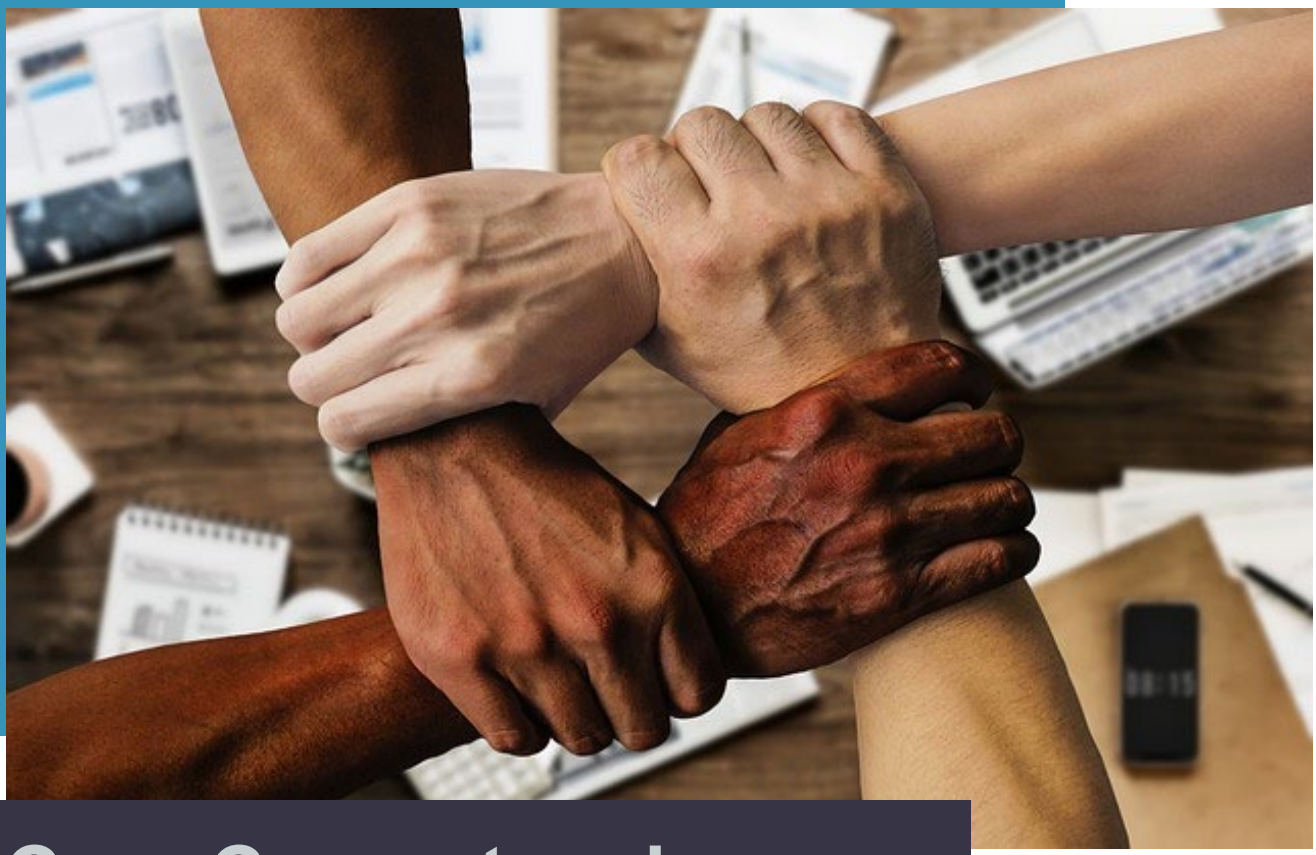

Core Competencies for Prevention Researchers

Society for Prevention Research

https://preventionresearch.org/

Updated: 12/5/25

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INTRODUCTION

History & Rationale

The field of prevention science in the United States (US) matured in the late twentieth century through the efforts of scientists, advocates, practitioners, administrators, and policymakers (Sloboda & Petras, 2014). While before this time multiple groups emphasized the importance of preventive efforts to improve health outcomes, it was not until the late 1970s, during the Carter Administration, that efforts coalesced to bring science and prevention together on a national scale. During the Reagan Administration in the 1980s, this seminal work led to the creation of offices and centers within the National Institutes of Health and other federal agencies that were dedicated to fostering and supporting high-quality prevention research.

Two US institutes in particular, the National Institute on Drug Abuse (NIDA) and the National Institute of Mental Health (NIMH), not only launched initiatives to fund prevention research and prevention research centers but also supported efforts to professionalize the field. In the early 1990s, work at NIMH led to the launch of a series of National Conferences on Prevention Research, and at NIDA, to the formation of the Society for Prevention Research (SPR). In 1997, prevention scientists leading these efforts, as well as leaders from other federal agencies, such as the National Institute on Alcohol Abuse and Alcoholism (NIAAA), and advocacy groups, such as the National Mental Health Association, came together under the umbrella of SPR and held a national conference in Baltimore, Maryland. This meeting and the drafting of a new set of organizational bylaws that followed set the stage for the organization SPR is today (Society for Prevention Research, 2025). In the 2000s, similar developments were taking place in other countries and this led to the founding of the European Society for Prevention Research in 2010, and more recently, to the founding of the Brazilian Association for Research in Prevention and Health Promotion, and the Asia Pacific Society for Prevention Research.

With continuous financial support and ongoing interest from a variety of private foundations, prevention science has flourished, identifying a host of strategies to reduce physical and mental health problems and promote well-being. These efforts have contributed to significant positive changes in society related to the prevalence of a variety of public health problems, including but not limited to juvenile delinquency (Beelmann et al., 2023), youth drug use and abuse (Hawkins et al., 2014; Smith et al., 2025), as well as significant positive changes in a variety of indicators of well-being, such as increased rates of high school graduation (Wang et al., 2025).

As the field has grown and as prevention science graduate training programs began to be established in various universities across the world, SPR members recognized the need for clarity about: (1) what prevention science is, and (2) what prevention scientists need to know to conduct cutting-edge work that will lead to further societal advances in health and well-being. In 2006, this led the SPR Training Committee to recommend to the SPR Board of

Directors that the Society develop “standards of knowledge” in prevention science. In response to this request, as part of its strategic plan, the Board commissioned a task force “to define prevention science and the type of research that falls within this definition, as well as to prepare a document that begins to outline specific training needs for new prevention researchers” (Society for Prevention Research, 2011).

The task force's work during the next 5 years resulted in the creation of *Standards of Knowledge in Prevention Science*. Published on the SPR website in 2011, the *Standards of Knowledge* outlined key **competencies** and **assumptions** for three broadly defined domains of prevention science: (1) **epidemiology** and **etiology**, (2) prevention **intervention** development, **implementation**, and institutionalization, and (3) prevention **research** methods (Society for Prevention Research, 2011). The *Standards of Knowledge* served the field well during the subsequent decade as graduate training programs were launched. However, continued advances in the science of prevention led the SPR Board to commission a new task force[1] in 2021 charged with systematically reviewing and recommending updates and revisions to the *Standards of Knowledge* and developing a plan to disseminate these updates. The SPR Board specified that a new edition of the *Standards of Knowledge* be created that accurately reflected the following:

- The continuing evolution of and advancement in key areas of prevention science (e.g., **research** and **evaluation** methods, **dissemination** and **implementation** science, health **disparities** and **health equity**, neurobiological influences in prevention **outcomes**),
- The expanding boundaries of the field of prevention science, with a broader range of outcome domains and a focus on both the prevention of **negative outcomes** and promotion of **positive outcomes**,
- The increasing recognition of the value and professionalization of the practice of prevention within communities, one that requires more specification of the knowledge and **competencies** required to deliver evidence-based prevention strategies, and to conduct more useful and rigorous **research** and **evaluation** of **preventive interventions** in service of practice goals, and
- The increasing international recognition and **diversity** of the field of prevention science, requiring expanded information sharing and flexibility regarding existing **competencies**.

Steps for the Revision Process

The task force engaged in three significant steps to complete the revision process (see **Appendix A** for details on the methods used for each step).

[1]The task force comprised Cady Berkel, Eric C. Brown (co-chair), Qiyue Cai, Brittany Cooper (co-chair), Erica Doering, J. Mark Eddy, Youngjo Im, Nathaniel Riggs, Zili Sloboda, and John W. Toumbourou. Support for the work of the task force was provided by Tatiana Bustos, Konul Karimova, Aggie Rieger, and Veronica Pinilla.

1. **Gather and analyze relevant information to inform revisions.** Based on a brief review of the prevention science literature and course syllabi, and rapid qualitative analysis principles and approaches (Vindrola-Padros & Johnson, 2020), the task force did this by (a) identifying relevant priority sources, (b) deductively extracting themes from each source, (c) summarizing themes across sources, and (d) suggesting revisions based on these themes.
2. **Update and revise original *Standards of Knowledge in Prevention Science* document.** To achieve this step, the task force divided into writing teams based on the major sections of the original document and used the themes and recommendations identified in the first step to guide their revisions.
3. **Gather feedback from key prevention partners and revise based on their input.** A revised version of the new document (now entitled *Core Competencies for Prevention Researchers*) was shared with key partners engaged in prevention, including the SPR Board of Directors, and revisions were made based on their feedback.
4. **Submit final version to SPR Board of Directors for approval.** In November 2025, a final draft was shared with the SPR Board of Directors who voted to approve this final version.

