US Deprescribing Research Network

ANNUAL REPORT 2020

Network Co-Directors: Michael Steinman, MD and Cynthia Boyd, MD, MPH

www.deprescribingresearch.org

Welcome

The US Deprescribing Research Network (USDeN) is a national research network devoted to supporting high-quality, high-impact research on deprescribing for older adults. Funded by the US National Institute on Aging since 2019, our work is organized around four key pillars:

- We support Investigator Development by providing opportunities for learning, collaboration, and community.

- We provide Pilot and Grant Planning Awards to catalyze novel research and junior investigator career advancement related to deprescribing.

- We develop high-value Research Resources and Guidance to promote cutting-edge research and advance the field.

- We facilitate Stakeholder Engagement so that deprescribing research is responsive to the needs and perspectives of older adults and those who care for them.

We welcome you to learn more and to join our community! Please visit us at **deprescribingresearch.org** to learn more and sign up for our listserv to keep abreast of upcoming events and resources.

Cynthia Boyd and Michael Steinman
Co-Principal Investigators, USDeN

What is Deprescribing?

Deprescribing refers to the thoughtful and systematic process of identifying problematic medications and reducing the dose or stopping these medications in a manner that is safe, effective, and helps people maximize their wellness and goals of care.

Deprescribing is not easy. Little is known about how to best identify which medications are prime for deprescribing, how to safely and effectively stop them, and how to engage patients and families, clinicians, and the health system in this process in a seamless and patient-centered manner. These are the challenges our network seeks to address.

Why is Deprescribing Important?

In the US, 67% of older adults take 5 or more medications[1]

15%

In the US, more than 1 in 7 older adults are using medications with potential for major drug-drug interactions
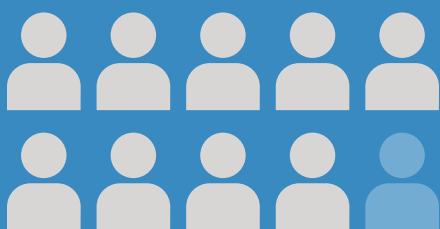
9%

Adverse drug reactions account for 1 of every 11 hospital admissions among older adults[1]

67%

2 out of every 3 older adults want to reduce the number of medications they are taking[2]

More than 9 in 10 would be willing to stop taking one or more of their medicines if their physician said it was possible[2]

[1] Qato et al, https://pubmed.ncbi.nlm.nih.gov/26998708/   [2] Reeve et al, https://pubmed.ncbi.nlm.nih.gov/30326004/

Investigator Development

Led by **Drs. Kenneth Boockvar** and **Jennifer Tjia**, our Investigator Development Core is focused on building a community of learning, collaboration, and support for investigators interested in deprescribing.

JUNIOR INVESTIGATOR INTENSIVE

Fifteen early-career physician-, pharmacist-, and nurse-investigators comprise our inaugural Junior Investigator Intensive (JII) cohort. The JII program provides an interdisciplinary community of learning with virtual works-in-progress conferences, office hours, and special webinars designed to help participants advance their research and research careers. Applications for our next cohort are due February 2021.
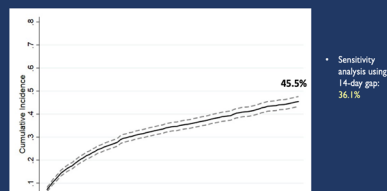
WEBINARS

In our inaugural year, we organized or co-hosted 7 webinars with over 365 participants. Topics ranged from stakeholder-driven research to multi-site deprescribing trials. More than 90% of attendees rated the sessions as very good or excellent. Visit our website to learn more and view archived sessions.

ANNUAL MEETING

The capstone of our investigator development activities is our annual meeting, which this year attracted over 200 attendees. Engaging speakers and small group breakouts spoke about updates and the future of deprescribing research. More than 90% of attendees rated the event as very good or excellent. Visit our website to view archived sessions.

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> The JII program is like finding my tribe – investigators with a variety of training with the same deep interest in deprescribing. I find the group inspiring and I have a learned a lot from my peers.
>
> **Rasheeda Hall, MD**

Pilot and Grant Planning Awards

Led by **Drs. Sandra Simmons** and **Amanda Mixon,** our Pilot Core provides several varieties of grants. Pilot Awards are 1-year awards designed for junior investigators to conduct small-scale or pilot projects that can lead to future, larger research opportunities. Grant Planning Awards are 1-year awards designed for more experienced investigators to support planning activities for large-scale grants. Applications for next year's awards are due January 2021. In addition, we have recently started a program for small Collaboration Grants to facilitate discrete activities that will enhance new collaborations between and among investigators and stakeholder groups.

Our Pilot Core works closely with the Stakeholder Engagement Core and meets regularly with funded investigators to help them advance their work, troubleshoot problems, and identify best practices for partnering with stakeholders.

PROFILE: Ariel Green
Pilot Grant Awardee

Dr. Green is an Assistant Professor in the Johns Hopkins Division of Geriatric Medicine and Gerontology. Her pilot project studied older adults' preferred communication strategies for clinicians to use when discussing deprescribing. Using a national survey, her team presented 2 vignettes where a medicine might be stopped, and asked participants to rate their preference for 7 different reasons a clinician may offer about why they should reduce or stop the medication. The most preferred options focused on the risk of side effects, and on the phrase "This medicine is not good for you in the long run." These justifications were preferred up to 9 times more often than the least preferred reasons that a clinician might give, which included the effort involved in taking the medicine and the phrase "This medicine is unlikely to help you function better." These findings suggest that clinicians should link deprescribing to the patient's history or key concerns (such as falling or memory) and frame it as a positive step to preserve well-being.

