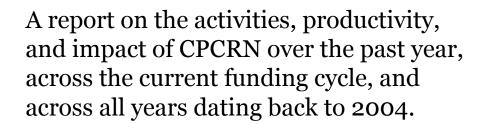


## Impact of the Cancer Prevention and Control Research Network April 2018







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Funding Cycle 4, Year 3, with Summary 2004-2017

The Centers for Disease Control and Prevention (CDC)- and National Cancer Institute (NCI)-funded Cancer Prevention and Control Research Network (CPCRN) has been in operation since 2004. Over that time, the Network has had 16 university members, with 8 universities currently housing CPCRN Network Centers. This report demonstrates the impact of the work done by CPCRN's investigators and summarizes the research and dissemination activities of the CPCRN, its member Centers, and its multicenter Workgroups over three time periods: the past year (through September 2017), the first three years of the current five-year funding cycle, and all network activity dating back to 2004.

By the numbers: CPCRN has had significant impact on the scientific literature in cancer prevention and control. Since 2004, there have been 2,007 CPCRN-related publications in peer-reviewed journals, 176 of which reflected multicenter collaborations. In the current funding cycle, there have been 307 publications, 36 of which reflected multicenter collaborations, and just in the past year, CPCRN published 105 articles, 11 of which reflected multicenter collaborations. CPCRN has also led to nearly 2,000 presentations to outside organizations since 2004, with 225 in the current funding cycle and 112 in the past year. Hundreds of these presentations have been given in collaboration with research partner organizations, such as Federally Qualified Health Centers (FQHCs, 106 since 2004) and other health care providers (198 since 2004). In the past year, the CPCRN Coordinating Center began tracking trainings and workshops separately from other types of presentations, and CPCRN Centers reported conducting 13 training programs or workshops in the past year, one of which reflected a multicenter collaboration between the University of North Carolina and Oregon Health and Science University that was delivered 4 times.

Seeking grant funding for new research and dissemination efforts is a priority for CPCRN investigators. In the past year, CPCRN Centers submitted 38 applications for funding worth \$94 million, 4 of which reflected multicenter efforts, and six of which were related to the work of CPCRN Workgroups. Over half (20) were funded, for a total of \$69 million. In the first three years of the current funding cycle, CPCRN Centers submitted 127 grant applications worth \$227 million, with over half (69) of those funded, for a total of \$104 million in external funding secured by CPCRN centers in the current funding cycle. Since 2004, CPCRN has applied for 1,270 grants (189 of them multicenter collaborations), totaling nearly \$1.5 billion. Nearly 600 of those grants were funded, totaling approximately \$600 million. Multicenter collaborations have clearly brought strength to investigators' grant applications. Of the 189 multicenter grant applications submitted since 2004, 113 (60%) have been funded, securing over \$90 million in funding for CPCRN collaborative research. CPCRN progress reporting data shows that CPCRN members develop relationships with and consistently partner with state and federal breast, cervical, and colorectal cancer detection programs and health care systems such as Federally Qualified Health Centers in their grant-seeking efforts.

Reports, Plans, and Policies Created in Conjunction with State and National Programs: CPCRN Centers were instrumental to the creation of a dozen reports, plans, or policies with state and national programs in the past year, listed below (with partner organization in parentheses).

- 1. 2017 Cancer in Iowa (Iowa Cancer Registry)
- 2. Revision of Iowa Cancer Plan 2018-2022 (Iowa Cancer Consortium)
- 3. South Carolina Cancer Plan (South Carolina Cancer Alliance)
- 4. Case Western Reserve University Tobacco-Free Campus Policy (CWRU Smoke-Free Campus)
- 5. Stakeholder Research Priorities for Smoking Cessation Interventions within Lung Cancer Screening Programs (American Thoracic Society)
- 6. Prostate Cancer Recommendations for Improving the Health of Pennsylvania Men (Pennsylvania Department of Health)
- 7. Kentucky Adolescent Vaccination for Pharmacists Policy Change (Kentucky Pharmacy Association)

- 8. Washington CRCCP Year 1 Process Evaluation Findings and Lessons Learned: A Summary Report (Washington Colorectal Cancer Control Program)
- 9. Washington CRCCP Evaluation Plan, Version 2.0 (Washington Colorectal Cancer Control Program)
- 10. Washington Department of Health Breast and Cervical Cancer Screening Program Evaluation Plan (Washington Breast, Cervical, and Colon Health Program)
- 11. Community Health Worker Interviews Summary Report (Washington Cancer Survivorship Network)
- 12. Patient Preferences for Survivorship Care Plans Summary Report (Washington Cancer Survivorship Network)

Catalyzing Action and Effecting Change: CPCRN Centers and Workgroups engaged in a variety of activities in the past year that demonstrated the Network's impact via catalyzing action and effecting change in partnership with community and policy organizations. For example, after learning of the findings of the FQHC Workgroup's CRC screening activity survey, University of Washington's partner FQHC acted promptly on the findings, gathering client feedback, and adjusting workflows to increase efficiency of screening kit distribution. Based on client feedback, they helped the FQHC develop an interview guide and update materials and mailing methods, provide targeted outreach and education to providers and clinic staff, and provided motivational interviewing training to increase staff capacity to communicate with clients about CRC screening. Furthermore, UW developed a tool now used by Washington CRCCP FQHCs to track, monitor, and summarize CRC screening FIT kit distribution efforts.