Notable Revisions & Updates

Notable revisions and updates that were made include:

- Changing the title of the document from *Standards of Knowledge in Prevention Science* to *Core Competencies for Prevention Researchers* to better reflect the content and distinguish it from the SPR *Standards of Evidence* (Gottfredson et al., 2015).
- Changing the titles of all core competency domains and adding a separate core competency domain for Dissemination and Implementation Science.
- Adding a Recommended Readings list.
- Changing the order of core domains such that Research and Evaluation Methods comes first to better communicate priorities and the foundational importance of methods decisions in guiding prevention efforts.
- Aligning and developing overarching **assumptions** and **principles**; removing domain-specific **assumptions**.

Related Society for Prevention Research Publications

This document is distinct from and complementary to the following documents published by SPR through other task forces appointed by the SPR Board of Directors. Table 1 below describes the primary goal of these related SPR publications. In general, the *Core Competencies for Prevention Researchers* outlined in this document reflect and build from these previous publications.

Table 1. Related SPR Publications

SPR Publication	Description
Standards of Evidence	The original SPR Standards of Evidence (Flay et al., 2005) were developed to determine the requisite criteria that must be met for preventive interventions to be judged tested and efficacious or tested and effective. In 2013, the SPR Board of Directors convened a task force to update and extend the "SPR Standards of Evidence: Criteria for Efficacy, Effectiveness, and Dissemination" published in 2005. The "Standards of Evidence for Efficacy, Effectiveness, and Scale-up Research in Prevention Science: Next Generation" was published in *Prevention Science* in 2015 (Gottfredson et al., 2015). The revised and updated standards include special attention to standards for replication studies and scaling up of effective interventions. New standards have been added for testing theory, describing interventions, measuring the quality of implementation, documenting adaptations in the field, reporting study results, and evaluating outcomes of scale-up efforts. Guidance is also provided on determining effectiveness in face of multiple outcomes/multiple studies.
Ethical Challenges in Promoting the Implementation of Preventive Interventions: Report from the SPR Task Force	In 2015, SPR commissioned Drs. Irwin Sandler and Tom Dishion to organize a series of SPR roundtables and to establish a task force to explore and articulate the salient ethical issues that occur as prevention researchers are involved in delivering, adapting, disseminating, and implementing preventive interventions. The resultant article summarizes the activities and findings of the task force and articulates some of the ethical issues that can arise as prevention scientists and practitioners engage with community stakeholders in the implementation of preventive interventions. In considering these activities and ethical challenges, broad ethical principles were specified to guide ethical behavior and identify questions that could guide deliberation and navigation of challenges of prevention research (Leadbeater et al., 2018).
Scaling up Evidence-based Interventions in US Public Systems to Prevention Behavioral Health Problems: Challenges and Opportunities	In 2016, SPR formed the Mapping Advances in Prevention Science (MAPS) IV Translation Research Task Force to build on and extend the MAPS II Translation Research Task Force efforts (Spoth et al., 2013). This paper published in *Prevention Science* in 2019 summarizes the MAPS IV Task Force findings regarding factors influencing and facilitating the uptake of EBIs after they have demonstrated effectiveness in rigorous evaluations (Fagan et al., 2019).

SPR Publication	Description
Standards of Evidence for Conducting and Reporting Economic Evaluations	Endorsed by the SPR Board of Directors, this article published in *Prevention Science* in 2018, reports the findings of the MAPS III task force deliberations, proposes standards for economic analyses, and identifies opportunities for future prevention science (Crowley et al., 2018). Through examples, policymakers' need and use of economic analysis are described. Standards are proposed for framing economic analysis, estimating costs of prevention programs, estimating benefits of prevention programs, implementing summary metrics, handling uncertainty in estimates, and reporting findings. Topics for research in economic analysis also are identified.
Strategic Directions in Preventive Intervention Research to Advance Health Equity	Commissioned by SPR, this article, published in *Prevention Science* in 2022, describes and illustrates strategic approaches for reducing health inequities and advancing health equity when adopting an equity-focused approach for applying prevention science evidence-based theory, methodologies, and practices (Boyd et al., 2023). The ecosystemic framework was introduced as a guide for analyzing, designing, and planning innovative equity-focused evidence-based preventive interventions designed to attain intended health equity outcomes. To advance this process, the authors introduce a health equity statement for conducting integrative analyses of ecosystemic framework pathways by describing the role of social determinants, mechanisms, and interventions as factors directly linked to specific health equity outcomes.

Note. The SPR Board of Directors has convened new task forces in 2025 to update and expand both the Standards of Evidence and Ethical Guidelines, building on prior work. The results of these efforts are forthcoming as of this publication.

Intended Audience & Use of the Document

The primary audiences for this document are current and future prevention scientists and those entities tasked with training and supporting them (see Table 2). In addition, this document will serve as a guide to several other important groups, including practitioners who implement evidence-based **preventive interventions** in schools, workplaces, social and health services organizations, and communities. In addition, other public health and behavioral service professionals may find the document useful for their work (see Table 3). **Research** and practice **competencies** are intrinsically linked and mutually supportive. **Research** informs effective practice by providing evidence-based strategies, while practice provides the context and opportunities to refine and develop **research**.

Table 2. Primary Audiences & Uses

Audience	Purpose
Prevention Scientists, Researchers, Program Evaluators, Students, and Trainees	• Understand, explain, and define the field • Ensure adherence to **assumptions**, **principles**, and **competencies** • Inform **research** • Design **research** and **evaluation** studies • Use as a framework for training and practice • Support grant and publication development • Facilitate advocacy • Engage with communities
Universities, Instructors, and Educators	• Design and teach courses • Develop undergraduate and graduate degree programs in prevention science, including core courses aligned with the core competency domains.

Table 3. Secondary Audiences & Uses

Audience	Purpose
Practitioners, Nonprofits, Community Members, and Partners (e.g., groups that develop examinations for licensing and certifying prevention practitioners)	• Understand the field (e.g., **assumptions**, **principles**, and **competencies**) • Use as a tool for **implementation** and **evaluation** • Strengthen funding applications • Ensuring competent practice
Policymakers	• Understand the field (e.g., **assumptions**, **principles**, and **competencies**) • Inform prevention-related policymaking
Funders, Grant Reviewers	• Guide assessment of scientific merit • Draft funding announcements • Determine funding priorities
Journal Reviewers	• Understand the field (e.g., **assumptions**, **principles**, and **competencies**) • Guide review process

Organization & Sections of the Document

The remainder of this document is organized according to the following major sections.

- What is Prevention Science?
- Core Competency Domains

- Glossary
- References
- Example Readings
- Appendices

What is Prevention Science?
This section defines the term prevention science and outlines context for the **competencies**, **assumptions**, and **principles** of prevention science.

Core Competency Domains
Prevention science has four competency domains:

- Research & Evaluation Methods
- Epidemiology & Etiology
- Intervention Development & Adaptation
- Dissemination & Implementation Science

In each domain, this document provides:

a) general domain description,
b) domain purpose, and
c) necessary **competencies** that enable prevention scientists to conduct prevention science research in that domain.

Glossary

This section provides a table of key prevention science terms and their definitions. Key terms are highlighted in **dark blue font** throughout the document and hyperlinked to easily navigate to the glossary to view their definitions.

References
This section provides a list of sources cited throughout the document.

Example Readings
This section provides additional example readings organized into subsections: Prevention Science; Research & Evaluation Methods; Epidemiology & Etiology; Intervention Development & Adaptation; and Dissemination & Implementation Science.

Appendices
This section includes additional details relevant to the content contained in the other sections.