YEAR 1 AWARDEES

Greg Ouellet, *Yale*
Decisions about anticoagulation in patients with atrial fibrillation and dementia

Ariel Green & Nancy Schoenborn, *Johns Hopkins*
Older adults' attitudes and preferences about how deprescribing recommendations are discussed

Jen Kuntz, *Kaiser Permanente Northwest*
Intensification and deintensification of glucose-lowering therapies among older adults with diabetes mellitus and MCCs

NEW AWARDEES (YEAR 2)

Sarah Szanton, *Johns Hopkins*
Goal directed deprescribing and its effect on self-management in community-dwelling older adults with multiple chronic conditions

Ranjit Singh & Robert Wahler, *University at Buffalo*
Patient-driven deprescribing to enhance successful aging

Justin Lee, *McMaster*
Improving medication prescribing-related outcomes for vulnerable elderly in transitions (IMPROVE-IT): a pilot randomized controlled trial

Joshua Niznik, *University of North Carolina, Chapel Hill*
Deprescribing bisphosphonates in nursing home residents with dementia

Sarah Vordenberg, *University of Michigan*
Psychological and clinical factors that predict intent to deprescribe medications among older adults

Scott Pilla, *Johns Hopkins*
A national survey of physician perspectives on deprescribing diabetes medications for older adults

> " This pilot award was a great experience; I benefited tremendously from consultation with the pilot and stakeholder engagement cores. It's been a springboard for my future research and grant applications. "
>
> DR. ARIEL GREEN

Data and Resources

Led by **Drs. Elizabeth Bayliss** and **Sascha Dublin**, the Data and Resources Core offers a variety of resources and expert guidance to support deprescribing research, with additional resources currently under development. In addition, the network has convened a series of Working Groups to develop high-value resources and best-practice guidance to advance the field.

IRB AND DATA SAFETY MONITORING RESOURCES

Deprescribing research poses special challenges for regulatory review and data safety monitoring. For example, if a medication is stopped and a study subject experiences a clinical event that could be prevented by that medication, does that count as a safety event? We have compiled a compendium of successful IRB applications and data safety monitoring plans that demonstrate how experienced investigators have navigated these challenges.
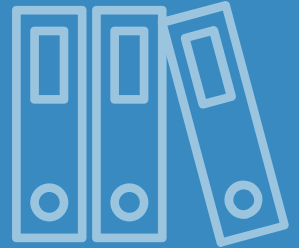
CONSULTATION SERVICES

Investigators can request a free, one-hour consultation with a subject matter expert to provide guidance on a specific issue in their research. This service is open to all. In addition, we strongly encourage Pilot and Grant Planning Award awardees and Junior Investigator Intensive awardees to make use of this resource.

HIGH-VALUE TARGETS FOR DEPRESCRIBING

This Working Group, led by Dr. Shelly Gray, is developing a systematic review and meta-analysis of deprescribing studies to identify what types of interventions, medications, and care settings yield the greatest impact for deprescribing and associated clinical outcomes. This will help inform priority areas for future research and implementation.
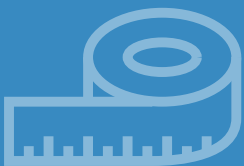
MEASUREMENT IN DEPRESCRIBING RESEARCH

This Working Group, led by Dr. Elizabeth Bayliss, is conducting a literature review and expert Delphi process to identify what outcome measures are most important to measure in studies of deprescribing, and then define the current state of science about these high-priority measures. Results from this effort will guide efforts to harmonize outcome measurement across studies of deprescribing interventions and identify areas development and validation of new areas.

Stakeholder Engagement

Engaging with the users of deprescribing research – including patients and caregivers, clinicians, and health system and policy leaders – is a key principle that underlies the work of the network. Led by **Drs. Nicole Brandt** and **Catherine Sarkisian** and **Ms. Carmen Reyes**, the Stakeholder Engagement Core supports a number of initiatives that amplify this theme. Stakeholder representatives and core leaders participate in the development and review of pilot and grant planning awards, meet with network awardees and participate in pilot and grant planning awards, engage with Junior Investigator Intensive awardees, and more.

STAKEHOLDER ENGAGEMENT COUNCIL

The Stakeholder Engagement Council comprises older adults and their caregivers as well as health care professionals and health systems representatives. The Council provides input on network activities, helps select network awardees, and serves as a conduit for disseminating network-sponsored research to communities of interest.

> " Older adults experience disproportionate harms related to medications. This is why addressing medication is a critical component of Age-Friendly Health Systems. The USDeN supports research that enables all health care providers and care settings to provide better and safer care. I am proud to serve on the USDeN Stakeholder Engagement Council. "

Amy Berman, RN, LHD, FAAN
Senior Program Officer
The John A. Hartford Foundation

In Our First Year:

9 pilot and grant planning awards awarded (Years 1 and 2, combined)

15 participants in the Junior Investigator Intensive program

6 press mentions of our core leaders in the *New York Times*, *Consumer Reports*, *Healthline*, and other leading news outlets

400 network members

8,000 website impressions; 820 Twitter followers

81% of network members somewhat or extremely satisfied by the work of the network

6 webinars: More than 90% of attendees rated sessions as very good or excellent.

The US Deprescribing Research Network is funded by the National Institute on Aging, Grant No. R24AG064025

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