In another case of the work of the FQHC group catalyzing action, University of Kentucky discovered, while conducting qualitative interviews with the Juniper Health organization for the FQHC Workgroup that they had heard about UK's Proactive Office Encounter (POE) framework from UK's CPCRN partner White House Clinics and had adapted and implemented it in Juniper's clinics. UK established a partnership with Juniper to learn more about their POE implementation process. UK was also sought out by Appalachian Regional Healthcare for Technical assistance in implementing POE at their clinics.

In another case of the FQHC Workgroup sparking organizational change, the University of Pennsylvania CPCRN team worked with stakeholders and FQHC partners to identify barriers, challenges, and needs regarding CRC screening and used process mapping to inform development of a project to address critical gaps in the uptake of evidence-based strategies to increase screening. They held a peer learning kick-off event where each of 4 clinic sites developed collaborative action plans for implementing their tailored evidence-based projects.

And although much of the Network's current work with FQHCs is focused on CRC screening, Case Western led an effort with local FQHCs to create a registry for abnormal Pap smears and colposcopies so that the FQHC team can better follow-up with patients in a timely manner.

In addition to their 6 publications in the past year, the Modeling Evidence-Based Intervention Impact Workgroup catalyzed action in several ways: University of North Carolina investigators used the Workgroup's findings to motivate and implement a CRC screening outreach quality improvement initiative with county and state organizations. Drs. Wheeler and Brenner developed a new partnership with Public Health Department and Medicaid stakeholders to implement mailing reminders and FIT kits to Medicaid clients. In addition, the Workgroup's efforts prompted a 6-part series of webinars and a technical assistance program for Oregon Health and Science University partners to assist with implementing Evidence-Based Interventions for Coordinated Care Organizations (Oregon's Affordable Care Act healthcare system) to increase CRC screening, resulting in the initiation of multi-component interventions to increase community demand, improve community access, and increase clinical delivery of screening services. Results from the Workgroup also were presented to National CRC Roundtable leadership and to the North Carolina CRC Roundtable.

The work of the Tobacco and Lung Cancer Screening Workgroup has had substantial impact on local and national levels this past year, catalyzing action and effecting change in several ways. Case Western Reserve University worked with health clinic organization partner MetroHealth to incorporate permanent changes to their Electronic Medical Records (EMR) system to incorporate Case Western's eReferral intervention to conduct patient tobacco use assessments, assistance, and referrals to the state Quitline. On a national level, University of Washington's Dr. Zeliadt's SIP-funded research findings suggested

prioritizing careful monitoring of tobacco cessation and quit rates by geographic groupings and providing screening programs incentives for close monitoring of the prioritized quality measure that emerged from the study. Dr. Zeliadt's findings were presented at the National Lung Cancer Roundtable, and influenced the American College of Radiology Registry to begin routinely calculating and reporting quit rates based on Dr. Zeliadt's recommendations, which also informed the American Thoracic Society's Official Research Agenda Policy Statement on integrating smoking cessation into lung cancer screening.

And finally, the work of the HPV Vaccination Workgroup influenced passage of Kentucky Senate Bill 101, allowing Kentucky Pharmacists to administer HPV vaccines to adolescents. Lessons learned by a CPCRN multicenter pilot grant from the American Cancer Society HPV Vaccination Roundtable to examine HPV vaccination in pharmacy settings were disseminated to and informed drafting of the legislation by Kentucky pharmacy advocates.

Significant Dissemination Communications: Some of CPCRN's work this past year was disseminated broadly over social or traditional media to reach a wide audience. For example, University of Iowa P.I. Dr. Askelson was featured in an article in national magazine *The Atlantic* about the decision to close one third of Planned Parenthood centers in Iowa. Dr. Askelson discussed her view on how reduced health care access for women's health, including cancer prevention and detection services, will impact the state's population. University of Iowa CPCRN research was also featured in a British National Health Service article about the link between energy-dense foods and obesity-related cancer. And *Oregon Health and Science University's Dr. Winters-Stone* conducted a study to determine whether providing a free exercise DVD in addition to an oncologist's recommendation for exercise led to better outcomes than the doctor's recommendation alone; it did. Stories about the program were featured on the OHSU website and in their cancer center's newsletter, and disseminated via multiple social media platforms, reaching over 14,000 people's social media feeds.