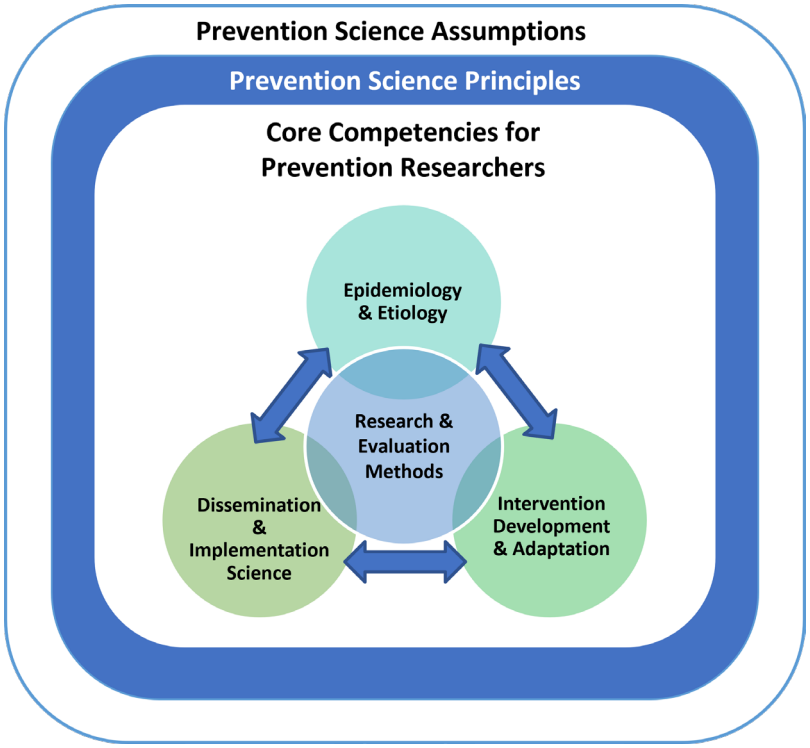
- Appendix A: Detailed Description of Task Force Methods for Revisions
- Appendix B: Table of Core Competencies by Domain
- Appendix C: Prevention Research & Practice Competencies Table

WHAT IS PREVENTION SCIENCE?

Prevention science is an interdisciplinary field that studies the factors and conditions that influence health and well-being; how to prevent and reduce negative impacts; and how to promote health and well-being among individuals, families, and communities. It includes individuals with diverse training, perspectives, and theoretical orientations. At its core, prevention science aims to (1) identify risk, promotive, and protective factors and processes related to positive outcomes and negative outcomes, (2) develop preventive interventions and assess their efficacy and effectiveness, and (3) determine optimal means for intervention implementation, dissemination, and scalability. Central to these goals, prevention science is guided by a set of core assumptions and corresponding principles that lay the groundwork for each of the four core competency domains (Figure 1).

- **Principles** provide guideposts for assuring research aligns with the overarching edicts of prevention science research.
- **Assumptions** are proposed fundamental tenets of the field that serve as a foundation for effectively conducting prevention science research and evaluation in line with its principles.
- **Competencies** include the knowledge, skills, abilities, and behaviors that enable prevention scientists to effectively conduct prevention science research and evaluation.

Figure 1. Model of Core Competencies for Prevention Researchers



In addition to the four core competency domains (Figure 1), which are the focus of this document and are described in greater detail in the subsequent sections, prevention science is grounded in the following **assumptions** and corresponding **principles** (Table 4).

Table 4. Prevention Science Assumptions and Principles

Assumptions	Principles
1. Lifespan Development Within Systems	
A1. Identifying optimal states of human development, including life-course and situational causes within the context of multilevel interacting systems over time, offers insights for improving the human condition.	P1. Prevention science integrates knowledge from multiple disciplines, such as human development, public health, psychology, social work, education, and systems science, to measurably prevent health and social problems.
2. Integrity, Rigor, and Ethics	
A2. To safely and equitably achieve **research** integrity and scientific rigor, we must appropriately and ethically apply diverse types of methods and analytic approaches (e.g., **quantitative**, **qualitative**, **mixed methods**) in service of the **research** and **evaluation** questions being addressed.	P2. Prevention science was founded in the scientific method and prioritizes rigorous, diverse, and ethical **research** and evaluative approaches that include both inductive and deductive reasoning.
3. Scientific Equity	
A3. Scientific equity seeks attention to, and amelioration of, differences in the amount of scientific knowledge that is produced to understand both the causes and the solutions to health problems and to promote **positive outcomes**.	P3. Prevention science is conducted with consideration for scientific equity and aims to understand and address **disparities** in health **outcomes** with the goal of achieving **health equity** for all people.
4. Health Equity	
A4. Health **outcomes** and their underlying causes are often inequitably distributed across the population – to achieve **health equity** for all people, prevention scientists must understand the mechanisms underlying these inequities.	P4. **Preventive interventions** should reflect a continuum (e.g., **universal**, **selective**, and **indicated**; **primary**, **secondary**, and **tertiary**; etc.) based on **risk** distribution among the focal population. Populations facing disproportionate **risk** should be prioritized for **selective** and **indicated interventions**, in addition to **universal interventions** focused on entire populations.

Assumptions	Principles
5. Theory	
A5. Theory is central to the scientific method and seeks to explain the mechanisms that account for a behavioral outcome discovered through empirical etiological investigations and evaluations of preventive interventions.	P5. Prevention science is guided by and, in turn, informs theory.
6. Community	
A6. The pursuit of scientific knowledge should be based in and informed by the participation of the communities affected by the topic being studied with the goal of using that empirical knowledge to solve real-world problems.	P6. Prevention science is community-informed and applied. Therefore, building partnerships between prevention scientists, practitioners, policymakers, and community members is essential.
7. Collaboration	
A7. Solving complex social problems requires transdisciplinary perspectives, approaches, and collaborations with diverse groups.	P7. Prevention science requires collaboration that leverages transdisciplinary perspectives and approaches.
8. Innovation	
A8. Science continuously monitors safety and equity and seeks advances and innovations that improve upon existing approaches.	P8. Prevention science understands and honors its foundations while continuing to evolve and innovate to achieve its goals.
9. Communication	
A9. Effective scientific communication is non-stigmatizing and equitable for both academic and non-academic audiences.	P9. Prevention scientists communicate in non-stigmatizing and equitable ways with both academic and non-academic audiences.
10. Research Participant Protections	
A10. The protection of all participants (i.e., “human subjects”) and their immediate social-ecological systems (e.g., peers, families, and communities) should be maintained as a primary consideration in all activities conducted by prevention scientists.	P10. Prevention science research and evaluation is conducted in accordance with ethical guidelines specified by the Society for Prevention Research and the general field.

Prevention Science Teams

This document describes the core competencies expected from prevention scientists to effectively conduct their research and evaluation activities. However, we acknowledge that no individual prevention scientist possesses advanced expertise in all competencies.

Therefore, a **team science** approach is critical. This includes carefully selecting team members with **research** expertise across relevant core competency domains, as well as from practice and policy. To achieve the shared vision of improving prevention science equitably, prevention science must be informed by practice and policy, just as practice and policy must be informed by prevention science **research** and **evaluation**. Therefore, prevention science teams require strong and equitable partnerships among scientists, practitioners, policymakers, and other community members (e.g., laypeople, advocates, community organizations, government administrators, tribal nations). This type of partnership involves mutual participation, mutual trust and respect, mutual benefit and equal value placed on each partner's contribution at all stages in the research process. **Research** and practice **competencies** value collaborative **research**, fostering the capacity of scientists to produce relevant work, as well as the capacity of practitioners and policymakers to use **research** evidence.

RESEARCH & EVALUATION METHODS

Research and evaluation methods for prevention science draw heavily from many fields, as necessitated by the complexity of data used in prevention science investigations. These data are often nested (i.e., multilevel), multi-dimensional (i.e., multiple traits and methods), and range from purely qualitative to purely quantitative, and combinations of these two approaches. This complexity calls for the use of best available practices, and integrating methodological expertise from multiple sources, with consideration of ethical and equitable methods being at the forefront of the research or evaluation. Research and evaluation methods evolve over time; innovations are an essential part of prevention science's relevance.

Purpose

Research and evaluation methods is a cross-cutting domain that supports the epidemiology & etiology, intervention development & adaptation, and dissemination & implementation domains (see Figure 1). The purpose of this domain is to use best methodological practices to:

- Ensure rigor and validity through study designs, measures, and analytic strategies that produce transparent, reproducible, and trustworthy evidence.
- Advance methodological innovation by developing approaches tailored to the complexities of prevention science, including multilevel and longitudinal data.
- Promote relevance, inclusivity, and equity by employing contextually informed and participatory methods that incorporate diverse experiences.

Core Competencies

Prevention science core competencies in research and evaluation methods include:

1. Knowledge of a variety of research and evaluation designs for qualitative (e.g., case study, narrative, ethnographic, phenomenological, grounded theory), quantitative (e.g., non-experimental, quasi-experimental, experimental), and mixed methods (e.g., sequential, convergent, multiphasic) studies.
2. Knowledge of the advantages and limitations of the various research and evaluation designs within different settings, involving different populations, and with consideration for the type of research or evaluation study being conducted (e.g., etiologic, intervention development and adaptation, efficacy or effectiveness trials, implementation studies, and economic analysis), including intended and unintended consequences of applying various research and evaluation methods.
3. Knowledge of sampling theory and design (e.g., systematic, stratified, planned missingness, cluster), including various sampling approaches (e.g., convenience, response driven sampling), and the conditions in which each approach can be used effectively.

