

Leveraging Social Networks to Promote Widespread Individual Behavior Change

RFA-AG-24-025 (R01) & RFA-AG-24-026 (R34)
Technical Assistance Webinar

July 26, 2023

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Outline

- Background on social network interventions
- RFA-AG-24-025 (R01)
- RFA-AG-24-026 (R34)
- Resources

Social Network Interventions

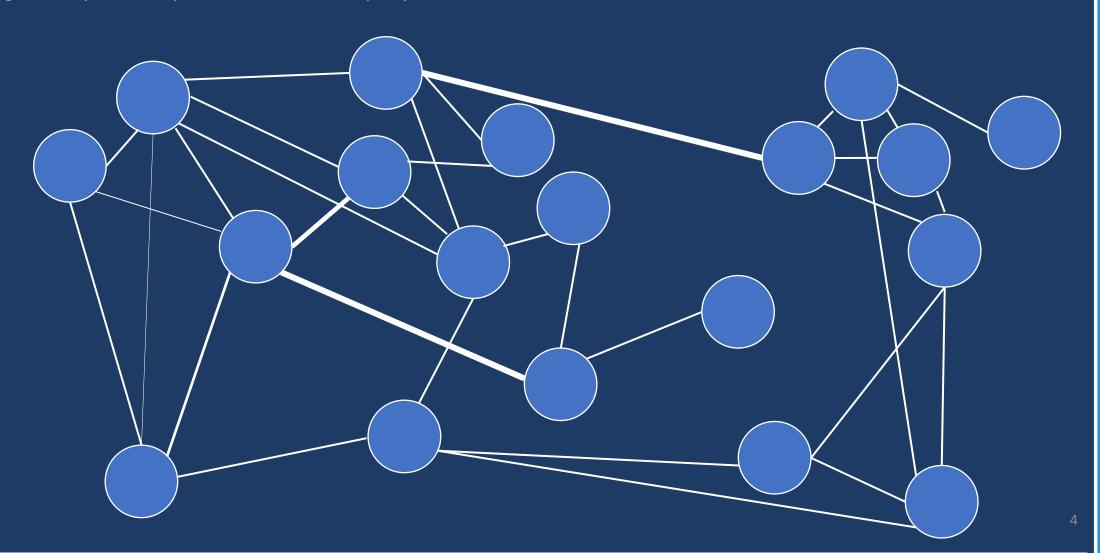
- An intervention that targets specific, malleable interpersonal processes and/or characteristics of a social network to cause widespread individual behavior change.
- Social network interventions for health use
 - social network data or
 - social network characteristics

to promote uptake of positive health behaviors (or curtailment of negative health behaviors) among individuals, communities, organizations, or populations.

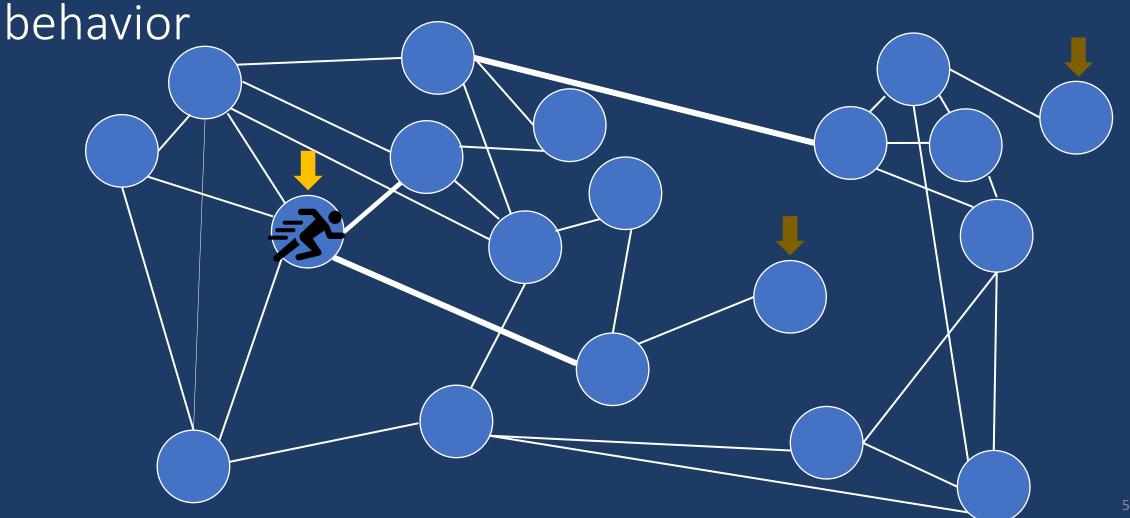
- These interventions typically
 - (a) change the behavior of individual(s) within a network who are identified to be most likely to influence the behaviors of others and promote interpersonal processes between those individuals and others, to achieve the ultimate goal of maximizing wide-scale uptake of behavior change across the network (including among those who did not themselves directly receive the intervention), or
 - (b) manipulate social network characteristics in ways that are likely to modify social ties and/or interpersonal processes that influence behavior, with the ultimate goal of changing at scale the behaviors of individual network members.