Requests for Scientific Expertise: CPCRN researchers are frequently sought out by outside organizations for their scientific expertise in cancer control. A brief listing of those requests for expertise is featured below; more details are featured in the full report:

- UW's Drs. Hannon and Coronado were sought by CDC to serve as members of CDC's Breast and Cervical Cancer Early Detection and Control Advisory Committee.
- UW's Dr. Taylor was sought out to serve as a reviewer by the CDC and NCI's primary groups seeking to promote Evidence-Based Approaches to cancer control, the CDC's Guide to Community Preventive Services and NCI's Research-Tested Intervention Programs.
- UW's Dr. Coronado was **sought by CDC's Community Guide Cancer Screening Evidence Review Committee** for her expertise in engaging community health workers to promote cancer screening.
- UNC's Dr. Wheeler's **expertise in CRC screening decision making and simulation was requested by several organizations**, including the *North Carolina Colorectal Cancer Roundtable*, the *American Cancer Society, Centers for Disease Control and Prevention, National Cancer Institute*, and *National CRC Roundtable*.
- USC's Dr. Friedman sought by South Carolina Hospital Association for assistance in developing a tool
  to gauge health literacy in patients in all hospital systems in South Carolina.
- USC's Dr. Friedman sought by South Carolina Cancer Alliance for assistance in developing a prostate cancer educational resource.
- UI's Dr. Askelson and Ms. Seegmiller were sought by American Cancer Society and Iowa Managed Care Organizations to develop an evaluation of a statewide HPV vaccination project.
- OHSU and UW's Drs. Davis and Coronado were sought by the Oregon Health Authority's Transformation Center for Colorectal Cancer Screening technical assistance at Coordinated Care Organizations.
- UW's Dr. Coronado was sought by the NW Portland Area Indian Health Board and NW Tribal Clinical Cancer organization to speak at their Clinical Cancer Update meeting about CRC screening.

- UK's Dr. Vanderpool was sought by state teams at the 80% by 2018 forum to provide technical assistance on increasing CRC screening rates through enhanced partnerships between Comprehensive Cancer Control Coalitions and FQHCs.
- UNC's Dr. Leeman was sought to serve on the NCI Qualitative Research in Implementation Science Workgroup, and presented the group's guidance at the Seattle Implementation Research Conference.
- UNC's Dr. Rohweder was **sought by the National Colorectal Cancer Roundtable** to share data from the FQHC workgroup's survey and qualitative interviews.
- UI's team was sought by Iowa Department of Public Health to assist in an Evaluation of HPV vaccination Vaccines for Children Clinics

<u>CPCRN Coordinating Center & Steering Committee</u>: With leadership from the Coordinating Center, the Steering Committee developed a **new Mission Statement and Network Strategic Plan** outlining the network's aspirational goals, objectives and tactics to achieve them and key performance indicators to evaluate success. The Coordinating Center also worked with Steering Committee leadership to develop written **Guidelines for Collaboration** to use in Steering Committee discussions around group norms for network collaborations.

The Network's Annual Scientific Meeting was held in Chapel Hill, NC in May 2017, including 37 inperson attendees and 12 virtual participants via Adobe Connect. In addition to dedicated time for Workgroups and the Steering Committee to meet, plenary sessions were dedicated to re-envisioning the network/network structure, workshopping grant ideas, defining high priority questions for the CPCRN, measuring impact of the CPCRN, discussing tips and tricks from DIRH-funded investigators, and presenting workgroup and center research.

Members were encouraged to participate in the CDC Cancer Conference and Conference on the Science of Dissemination and Implementation in Health; the Network had high visibility at both meetings, including two panel discussions and several individual presentations at the Cancer Conference. The Coordinating Center planned a CPCRN networking event during the D&I conference and a half-day meeting at the conclusion of the Cancer Conference featuring a presentation by the Alan Alda Center for Communicating Science where investigators learned to communicate their work in clear, vivid, and engaging ways.

During Year 3, the Coordinating Center further developed our processes and structures to support CPCRN through the use of technology via multiple projects, including: 1.) revising our progress reporting system to capture the impact of CPCRN work in new and different ways of interest to the funders, 2.) by developing a new communications and dissemination strategy increasing CPCRN's social media presence, 3.) implementing a quarterly emailed newsletter to inside and outside CPCRN audiences, 4.) implementing extensive updates to the CPCRN website to broaden its appeal to external (non-member) users, and 5.) developing a project to feature a searchable and filterable bibliography of all CPCRN publications and their abstracts dating back to 2004.

<u>Conclusion</u>: CPCRN has made substantial impact in cancer prevention and control and dissemination and implementation science in the past year, across the current funding cycle, and across its history dating back to 2004. Its members continue to innovate, develop, implement, and evaluate evidence-based approaches to cancer prevention and control with their local, state, and national partners, influencing everything from local clinic practices to state cancer plans to national organizations' practices and policies. *The Network's extensive history of publications (over 2,000) and funded grants totaling over \$600 million in research dollars demonstrate just two of many ways the Network and its investigators' expertise has and continues to have significant impact on the nation's dissemination and implementation of evidence-based cancer prevention and control research.* 

**Note**: This document is an executive summary of a detailed 90-page report; for more information, contact Rebecca Williams, Chief Technology Officer of the CPCRN at the Coordinating Center via email: rebeccawilliams@unc.edu.