4. Understanding of best practices for participant recruitment, assignment, and retention, and minimization of selection bias and differential attrition.
5. Ability to apply a variety of **quantitative**, **qualitative**, and **mixed methods** data collection practices (e.g., in-person or virtual interviews and focus groups, observational data collection, biological data collection, ecological momentary assessment) and their appropriate analytic techniques.
6. Understanding of the various types of, and approaches to, handling missing data (e.g., missing completely at random, missing at random, not missing at random).
7. Knowledge of **mediation** and **moderation** analyses as methods to examine **etiology** and **intervention** development, **adaptation**, **evaluation**, and **implementation**/**dissemination**.
8. Ability to understand methods for managing and analyzing complex data structures and ensuring measurement validity (e.g., multilevel and longitudinal analyses, multi-dimensional methods, and confirmatory factor analytic techniques).
9. Following and attending to rapidly changing **research** and **evaluation** methods and related technologies (e.g., artificial intelligence).

EPIDEMIOLOGY & ETIOLOGY

Epidemiology is the study of the distribution and determinants of health-related outcomes in specified populations and the application of this study to the prevention of health problems. Etiology is the science that identifies factors or processes that produce or predispose toward certain health or behavioral conditions. Together, epidemiology and etiology provides a foundation for intervention development, adaptation, and testing by identifying proximal targets for intervention and relevant outcome measures. It includes studies that aim to understand human development and disease processes by investigating and synthesizing knowledge on the causal relationship among risk, promotive, and protective processes, and outcomes. It also explores heterogeneity in and the underlying mechanisms that account for these associations (e.g., mediation and moderation). The goal of epidemiology and etiology is to understand the distribution of outcomes and identify the predictors of those outcomes that can be addressed through intervention to prevent negative outcomes and promote positive outcomes.

Epidemiology and etiology also inform the selection of appropriate interventions for specific settings (e.g., peer groups, families, and communities) and populations in that the interventions selected should address the specific risk, promotive, and protective processes and outcomes that are relevant for the focal population. Epidemiology and etiology also inform aspects of dissemination and implementation science, as well as alignment with the local context and causal mechanisms to achieve better outcomes and promote health equity.

Purpose

To identify prevention needs and inform intervention development, testing, adaptation, and implementation/dissemination by:

- Synthesizing knowledge into theories of human development, health, and behavior processes.
- Defining indicators and processes for human development, health, and behavior outcomes.
- Describing the incidence and prevalence of outcomes and related risk, promotive, and protective factors and processes across stages of human development, populations, and geographic areas.
- Identifying how risk, promotive, and protective factors and processes are related empirically to proximal and distal outcomes within and between populations.
- Describing how the relations among these factors, processes, and outcomes are distributed across stages of human development, populations, and geographic areas.

Core Competencies

Prevention science core competencies in epidemiology and etiology include:

1. Knowledge of behavioral, developmental, and systems theories that describe and explain the processes and mechanisms through which **risk**, **promotive**, **protective factors** and processes are related to **outcomes**.
2. Knowledge of **risk**, **promotive**, **protective factors** and processes for specific **positive outcomes** and **negative outcomes**, their general distribution within and between groups and populations, and their relations to the onset, maintenance, and progression of these **outcomes**.
3. Ability to determine and understand implications of the incidence and prevalence of specific **positive outcomes** and **negative outcomes**, including how to disaggragate data to determine **disparities** in outcomes and if an intervention affects those outcomes for specific subgroups.
4. Ability to use findings from epidemiological and etiological **research** to address **diversity**, **equity**, **inclusion**, **social justice**, and ethical issues in **preventive interventions**.
5. Ability to interpret and communicate epidemiological and etiological **research** in non-stigmatizing and equitable ways to academic and non-academic audiences, with attention to culture and context.
6. Ability to leverage epidemiological and etiological **research** to advocate for effective prevention.

INTERVENTION DEVELOPMENT & ADAPTATION

During the past four decades, prevention scientists have worked to identify the etiological, developmental, and contextual mechanisms by which **risk**, **protective**, and **promotive factors** influence **positive outcomes** and **negative outcomes** across the life course. This empirical information has been incorporated into **preventive interventions** to mitigate sources of risk and optimize **positive outcomes**. The effects of these **interventions** have been evidenced, multifaceted, and long-lasting. **Intervention** development remains a critical focus of prevention science in improving **safety** and expanding the body of evidence-based **interventions** to more comprehensively address the breadth of **risk**, **promotive**, and **protective** mechanisms across cultures and contexts, to improve **outcomes** for all.

Purpose

To develop effective **interventions** that address relevant **risk**, **promotive**, and **protective factors** and processes for the prevention of **negative outcomes** and promotion of **positive outcomes** by:

- Leveraging etiological **theory**, **research** and **evaluation**, and community guidance to develop heuristic explanatory models encompassing the linkages between contextual and culturally specific **risk**, **protective**, and **promotive** processes and **outcomes**.
- Using theories of human development, human learning, and human behavior, evidence from prior **interventions**, and input from intended users (e.g., implementers and beneficiaries) to develop and adapt **interventions** (and their components) that are designed to reduce or mitigate **risk**, enhance **protective** and **promotive** processes, optimize **outcomes**, and be feasible for **implementation** and **dissemination**.
- Developing materials and procedures to support consistent and high-quality **intervention** **implementation** and **dissemination**.

Core Competencies

Prevention science core **competencies** in **intervention** development and **adaptation** include:

1. Knowledge of relevant theories and **research**/**evaluation** findings from relevant disciplines (e.g., biological, developmental, psychological, social, behavioral, environmental) that explain the relationships among **risk**, **promotive**, and **protective** factors and **outcomes**.
2. An understanding of both common and contextual and/or culturally specific **risk**, **protective**, and **promotive factors** to support underserved and high-risk populations.

3. Skills for partnering with communities to develop and test community-based **preventive interventions**, which already may be established within communities and have evidence of implementation.
4. Skills for engaging community partners in culturally and contextually relevant development and **adaptation** of **preventive interventions**.
5. Knowledge of relevant methods and theories related to behavior change, therapeutic methods, and curriculum development to develop and adapt **interventions** that are effective in addressing **risk**, **promotive**, and **protective factors** and **outcomes** within the focal population.
6. Knowledge of frameworks for applying evidence and community input to the development and **adaptation** of **preventive interventions**. This includes frameworks for contextually grounded **intervention** development and **adaptation**.
7. Knowledge of products, practices, and **interventions** that **research** reviews have shown to be unsafe and that increase **negative outcomes**.
8. Knowledge of products, practices, and **interventions** that **research** reviews have shown to be effective and that increase **positive outcomes**.
9. Ability to use findings from **intervention** development and **adaptation research**/**evaluation** to address **diversity**, **equity**, **inclusion**, **social justice**, and ethical issues.
10. Ability to interpret and communicate **intervention** development and **adaptation research**/**evaluation** in non-stigmatizing and equitable ways to academic and non-academic audiences, with attention to culture and context.
11. Ability to leverage **intervention** development and **adaptation research**/**evaluation** to advocate for effective **preventive interventions**.

DISSEMINATION & IMPLEMENTATION SCIENCE

Despite the extensive evidence for the efficacy and effectiveness of preventive interventions, access to evidence-based interventions has been limited. Dissemination and implementation science is a critical aspect of prevention science, in that it systematically addresses the gap between what works and what is actually used. Dissemination and implementation science focuses on topics such as expanding access to preventive interventions, promoting the consistent delivery of core intervention components, tailoring intervention delivery and receipt to meet the needs of the intended users, enhancing participant engagement and responsiveness, and addressing factors associated with feasibility and long-term sustainability. Use of dissemination and implementation science should be informed by theories, frameworks, and models to deepen our understanding of how to promote the use of effective preventive interventions across diverse settings and populations.

Purpose

To facilitate the implementation and dissemination of preventive interventions for all communities and contexts by:

- Conducting dissemination and implementation research and evaluation with communities and intervention delivery systems (e.g., healthcare, schools, courts/legal institutions, child welfare, community-based organizations) to understand the context of dissemination/implementation.
- Establishing evidence of the impact of dissemination/implementation outcomes (e.g., feasibility, acceptability, appropriateness, adoption, reach, fidelity, adaptation, quality of delivery, participant engagement/responsiveness, dosage, sustainment) on intended intervention outcomes (e.g., risk, protective, and promotive factors, and outcomes).
- Assessing implementation determinants (i.e., barriers and facilitators) of dissemination/implementation outcomes across contexts and populations.
- Developing and testing implementation strategies to address relevant implementation determinants.
- Advocating for effective and against ineffective prevention strategies.

Core Competencies

Prevention science core competencies in dissemination and implementation science include:

1. Knowledge of current theories, frameworks, and models in **dissemination** and **implementation** science to identify relevant **dissemination/implementation outcomes** in diverse settings.
2. Ability to partner with both recipients and deliverers of **interventions**, and local prevention **implementation** delivery systems to understand the context, planning, and actuation of **dissemination**/**implementation** studies that are focused on relevant determinants, strategies, and **outcomes**.
3. Ability to develop conceptual models explicating the mechanisms by which **implementation determinants** and **strategies** relate to targeted **outcomes**.
4. Knowledge of relevant theories, models, and frameworks to inform the development and **adaptation** of **implementation strategies**, including **safety** risks.
5. Ability to use findings from **dissemination**/**implementation** science to address **diversity**, **equity**, **inclusion**, **social justice**, **safety**, and ethical issues.
6. Ability to interpret and communicate **dissemination**/**implementation** science in non-stigmatizing ways to academic and non-academic audiences, with attention to culture and context.
7. Ability to leverage **dissemination**/**implementation** science to advocate for effective, and against ineffective, prevention strategies.

