources that provide information to community planners and implementers, health care and public health professionals, policymakers, and researchers to promote public health using evidence-based strategies.

Objective V.2: Enhance partnerships to promote the dissemination of evidence-based interventions for disease prevention.

- ✓ Collaborated with the trans-NIH D&I Working Group to create a new [Resources for Researchers section on D&I research](#) for the ODP website. The material includes examples and links to funded projects; training opportunities; frameworks, theories, and models; and D&I-related programs, offices, and divisions at the NIH. The section also provides information on D&I research funding opportunity announcements across all Institutes, Centers, and Offices.
- ✓ Strengthened partnerships with the implementation science programs at the National Cancer Institute (NCI), National Institute on Drug Abuse (NIDA), National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institute of Dental and Craniofacial Research (NIDCR), and OBSSR; D&I program staff at CDC and AHRQ; AcademyHealth; and the United States Cochrane Center. These partnerships have led to an improved understanding of the D&I landscape at the NIH and in the extramural community, and have allowed the ODP to work collaboratively to incorporate prevention components into the D&I research agenda and activities.

Objective V.3: Enhance partnerships to promote research on dissemination and implementation of evidence-based interventions in prevention.

- ✓ Joined 17 other NIH Institutes, Centers, and Offices on three Funding Opportunity Announcements for Dissemination and Implementation Research in Health (R01, R03, R21). These NIH-funded grants will help to identify, develop, evaluate, and refine effective and efficient methods, systems, infrastructures, and strategies to disseminate and implement evidence-based practices and programs into public health, clinical practice, and community settings.
- ✓ Provided co-funding for the Training Institute for Dissemination and Implementation Research in Health. This training provides investigators with theory, implementation, and evaluation approaches to D&I research and helps them create partnerships and multilevel, transdisciplinary research teams. The trainees will learn how to choose research designs, select methods and analyses appropriate for D&I investigators, and conduct research at different levels of intervention (e.g., clinical, community, policy).

- ✓ Assisted in planning the Annual Conference on the Science of Dissemination and Implementation in Health. This conference is focused on the highest priorities for D&I research to help optimize health and health care in the United States and globally. Strategic Priority V team members co-lead the Prevention and Public Health Track, which highlights innovative research on methods for evaluating the dissemination or implementation of interventions to prevent disease and improve public health (including research design, measurement, data analysis, or data visualization).

OPPORTUNITIES

Medicine: Mind the Gap Webinar on D&I Research Methods

In collaboration with Strategic Priority III, Strategic Priority V has proposed a Medicine: Mind the Gap webinar focused on D&I research methods. [Medicine: Mind the Gap is a webinar series](#) that explores research design, measurement, intervention, data analysis, and other methods of interest to prevention science. The webinar series aims to engage the prevention research community in thought-provoking discussions to promote the use of the best available methods in prevention research and to support the development of better methods.

Characterize the NIH D&I Research Portfolio

Strategic Priority V is collaborating with NCI as well as with staff from the National Institute of Mental Health (NIMH), National Institute of Nursing Research (NINR), NIDA, NHLBI, and Fogarty International Center (FIC) to develop a trans-NIH codebook to facilitate D&I portfolio analysis. By systematically monitoring the D&I portfolio funded by the NIH, the ODP can better assess the progress of research over time and enhance partnerships that promote D&I research within the field of disease prevention.

STRATEGIC PRIORITY VI



Strategic Priority VI: Increase the visibility of prevention research at the NIH and across the country.

Strategic Priority VI focuses on disseminating information to broaden the scientific and public health impact of the NIH prevention research portfolio. The ODP can enhance prevention research by disseminating NIH prevention research and resources, strengthening partnerships to improve information dissemination, and gathering input and feedback from stakeholders including researchers, program and policy stakeholders, and the general public. Strategic Priority VI team members have been integrated into each of the priority teams to facilitate communication and the promotion of program goals and new resources.

Strategic Priority VI accomplishments and opportunities are outlined below.

ACCOMPLISHMENTS

Objective VI.1: Increase the availability of information about prevention research through the use of traditional and digital communication tools.