Social Network Interventions

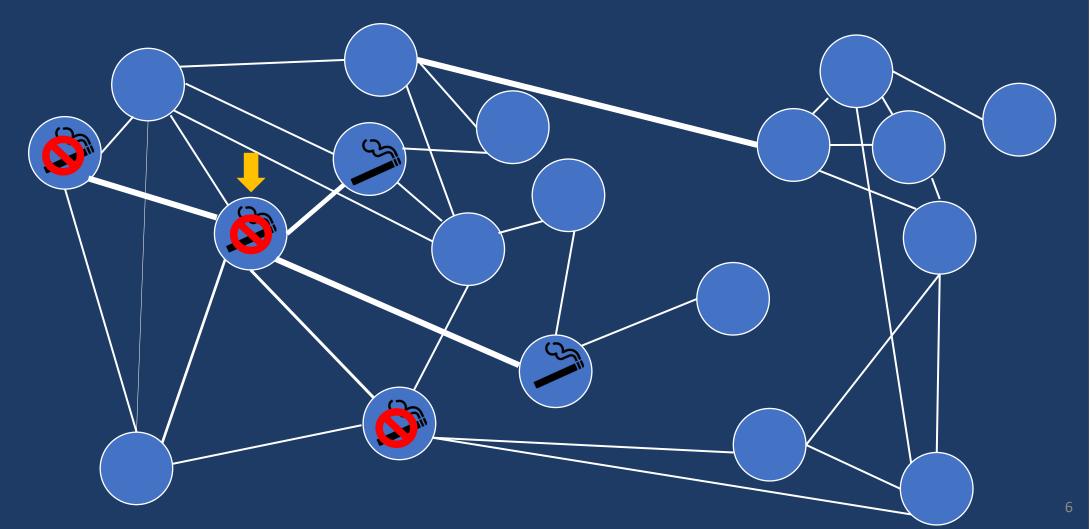
One way to extend the reach of a given behavioral intervention may be to adapt or modify an intervention to target *interpersonal processes* between people



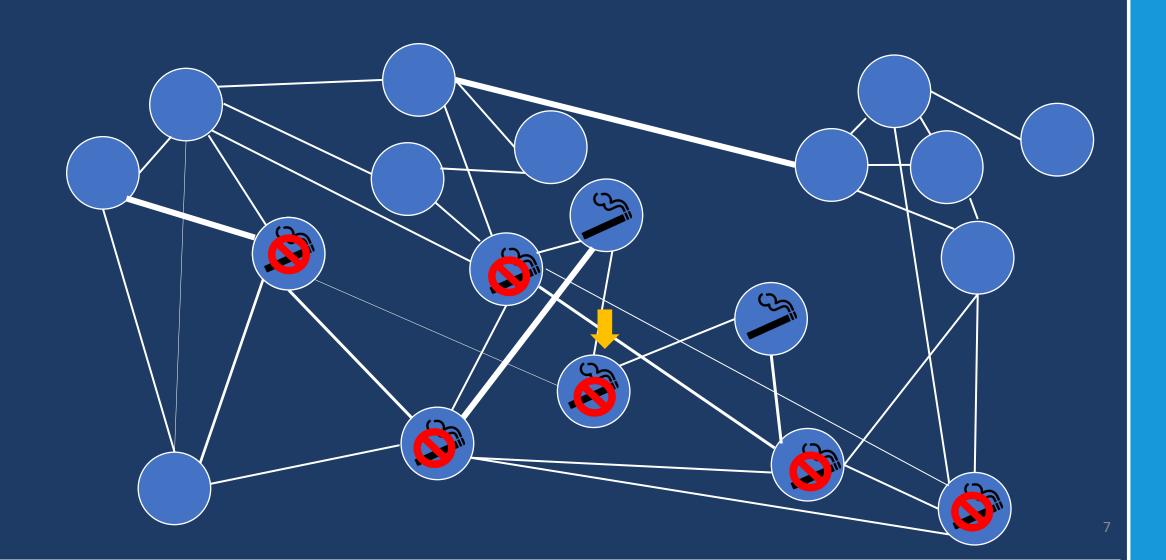
Use **social network data** to determine individuals most likely to influence the behaviors of others and promote interpersonal processes that 'spread'