GLOSSARY

This section provides a table of key prevention science terms listed in **dark blue highlight** throughout this document and their definitions. They are organized alphabetically.

Prevention Science Term	Definition
Adaptation	The process of modifying interventions to be relevant and effective across different cultural or contextual settings.
Assumptions	Fundamental tenets that serve as a foundation for effectively conducting prevention science.
Competencies	The knowledge, skills, abilities, and behaviors that enable professionals to effectively conduct prevention science.
Core Intervention Components	Essential elements or active ingredients of an intervention that are responsible for producing its desired outcomes. They represent the mechanisms of change — the specific activities, processes, or principles that make the intervention work. While some elements of an intervention can be modified to fit a new cultural, organizational, or contextual setting, the core components should remain intact to preserve intervention effectiveness.
Disparities	A difference in negative outcomes in which disadvantaged social groups systematically experience worse outcomes or greater health risks than more advantaged groups.
Dissemination	Making information about effective and ineffective programming available to practitioners, policymakers, and the public.
Dissemination and Implementation Outcomes	Include indicators such as reach, fidelity and adoption to evaluate the success of the process of applying an intervention to equitably sustain positive outcomes.
Distal	Long-term outcomes in the causal chain of intervention program logic.
Diversity	The inclusion of a broad range of characteristics, backgrounds, and experiences among both research participants and the research workforce.

Prevention Science Term	Definition
Effectiveness	An intervention demonstrates targeted outcomes based on an evaluation designed with high external validity to infer population effects within real-world conditions.
Efficacy	An intervention causes targeted outcomes based on an evaluation designed with high internal validity offering optimal conditions to infer causal effects.
Epidemiology	The study of the distribution and determinants of health-related outcomes in specified populations and the application of this study to the prevention of health problems.
Etiology	The study of human development and disease processes that identifies factors or processes that produce or predispose toward negative and positive outcomes.
Evaluation	Assessment of and intervention's ability to achieve its goals against established standards of efficacy, effectiveness, efficiency, equity, dissemination and/or implementation.
Feasibility	Whether preventive interventions can be effectively and equitably implemented within specific constraints such as time, resources, and capacity.
Fidelity	Intervention integrity representing the extent to which its delivery and receipt matches its intended content, structure, and procedures.
Health Equity	Efforts to reduce disparities in health outcomes and promote equal access to preventive interventions for all populations, improving inclusion of marginalized and underserved groups.
Implementation	The process of applying a specified intervention within a target setting to equitably sustain positive outcomes.
Implementation Determinants	Factors that influence the success of a specified intervention within a target setting to equitably and effectively produce positive outcomes.
Implementation Strategies	Includes actions such as partnerships, co-design, tailoring, and adaptation for the

Prevention Science Term	Definition
	application of specified interventions within target settings to equitably and effectively achieve positive outcomes.
Inclusion	Using active processes such as respectful listening, cultural humility, and empowerment to create environments where diverse groups of individuals feel welcomed, respected, supported, and valued.
Indicated Prevention	Interventions that target individuals or groups already exhibiting high-risk behaviors, but do not yet meet medical or other diagnostic criteria for classification as a "disease" or "disorder," per se; yet are showing early danger signs (e.g., prodromal symptoms).
Intervention	Requires that strategic components and actions are specified to enable replication of programs, practices, policies, strategies, and systems; with the theoretical mechanisms that will logically prevent negative outcomes and promote positive outcomes.
Mediation	When a variable is demonstrated to partially or fully explain the influence of a dependent variable on an independent variable.
Mixed Methods	Research and evaluation designs that integrate both qualitative and quantitative methods.
Moderation	When a variable is demonstrated to change the effect a dependent variable has on an independent variable.
Negative Outcomes	Death, disorder, disease, dysfunction, or other social problem defined by severity of burden.
Outcomes	The intended effects of the intervention that can be short-, intermediate-, and long-term.
Positive Outcomes	Achieving the characteristics defined in positive youth development, positive health, and human development indicators.
Prevention Science	An interdisciplinary field that studies the factors and conditions that influence health and well-being; how to prevent and reduce negative impacts; and how to promote health and well-being among individuals, families, and communities.

Prevention Science Term	Definition
Preventive Interventions	Interventions (see above) designed using prevention science competencies to reduce the development of negative outcomes and promote positive outcomes.
Primary Prevention	Interventions or actions that target one or more risk/promotive or protective factors in order to keep a health or behavior problem from reaching a level of severity that requires "treatment."
Principles	Guideposts for assuring research and evaluation aligns with the overarching edicts of prevention science.
Promotive Factor	Conditions or attributes that enhance positive outcomes, fostering good health, resilience, or well-being.
Protective Factor	Characteristics, conditions, or processes that reduce the impact of risk factors on outcomes, and buffer against negative outcomes.
Proximal	Short-term or immediate outcomes in the causal chain of an intervention's theory of change.
Qualitative	Research and evaluation where patterns and theories are developed or tested using methods like interviews and observations to gather detailed, narrative data.
Quantitative	Research that aims for objectivity and employs inferential methods to analyze numerical data.
Research	Systematic investigation about a topic or issue, using a commonly accepted scientific method, that is intended to contribute to generalizable knowledge.
Risk Factor	Variables associated with an increased likelihood of negative outcomes or reduced positive outcomes.
Safety	Intervention and dissemination efforts to reduce exposure to danger and protect against the risk of negative outcomes.
Scalability	Within dissemination and implementation science refers to an interventions potential to equitably expand the reach and or size of positive outcomes.

Prevention Science Term	Definition
Secondary Prevention	Interventions or actions that follow from early diagnosis or identification of a "disease," "dysfunction," or "disorder," whereby treatment of the condition prevents more severe problems from developing.
Selective Prevention	Interventions that target individuals or groups at higher-than-average risk for a health or behavior problem, identified by the magnitude and nature of risk factors for the health or behavior problem in question. This intervention type targets subsets of the total population that are considered at elevated risk for a health or behavior problem by virtue of their membership in that particular segment of the population.
Social Justice	Accepts that health is a human right and seeks to understand and reduce social determinants that create and perpetuate health disparity.
Sustainment	Within dissemination and implementation science refers to the process of maintaining and institutionalizing an intervention's potential for equitable implementation to continue achieving positive outcomes across time.
Team Science	Collaborative research approach where groups of scientists, often from different disciplines, work together on complex problems to achieve a common goal that would be difficult or impossible for individuals to accomplish alone. It involves managing the processes of how teams organize, communicate, and conduct research; including factors like team dynamics, knowledge integration, and leadership, to accelerate innovation and solve complex problems.
Tertiary Prevention	Interventions or actions undertaken to improve general quality of life by reducing pain or disability, limiting or delaying health/behavior complications, or restoring functionality.
Theory	Conceptual frameworks for understanding developmental processes and relationships between risk, promotive, and protective factors, and interventions.

Prevention Science Term	Definition
Universal Prevention	Interventions that target the general population and are not directed at a specific risk group. These interventions address an entire population (national, local, community, school, or neighborhood) and are aimed at preventing or delaying the health or behavior problem before it starts, and reducing normative increases in health and behavior problems. The entire target population is considered at risk and able to benefit from this type of intervention.

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EXAMPLE READINGS

This section provides a list of example readings that include prevention science background readings and readings by core competency domain. You can also find these readings in this Zotero library: https://www.zotero.org/groups/6101765/spr_core_competencies/library

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APPENDICES

Appendix A: Detailed Description of Task Force Methods for Revision

The task force engaged in three major steps to complete the revision process. Below, we include details for how each step was completed.

1. **Gather and analyze relevant information to inform revisions.** Based on rapid qualitative analysis principles and approaches (Vindrola-Padros & Johnson, 2020), the task force did this by (a) identifying relevant priority sources, (b) deductively extracting themes from each source, (c) summarizing themes across sources, and (d) suggesting revisions based on these themes.

   From 2021-25, we compiled information through the following primary sources: 1) task force meeting and conference roundtable notes, 2) prevention researcher interviews, and 3) prevention practitioner focus groups. Below is a summary of how we collected and deductively extracted themes from each of these primary sources.

   We also gathered information through a focused literature review of prevention science publications since 2011 and a review of graduate-level prevention science course syllabi collected as part of the SPR Training Committee Syllabi Project. Information from these two sources also informed revisions to the document and provided relevant citations and example readings that were incorporated in the final document.

   Task force meeting and conference roundtable notes
   Starting in January 2022, the task force met approximately once a month. For each meeting, the co-chairs provided an agenda to guide the discussion regarding how to revise the *Standards of Knowledge* document. Notes were recorded in a running meeting notes document and shared with the task force. In 2022 and 2023, the task force held 90-minute roundtable discussions during the annual SPR conference. We used this opportunity to gather feedback from SPR members and conference attendees. Notes were recorded and shared with the task force during the subsequent monthly task force meeting.