- ✓ Expanded the ODP presence by developing new sections of the ODP website (see below), posting thousands of tweets via Twitter, and sending dozens of eblasts to NIH staff, extramural researchers, professional societies, and other stakeholders. Strategic Priority VI also partnered with federal and non-federal stakeholders to widely disseminate ODP and NIH messaging.
- ✓ Developed the [Community Resources section of the ODP website](#), which is intended for a variety of audiences, including community planners, health care and public health professionals, policymakers, and the general public. It highlights various evidenced-based programs and practices, news and announcements, upcoming events, educational materials, and resources from the NIH and its federal partners.
- ✓ Developed the [Resources for Researchers section for the ODP website](#), which is aimed at assisting investigators by providing information and interactive tools that support researchers in developing and funding quality projects that address a wide range of research needs, gaps, and priorities. The section also offers recent, peer-reviewed articles on prevention research and training opportunities to inform investigators throughout their research careers. There are currently nine subsections, including Finding NIH-Funded Research; Applying for NIH Funding; Methods-Related Funding Opportunity Announcements; Prevention-Related Programs, Offices, and Divisions; Prevention-Related Study Sections; Prevention Research Articles; Prevention Research Needs and Gaps; NIH Training Opportunities in Prevention Research Methods; and Resources for Dissemination and Implementation Research.
- ✓ Enhanced the [ODP Director's Page](#) and began posting a new Director's Letter every other month to highlight the work of the ODP. To date, 13 letters have been posted. A listing of the ODP Director's presentations to various audiences at key meetings and seminars is also included on this page.
- ✓ Served as the primary liaison to the ODP's scientific, communications, and technology support contractor on all projects relating to the continued monitoring, growth, maintenance, and analysis of the ODP website; all of the ODP's social media efforts; and the planning, coordination, and promotion of the ODP's meetings, webinars, and conferences.

Objective VI.2: Increase communications and collaborations with stakeholders to coordinate communications about disease prevention.

- ✓ Identified federal and non-federal stakeholders and enhanced collaborations with a variety of NIH committees, including the Trans-NIH Communication Directors Committee, the Trans-NIH D&I Working Group, the Trans-NIH International Representatives Committee, and the NIH Social Media Collaboration Committee.
- ✓ Strengthened partnerships with professional organizations (e.g., Society for Prevention Research, AcademyHealth) to promote ODP-sponsored events and initiatives, thereby increasing the visibility of the ODP among organization stakeholders. Presented posters at three professional meetings to network and meet with stakeholders in person and to enhance efforts to spread the word about the ODP's prevention research resources.
- ✓ Collaborated with federal stakeholders to promote prevention-related activities, including the National Nutrition Research Roadmap developed by the Interagency Committee on Human Nutrition Research; Healthy People webinars coordinated by the HHS Office of Disease Prevention and Health Promotion; and the National Institute of Neurological Disorders and Stroke Mind the Risks campaign. Strategic Priority VI is also collaborating with NCI to develop their Success Stories project.

Objective VI.3: Support Strategic Priorities I–V via the ODP website and other communication tools.

- ✓ Provided leadership and technical support for a variety of communication-related projects. Many of these projects have been highlighted in the priority-specific mid-course reports and include the development and dissemination of materials related to the [Medicine: Mind the Gap webinar series](#) and the [Robert S. Gordon, Jr. Lecture in Epidemiology](#), as well as the updating of the list of [co-funded research projects](#) on the ODP website.
- ✓ Managed and led all communications tasks for the [Pathways to Prevention Workshops](#), including: developed and posted workshop information and promotional materials; wrote and disseminated media advisories; distributed promotional e-blasts to relevant listservs; worked with panelists and speakers to collect and edit bios, speaker presentations, and photos; developed a new electronic program book; increased promotion via social media; edited workshop reports; and coordinated post-workshop press telebriefings.
- ✓ Promoted the ODP's first annual [Early-Stage Investigator Award](#) by developing a new webpage, developing a PowerPoint slide for ODP staff to use to promote the Call for Nominations, and further disseminating the news about this opportunity via eblasts and social media.

OPPORTUNITIES

Addressing User Satisfaction

The ODP is committed to ensuring that all web-based resources are of the highest quality. To fulfill the mandate to disseminate all of the ODP's prevention research resources on the web, it is imperative that as many stakeholders as possible are able to find the information and access it, and the ODP's promotional efforts must be combined with findability and ease of use. Strategic Priority VI is in the process of developing meaningful metrics to understand who is coming to the site and what information is serving them best. Strategic Priority VI has also begun an effort at search engine optimization, so that the language on the ODP site matches the kind of language that visitors to the website type into a search box when they seek prevention research information on the web. Search engine optimization and user metrics will help the ODP reach and fully address the needs of its constituents.

Enhancing Social Media Presence

Building on the ODP's success with Twitter (currently over 16,000 followers), Strategic Priority VI plans to enhance its presence on the platform by creating new and engaging social media graphics; using relevant hashtags, Twitter chats, and other strategies to facilitate a conversation about prevention research; and measuring engagement. Twitter represents yet another opportunity to expand the ODP's outreach to larger and more varied audiences with versatile messaging in a timely and cost-effective manner and to support the ODP's NIH and federal partners by reposting links to their resources and promoting their programs and activities.