Manipulate social network characteristics to modify social ties and/or interpersonal processes that influence behavior



Change **social network** structure to promote health behavior



Two companion RFAs on Leveraging Social Networks to Promote Widespread Behavior Change

- RFA-AG-24-025 (R01 Clinical Trial Optional)
- RFA-AG-24-026 (R34 Clinical Trial Optional)

Key Dates for the both RFAs

Letter of Intent Due Date	New Application Due Date	Expiration Date	Review and Award Cycles		
			Scientific Merit Review	Advisory Council Review	Earliest Start Date
Oct. 3, 2023	Nov. 3, 2023	Nov. 4, 2023	Feb. 2024	May 2024	July 2024

Resources for applicants

- Social Network Diffusion of Individual Behavior Change Interventions Virtual Workshop Report
- NIA Health Disparities Framework
- Data Resources for Behavioral and Social Research on Aging
- Responses to FAQs:
- https://www.nia.nih.gov/research/dbsr/behavioral-and-social-research-funding-opportunities-and-applicant-resources.
- The NIH Stage Model for Behavioral Intervention Development

Purpose: to invite basic observational or experimental behavioral and/or social science R01 applications that test how intrapersonal and interpersonal mechanisms of behavior change interact with, influence, or are influenced by characteristics of social networks, with implications for health.

- Supports use-inspired basic observational or experimental behavioral and/or social science research that tests hypotheses about how interpersonal mechanisms of health behavior change interact with, influence, or are influenced by characteristics of social networks.
- This basic research should be designed to inform identification of targets for future social network interventions.
- Basic research to develop, refine, or optimize measures (assays) of putative targets (e.g., intra/interpersonal mechanisms of behavior change and/or social network characteristics) will also be supported by this RFA.
- At least two levels of analysis must be examined: processes at the level of interpersonal relationships and characteristics of the social network.

RFA-AG-24-025: NIA Priorities

- Basic behavioral and social science research that will help catalyze the development of future social network health behavior change interventions in mid-to-late life.
- Identify potentially malleable interpersonal processes and social network characteristics that influence health behavior change in mid-to-late life.
- Research that accounts for mid-to-late life changes in interpersonal relationships and social network composition, as well as projects that consider sociodemographic trends in aging and the impact of major later-life transitions on interpersonal processes, social network characteristics, and health outcomes.
- NIA also encourages projects that consider how social network analysis techniques can account for changes in social network characteristics over time. Projects that focus on people who themselves would benefit from health behavior change as well as those that focus on changing the behavior of people who are critical for promoting or helping maintain good health in others are both of interest.
- Applicants are encouraged to refer to the <u>NIA Health Disparities Research</u> <u>Framework</u> to learn about NIA priority populations, the integration of multi-level factors, and the incorporation of a life course perspective.