   In addition to the SPR conference roundtables, members of our task force also presented at the European Society for Prevention Research in 2023 and the Brazilian Association for Research in Prevention and Health Promotion in 2024. We used these opportunities to gather feedback from international prevention researchers. Notes were recorded at each session and shared with the task force during the subsequent monthly task force meeting.

To extract themes from the task force and conference roundtable notes, three task force members independently extracted themes deductively based on the major sections and components of the *Standards of Knowledge* document. They then met to discuss and review each other's coding and following this discussion they each produced independent summaries of their identified themes. A fourth task force member then reviewed summaries and identified six overarching themes, which included:

- What is the definition of prevention science and how is it unique from related fields like public health?
- What types of outcomes are considered part of prevention science and which are not? Domains of focus should be expanded.
- Health equity is important and should address: 1) diversity, equity, inclusion, social justice & ethics, and 2) inequitable distribution of risk/promotive/protective factors, & race/poverty.
- Prevention scientists must have knowledge and skills in collaborating with communities.
- Soft skills are important; scientists need training, supervision, and support in how to communicate with a wide variety of people to be successful in conducting research, disseminating findings, and achieving a voice that is listened to within non-academic/researcher circles, including a particular focus on policymakers.
- Intervention developers must consider issues relevant to on-the-ground implementation and scalability, including how best to maintain fidelity while also being flexible enough to allow for adaptations that meet local community needs and resources.

Prevention researcher interviews

A workgroup[2] within the task force led efforts to conduct interviews with prevention researchers to gather input on revisions to the *Standards of Knowledge* document. In 2023, the interview protocol was determined exempt by the IRB of the PI's (BC) home institution (Washington State University).

Sample. We developed a sampling frame for the interviews, which aimed to include researchers with expertise in one or more of the *Standards of Knowledge* core competency domains: epidemiology/etiology, prevention intervention development, implementation, scaling up and sustainability, and prevention research methods. We also aimed to include researchers with expertise in health equity, as this was identified by the task force as an important area to integrate throughout the core competency domains. The sampling frame also aimed to have representation from different careers levels including senior, early, and mid-career and of different racial and ethnic backgrounds. To identify a pool of potential interview candidates, we used the SPR

[2] Cady Berkel, Brittany Cooper, Erica Doering, Konul Karimova, Aggie Rieger, Nate Riggs, and Zili Sloboda

membership list for 2022 and 2023 (*N*=926). First, the original sample was reviewed for the self-reported SPR service data to sample engaged members and *n*=140 members were stratified and grouped under the categories of epidemiology/etiology (*n*=25), prevention intervention development, implementation, scaling up and sustainability (*n*=81), and prevention research methods (*n*=25) as this classification was readily available and self-reported by the members under their research foci[3]. If a member included more than one research foci, they were coded only for one group to avoid duplication in the final sample. Researchers were also coded under the health equity if their research population and methods included racial or ethnic minority groups and/or cultural adaptations. Using this stratified sampling strategy, 37 researchers were selected as key informants to be recruited for the interviews. The sample was equally divided between four categories of research focus and three categories of career level. There was missing data in the gender and racial/ethnic representation of the researchers but based on available data most of the sample (57%, *n*=20) identified as female, and one third of the sample (30%, *n*=11) identified as White, Caucasian, or European.

As a next step, the team reached out to the selected sample of participants sharing information about the study and requesting them to sign up for the individual interviews if they were interested and available. This recruitment process resulted in a total of 14 interviews conducted in May-June 2023, of which 72% identified as White, Caucasian, or European. To fill in the gaps in the racial/ethnic diversity of the sample, the team selected 9 participants who identified as Spanish/Hispanic/Latino, Black/African American, Asian/Pacific Islander, American Indian/Native American and other from the originally identified stratified sample (*n*=37) who had not yet been interviewed. We reached out to them giving them another chance to participate in the key informant interviews. This second wave of recruitment resulted in 6 interviews conducted which met the gaps in the demographic data and finalized the data collection in October 2023. The final sample included 20 prevention researchers with 70% (*n*=20) female, 50% (*n*=10) White, and close to equal percentages in four categories of prevention science domains and three career levels (see Figures A1 and A2). Participants were offered a $25 gift card in appreciation of their contributions.

[3] *N*=9 were categorized as ‘other’ for their research area.

Figure A1. Interview Sample Career Level by Area of Expertise

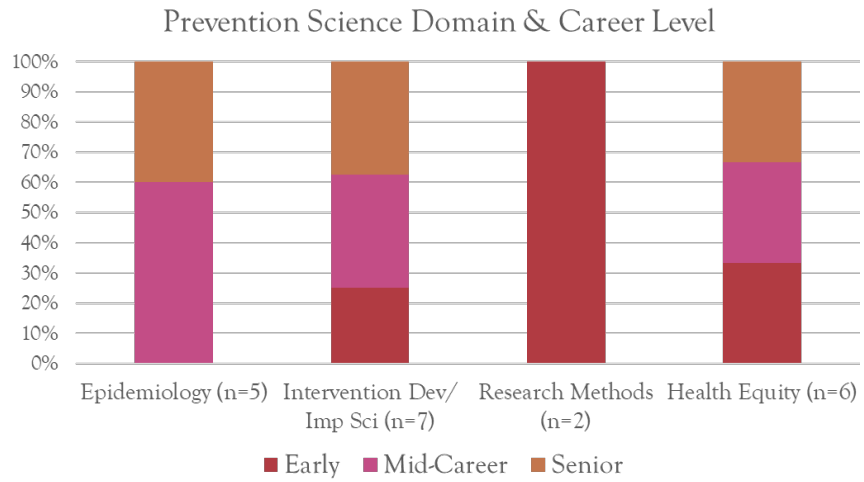
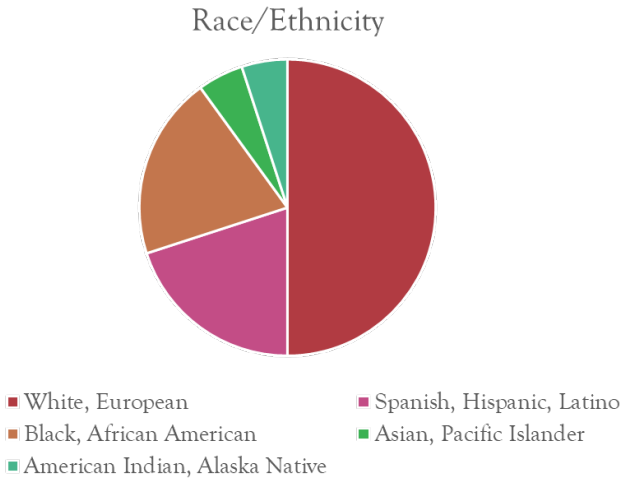


Figure A2. Race/Ethnicity of Interview Participants



Interview protocol. The interview protocol was developed to gather input on the needs and scope of updating the *SPR Standards of Knowledge* document (see Supplementary Materials for the full protocol). To test the interview protocol, one of the members of the workgroup (AR), conducted a pilot interview with a task force member (ZS) to understand the flow of the interview script and the timing of the questions. No substantial changes were made to the interview script as a result of the pilot interview. Following the pilot interview, one of the workgroup members (TB) led the scheduling of the interviews. The interviews were conducted using the PI's (BC) Zoom account and were recorded with participant permission to ensure data safety. The interviews were then transcribed using a third-party transcription service. All personally identifiable information also was removed from the data to minimize potential identification of the participants. The participants consented to the interviews and completed a brief demographics survey on Qualtrics prior to attending the interviews.

Coding & thematic analysis. Following the interviews, the interviewers completed short memos about the interviews to make notes on the substantial and interesting topics coming up in the interviews. This process helped to reflect on the interviews early on and lay the foundation for further analysis. A team of three primary

coders (BC, KK, and AR) developed a codebook based on the interview questions and tested the codebook using 2 randomly selected transcripts. The remaining transcripts were then equally split between three coders for coding.

As a first step, a codebook of a priori codes was created based on the research questions, debriefs after the interviews and memo building exercise, as well as knowledge of prevention science. The codebook was revised, and code definitions and examples were added as the team progressed through the coding process. Hence, the coding was both inductive and deductive and additional codes were created in the coding process. Inter-coder consistency was achieved through initial team discussions when coding began and maintained via ongoing discussions throughout the coding phase (Hemmler et al., 2022). After consensus was reached on the initial codebook, coders divided the remaining 18 transcripts among 3 coders and began coding independently. They communicated weekly to share and discuss coding samples. When any text in the transcript did not fit into an established code, or when a coder identified an additional topic or pattern, then this text was first coded as “Not sure” and, after team discussion, either coded under an existing code, or a new descriptive code was created for that text.

Once the coding was finalized, the coders exported the codes with their associated excerpts. These codes/excerpts were divided between the coders for a thematic analysis. This allowed us to review the themes across the transcripts. To practice the summarizing process and establish the expectations, the group individually analyzed one of the codes (i.e., the excerpts on the definition of prevention science). Then, the group met and used collaborative analysis to group the identified patterns and themes. Next, the group divided the codes between themselves based on the volume of the data and summarized the patterns across the excerpts of a code. As a part of consensus building and collaborative co-interpretation meetings, we wrote key ideas and patterns from the data on virtual sticky notes using Google Jamboard and then collaboratively sorted and grouped them based on emerging patterns and similarities. The process helped us to visually see and engage with the data and helped co-interpretation and iterative theme development. The group held multiple co-interpretation sessions for each code and finalized the thematic analysis process in February of 2024.

Finally, the PI (BC) summarized the themes in a memo, which summarized the identified themes with illustrative quotes from the interview (see Table A1). This summary memo was shared with the rest of the task force members to inform the next phase of revising the *SPR Standards of Knowledge* document.

Table A1. Interview Codebook

Code (# of excerpts)	Description	Quotes
Changes, strengths, & content relevant for…		
Principles (32)	Any feedback or thoughts within these sections, or content that is particularly relevant for the prevention science principles.	*I would say that our principles are much too oriented towards individual approaches. And I don't think they have to be. I mean, certainly, social justice is an example that doesn't have to be an individual approaches, so it's not that each one of them. But when you read through them carefully, you can see the bias towards the individual approach.*
Epidemiology/Etiology (111)	Any feedback or thoughts within these sections, or content that is particularly relevant for the epidemiology/etiology section.	*Epidemiology to me is, I'm trained in public health, so to me it's a very public health term, and I think prevention science draws from multiple disciplines. And so, for one, I'm not sure I would even call it epidemiology, I might call it etiology, which draws on epidemiologic data.*
Intervention Development & Implementation (196)	Any feedback or thoughts within these sections, or content that is particularly relevant for the intervention development and implementation section.	*I And that's not to say that in every situation you have to force community to run analyses and write papers, but there is this recognition that community should drive what studied, how it's studied, how it's discussed and presented, and that involvement much more actively. So I'm wondering if you might want to frame that thing that you highlighted just there in a different way to emphasize more of that co-creation and collaboration and co-creation, collaboration at a more equal level, not just like community's going to help me on my study, which is historically how it's always been. I think we're moving away from that sort of researcher-driven agenda.*
Research Methods (168)	Any feedback or thoughts within these sections, or content that is particularly relevant for the research methods section.	*Qualitative piece is really missing from the assumptions. I mean, you could think about it in some of these broader categories. But the emphasis is very heavy on quantitative forms of knowledge.*

Code (# of excerpts)	Description	Quotes
Whole Document (129)	Any discussion that applies to multiple sections, or the full document.	*I really like the principles, but there's no associated references, there's no state of the current knowledge base, there's no further readings, there's no, where did this come from? How did we come up with these Standards of Knowledge? So I feel like it could probably use a new title.*
Health Equity (133)	Any discussion of (a) underlying precursors to health disparities and/or (b) efforts to address them, including concerns at both individual and structural levels.	*This is the application of a variety of data collection methods. Yes, but do they promote equity throughout the research process? And so maybe there's some things around, because again, I mean, it's just this acknowledgement that while researchers can be, try to be as intentional as possible, researchers also promote harm that impacts the community. So if this is a document that's targeted for prevention science researchers, it's really helping them think about, well, what are the things that we should be considering as we engage in provincial research so that we don't perpetuate the same harms that we're trying to actually address through these interventions and stuff like that?*
Practitioners/Practice (71)	Any discussion of prevention practice. Include, broadly, any connection to practitioners and prevention practice. This includes discussion of practitioners as end users and gaps in research and practice.	*Parting thought is maybe looking at some of the credentials for the kinds of practitioners who we want to use our evidence and making sure that maybe either the standards themselves lead us to create evidence that meet their needs or maybe there's conversation between SPR and some of these organizations to see if there's some formal syncing up that can be done. And then I really think to this is adding a really dedicated section on advocacy and use of research evidence.*
Standards use…		
Audience (61)	Any discussion of who uses or who might use this work. Any	*I think by sharpening it up for the intended audiences, you make it that much more useful for the non-direct audiences to understand who we are and what we do*

Code (# of excerpts)	Description	Quotes
	exploration of end users.	*and what our value is." or "But now we definitely have to make sure that the audience can encompass community partners who may not have academic degrees necessarily, but who are essential for the objectives that we should achieve in prevention science. So it's a delicate balance, because you don't want to dilute the scientific tone of the document, but also, you want to make it accessible to the people who are in reality helping us make a difference in communities.*
Awareness (29)	Any information that suggests the degree to which the interviewee (or others) are explicitly or vaguely knowledgeable of the standards of knowledge.	*So, I, being honest, was not very familiar with the document itself. I recall reviewing it once a while back. So it as a document, I'm less familiar with than the SPR Standards of Evidence, that I'm a lot more familiar with. But the content in rereading it again for today was very familiar and resonates with my understanding of prevention science.*
Use (89)	Examples of both aspirational and tangible use of the standards of knowledge (for both research and practice)	*I think it's a great platform to make sure we are embracing principal tenets of prevention. So it's like for the people new on prevention, is a wonderful guide to get into the field. And for those of us who have been here for a while, is a wonderful checklist when we are writing proposals or writing publications, to make sure we are addressing some of the main themes, addressing the guide.*
Use Facilitator/Barrier (68)	Any factor (whether at the individual'-'level or beyond) that may promote the awareness and use of the standards (in both research and practice)	*I think for those who are already in the field, one value it could really have is around shared language and definitions. So because so much of our work is interdisciplinary, bringing people to the table, they often have different lenses to find things differently, so I think a tool like this could be really valuable that we're all on the same page in terms of both language, but also topics*.
What is prevention science?		

Code (# of excerpts)	Description	Quotes
Prevention Science Definition (54)	Any opinions or examples of what prevention science or prevention research is or is not	*Prevention science is dedicated to understanding distribution of issues that we're trying to prevent, what causes the issues we're trying to prevent, best ways to prevent issues. Either through direct prevention or more health promotion type interventions. And then what are the best ways that we can translate what we find to actually be used by practitioners, policymakers, others we hope are using our science to inform their decisions related to preventing issues. So that's the definition that I use.*
Priorities (87)	Statements that explicitly express attitudes or emotions regarding what is important in prevention science now and in the future	*I see myself as a community-based researcher who brings knowledge surrounding research. And again, research can be a tool for advocacy. And so I think that another core area missing is really advocacy.*

Prevention practitioner focus groups

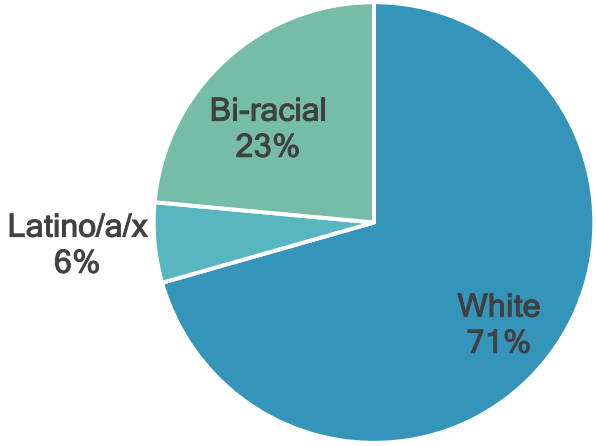
The same workgroup within the task force also led efforts to conduct focus groups with prevention practitioners to gather input on revisions to the *Standards of Knowledge* document. In 2023, the focus group protocol was determined exempt by the IRB of the PI's (BC) home institution (Washington State University).

Sample. Focus group participants were recruited via email from a list of current SPR members who self-identified as 'practitioner'. We also used a snowball sampling approach to identify additional prevention practitioners as they are less likely to be members of SPR. We emailed prevention practitioner organization leaders asking for potential focus group participants that fit our goals. We sought to gain representation across a variety of organizations (e.g., state agencies, local community-based organizations). Participants were offered a $25 gift card in appreciation of their contributions. In total, we conducted 5 focus groups with a total of 15 participants. A summary of their workplace affiliations and race/ethnicity are displayed below (Table A2 and Figure A3).

Table A2. Frequency of Focus Group Participants by Workplace Affiliation

Workplace	Number
International-level organization	2
National-level organization	2
State-level organization	8
Regional-level organization	1
Local-level organization	4

Figure A3. Race/Ethnicity of Focus Group Participants



Focus group protocol. The focus group protocol was developed to gather input on the needs and scope of updating the *SPR Standards of Knowledge* document (see Supplementary Materials for the full protocol). The focus groups were conducted using the PI's (BC) Zoom account and were recorded with participant permission to ensure data safety. The focus groups were then transcribed using a third-party transcription service. All personally identifiable information also was removed from the data to minimize potential identification of the participants. The participants consented to the focus groups and completed a brief demographics survey on Qualtrics prior to attending the focus group.