RFA-AG-24-025: NCI Priorities

- Observational, experimental, and intervention research to understand mechanisms through which social networks influence health behaviors for cancer prevention and control.
- Research that identifies how social networks and specific linkages within them
 can serve as targets for cancer risk behavior and survivorship interventions,
 and research that incorporates social network methods and measures to
 measure survivorship or care networks, and the influence on health behaviors
 and outcomes for cancer survivors, caregivers, and families.
- Research areas of interest include etiology, prevention, detection, diagnosis, treatment, survivorship, and end-of-life support among health disparity populations, people with lower socioeconomic status, underserved rural communities, and sexual and gender minority groups.
- Research that identifies the ways in which social network-level factors and other factors that affect social network dynamics may interact with individual-and systems-level factors to influence cancer prevention and control outcomes in recognized health disparity populations is especially encouraged.

RFA-AG-24-025 Application Instructions

- Describe how successful completion of the aims will lead to the project's ability to identify interpersonal processes and/or social network characteristics that can be targets for future social network interventions for health.
- Propose basic observational or experimental behavioral and/or social science research that falls within Stage 0 of the NIH Stage Model. This basic research should be designed to inform identification of targets for future social network interventions.
- Propose to examine the interaction between interpersonal processes of behavior change and social network characteristics (that is, whether and to what extent characteristics of the social network modulate or are modulated by processes of behavior change at the interpersonal level).

RFA-AG-24-025 Review Questions

Significance

 If the aims are successfully completed, how likely is it that the project will have identified interpersonal processes and/or social network characteristics that can be targets for future social network interventions for health?

Approach

- How well does the proposed research align with Stage 0 of the NIH Stage Model (e.g. use-inspired basic research on mechanisms of health behavior change)?
- How well justified is the investigator's plan to examine the interaction between interpersonal processes of behavior change and social network characteristics (that is, whether and to what extent characteristics of the social network modulate or are modulated by processes of behavior change at the interpersonal level)?

RFA-AG-24-025: Non-Responsiveness Criteria

- Clinical trials that do not meet the federal definition of basic research (CFR 272.3)
- Projects that do not examine how interpersonal mechanisms of health behavior change interact with, influence, or are influenced by characteristics of social networks (where the social network comprises more than two individuals) – including examination of both levels of analysis
- Projects that do not clearly articulate how proposed processes relate to health behavior or behavior change in populations of interest
- Non-human animal studies
- For applications submitted to NIA: Projects that do not focus on midto-late life health or health behavior change

RFA-AG-24-025: Budget and Project Period

Funds Available and Anticipated Number of Awards

- NIA intends to commit \$2,000,000 in FY 2024 and expects to fund 3-4 awards
- NCI intends to commit \$1,000,000 in FY 2024 and expects to fund 1-2 awards

Award Budget

 Application budgets are limited to \$500,000 in direct costs and need to reflect the actual needs of the proposed project.

Award Project Period

• The scope of the proposed project should determine the project period. The maximum project period is 5 years.

Purpose: to support the **planning activities** necessary to develop social network interventions to promote health across the lifespan

Application Information:

Applications must focus on planning activities that are necessary to lay the foundation for future development of social network interventions for health or health behavior change and make an argument for how completion of the proposed planning activities will yield future applications to test social network interventions for health across the lifespan.

Examples of planning activities include (but are not limited to):

- Establishment of multidisciplinary teams;
- Identification of most suitable method or approach for changing the health behavior of individuals within the social network;
- Development of a research framework and/or experimental design;
- Methodological advances to test feasibility of different recruitment, consent, and data collection processes;
- Measurement advances to understand and document network malleability;
- Development of plans to mitigate ethical, legal, or social issues;
- Test of analytical plans to mitigate potential factors that confound causal inference;
- Establishment of economic cost-effectiveness of social network approaches;
- Stakeholder engagement activities, such as development and/or establishment of community-based participatory research methods; and
- Development of staff training materials to ensure the intervention can be delivered with fidelity

Outside the scope of this RFA:

- Basic experimental and observational behavioral and/or social science applications that test how intrapersonal and interpersonal mechanisms of behavior change interact with, influence, or are influenced by characteristics of social networks *
- Research to identify targets for future social network health behavior change interventions and/or to develop, refine, or optimize measures (i.e., assays) of putative targets*
- Projects that propose to test the efficacy or effectiveness of a social network health behavior change intervention

^{*} These types of research are most appropriate for the companion R01 RFA (RFA-AG-24-025)

RFA-AG-24-026: NIA Interests

- Planning activities that support the development of social network interventions to promote health behavior change in mid-to-late life.
- Planning activities that will enable future tests of social network interventions for health to
 account for mid-to-late life changes in interpersonal relationships and social network), as well
 as sociodemographic trends in aging and the impact of major later-life transitions on
 interpersonal processes, social network characteristics, and health outcomes.
- Projects that consider how social network analysis techniques can account for both experimentally manipulated and naturally occurring changes in social network characteristics over the duration of a potential intervention.
- Projects that focus on people who themselves would benefit from health behavior change, as
 well as those that focus on changing the behavior of people who are critical for promoting or
 helping maintain good health in others.
- Applicants are encouraged to refer to the <u>NIA Health Disparities Research Framework</u> to learn about NIA priority populations, the integration of multi-level factors, and the incorporation of a life course perspective.

RFA-AG-24-026: NCI Interests

- Activities that lead to the development of social network interventions to promote cancer prevention and control and health behavior change at scale
- Studies of interest include applications utilizing social network analysis techniques and social network factors beyond perceptions of social support, such as the characteristics of the social network (network composition), an individual's position in the network (network structure), and the social norms that dictate group behavior, to understand the dynamics and malleable targets for intervention

Research areas of interest include:

- Etiology, prevention, detection, diagnosis, treatment, survivorship, and end-of-life support among health disparity populations (i.e., segments of the US population that have been typically underserved, underrepresented, and excluded from biomedical, clinical, behavioral, and social sciences research)
- Understanding the ways in which social network-level factors and other factors that affect social network may interact with individual-level and systems-level factors to influence cancer prevention and control outcomes in recognized health disparity populations.
- Leveraging social networks to develop efficacious and cost-effective strategies to promote primary, secondary, and tertiary cancer prevention and control, and in developing strategies to bolster social network structure and support to promote positive outcomes for survivors, caregivers, and families

RFA-AG-24-026: Review Questions

Significance

• If the aims are successfully completed, how likely is it that the proposed planning activities will support development of social network interventions for health (e.g., as measured by future applications to test social network interventions for health across the lifespan)?

Investigator(s)

- To what extent is the investigative team's experience with both:
 - The experimental medicine approach, the Science of Behavior change conceptual framework, and/or the NIH Stage Model, and
 - social network analysis sufficiently developed that the proposed planning activities, under the leadership of this investigative team, will likely yield an application to support trial(s) to test a social network intervention for health across the lifespan?

Approach

• How necessary are the proposed planning activities for laying the foundation for a future social network intervention for health behavior change?

RFA-AG-24-026: Non-Responsiveness Criteria

- The following research activities will be considered <u>non-responsive</u> to this NOFO, and such applications will be administratively withdrawn prior to scientific peer review:
- Applications that propose to test the efficacy or effectiveness of a social network intervention on a health behavior outcome of interest
- Applications that do not have expertise on their team of at least (a) the experimental medicine approach, the Science of Behavior Change conceptual framework, or the NIH Stage Model and (b) social network analyses
- Applications that do not clearly articulate how proposed planning activities will advance
 development of social network interventions to change <u>health</u> behavior or behavior change in
 the populations of interest, where a social network is comprised of more than two individuals
- Applications that do not clearly state the proposed intervention target, interpersonal process
 of behavior change or social network characteristic, which has already been identified
- Non-human animal studies
- For applications submitted to NIA: Projects that do not focus on mid-to-late life health or health behavior change

RFA-AG-24-026: Budget and Project Period

Funds Available and Anticipated Number of Awards

- NIA intends to commit \$1,500,000 in FY 2024 and expects to fund 3-5 awards
- NCI intends to commit \$1,000,000 in FY 2024 and expects to fund 1-2 awards

Award Budget

- The direct costs for any year may not exceed \$225,000 (excluding consortium F&A costs)
- Total direct costs may not exceed \$450,000 over the 3-year project period

Award Project Period

- The maximum project period is 3 years
- The scope of the proposed project should determine the project period

Thank you!

For questions, please reach out to:

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