Coding & thematic analysis. Coding was conducted in qualitative software Dedoose (Dedoose, 2019) by one primary coder (AR). Team discussions (BC and AR) throughout coding led to deeper engagement with the data (Church et al., 2019). Coding was both inductive and deductive, following an iterative approach (Tracy, 2013) meaning that there was both an apriori codebook and that additional codes were created in the coding process. First, broad apriori codes were proposed before coding began, based on the team's previous knowledge of prevention science and on memos, interview exposure, and apriori research questions. When any text in the transcript did not fit into an apriori code, or when the coder identified an additional topic or pattern, then this text was first coded as "Not sure" and, after team discussion, either coded

under an existing code, or a new descriptive code was created for that text. Using coded data, the primary coder created a summary document and shared it with the PI (BC). After review, the task force members used this summary document to update the final memo which informed the revisions to the Standards of Knowledge.

2. **Update and revise original *Standards of Knowledge in Prevention Science* document.** To achieve this step, the task force divided into writing teams based on the major sections of the original document and used the themes and recommendations identified in the first step to guide their revisions.

   Based on their respective expertise, the task force members volunteered to revise the sections of the document. One person was assigned to be the lead for each of the major sections, now entitled: Research & Evaluation Methods, Etiology, Intervention Development & Adaptation, and Dissemination & Implementation Science.

3. **Gather feedback from key prevention partners and finalize the new document.** A revised version of the new document (now entitled *Core Competencies for Prevention Researchers*) was shared with the SPR Board and other key partners (e.g., attendees at the roundtable hosted by the task force at the 2025 SPR conference, an anonymous program officer from an NIH agency, consultation with the SPR International Committee) engaged in prevention. Final revisions were made based on their feedback.

Appendix A. Supplementary Materials

Interview Recruitment

Hello [insert name],

I hope you are doing well. I am emailing you today in hopes you'll be willing to support work being done by the Society for Prevention Research (SPR) to update the Standards of Knowledge in Prevention Science, which was published in June of 2011. Unsurprisingly, much has changed in Prevention Science over the last 11 years and so in 2021, the SPR Board of Directors approved a new task force dedicated to updating the SPR Standards of Knowledge.

Here is the link to current SPR Standards of Knowledge:
https://www.preventionresearch.org/Society%20for%20Prevention%20Research%20Standards%20of%20Knowledge.pdf

One phase of our efforts involves conducting individual interviews with 25 to 30 different generation/career-level prevention science experts, including prevention researchers/academics, policymaker/funders, and practitioners. Our goal in these interviews is to gain a deeper understanding of how representatives in the field of prevention view the purpose of the current SPR Standards of Knowledge and learn about what recommendations they have for revising the Standards of Knowledge.

We are reaching out to see if you would be interested in participating in an individual interview via Zoom. The interview will last approximately 60 minutes, and we can be flexible around your schedule. Participants will also receive a $25 gift card as a thank you for your time.

If you are interested in participation, please complete the following brief survey to schedule the interview.

Please let me know if you have any questions, and I hope you will be interested in participating!

Best,
[Add email signature of sender]

Interview Script
Introduction (5 minutes)

Interviewer: Hi! Thank you so much for coming to meet with us today.

Interviewer: My name is [insert name] and I work at [insert place of work and job title]. I will be leading the interview with you today.

Note-taker: And my name is [insert name] and I work as a [insert job] at [insert place of work].

Interviewer: We are meeting with you today to try to gain a deep understanding of how representatives in the field of prevention view the purpose of the current SPR Standards of Knowledge and what recommendations you may have for updating the Standards of Knowledge.

Today you will be participating in an individual interview. Once we get started, I am going to ask you questions and ask that you share your thoughts and opinions. [Insert notetaker name] and I will mostly just be listening today because we are here to learn from you. Please keep in mind that there are no right or wrong answers to my questions. We want to hear your opinion. If you have decided that you do not want to participate at any point in time today, that is okay. Just let me or [Insert notetaker name] know, and we will end the interview.

To show our appreciation for what you share with us and for your time, we have [insert incentive].

Before we get started, we are going to talk about audio recording permissions and discuss the timing of the interview.

Audio Recording Consent
For audio recording permissions, I need to let you know that we will be recording our conversation and taking notes. Please know that we will keep your responses confidential. Although we will share the things that are said here today, only those of us in the room will know who said them. If we discuss topics brought up in this meeting with others, we will talk about you in general terms so you cannot be personally identified. Again, all of this should help to keep your responses private.

Do you have any questions or concerns?

[Pause for answering questions and concerns.]

Timing

For timing, we expect to be here until about [insert time 60 number of minutes away from start]. We appreciate you coming and want to make sure we end on time, so [insert notetaker's name] will be keeping an eye on the clock and we may need to interrupt our conversation.

Do you have any questions before we begin?

[Answer questions.]

If you have any other questions as we go on, please feel free to ask them. I am going to begin the audio recording and then we can get started with the questions.

Section 1: Background & Perspectives on Prevention Science (10 minutes)

1. Please tell us a little bit about your background/experience with the field of Prevention Science.
2. How would you define 'prevention science'? What do you think makes it distinct from other related fields (e.g., public health)?
3. What are some trends or issues that you think will affect Prevention Science in the next few years? How about in the next 10 years?

Section 2: Experience with Standards of Knowledge (5 minutes)

1. How familiar are you with the SPR Prevention Science Standards of Knowledge?
2. How have you used them in your work?

Section 3: Feedback on Current Standards of Knowledge (30 minutes)
The next set of questions focus on different aspects of the current Standards of Knowledge. We are interested in getting your feedback on which components should remain, what should be modified, and what is missing. Before we ask our questions, we want to provide a brief overview of the current Standards of Knowledge. [Review slides from 2022 roundtable]

1. First, we have some general questions about the audience and purpose.
    a. Who do you think the target audience(s) should be?
    b. How would you (and your colleagues) use this document?
    c. What can we do to make it most useful for that purpose?
2. Next we have questions about the three major competency areas. We'll start with the Epidemiology section. [Show 1-page summary of purpose, assumptions, competencies]
    a. What is your impression of the purpose statement?
        i. Prompt (if needed): What should be modified? What is missing?
    b. What is your impression of the assumptions?
        i. Prompt (if needed): What should be modified? What is missing?
    c. What is your impression of the competencies?
        i. Prompt (if needed): What should be modified? What is missing?
3. Next, we'll discuss the section on Intervention Development, Implementation, and Institutionalization. [Show 1-page summary of purpose, assumptions, competencies]
    a. What is your impression of the purpose statement?
        i. Prompt (if needed): What should be modified? What is missing?
    b. What is your impression of the assumptions?
        i. Prompt (if needed): What should be modified? What is missing?
    c. What is your impression of the competencies?
        i. Prompt (if needed): What should be modified? What is missing?
4. Finally, we'll discuss the section on Research Methods. [Show 1-page summary of purpose, assumptions, competencies]
    a. What is your impression of the purpose statement?
        i. Prompt (if needed): What should be modified? What is missing?

   b. What is your impression of the assumptions?
      i. Prompt (if needed): What should be modified? What is missing?
   c. What is your impression of the competencies?
      i. Prompt (if needed): What should be modified? What is missing?
5. We are also interested in other areas you think should be covered in the revised version of the Prevention Science Standards of Knowledge.
   a. Are there other Prevention Science core domains or competency areas that should be included?
      i. How should health equity be incorporated into the Standards of Knowledge?
      ii. What other areas are currently missing and should be included in the revised Standards?
      iii. How do you think these other areas should be integrated into the revised Standards?
      iv. Are there any other competencies/professional skills that you believe should be included?

<u>Section 3: Implications for Prevention Practitioners (10 minutes)</u>
There are some examples of existing professional standards/competencies and in some cases related professional certification processes for prevention practitioners. For example, the IC&RC certification for substance misuse prevention professionals.

1. What role do you think the SPR Standards of Knowledge should/could play for non-researchers?
2. Are there other considerations we should make for a non-researcher audience?
3. How do you think the SPR Standards of Knowledge could enhance or build upon existing standards for prevention practitioners?

Focus Group Recruitment

Focus Group Prevention Practitioner Organization Leaders Email

Hello [insert name],

I am writing to you as a member of the Society for Prevention Research Task Force to revise the 2011 Standards of Knowledge document: https://www.preventionresearch.org/Society%20for%20Prevention%20Research%20Standards%20of%20Knowledge.pdf

This document provides guidance as to the definition and scope of prevention science and will continue to inform prevention research and practice. It will also serve as the foundation for courses and degree programs at colleges and universities. The intent is to unify the field of prevention and to have prevention professionals 'speak' with one voice. For this reason, we are reaching out to influential groups that represent research and practice prevention professions. The members of the [insert name of prevention practitioner organization] are key to prevention programming across the United States. We would like to recruit [insert name of prevention practitioner organization] members to participate in a focus group to discuss their prevention practice experiences and what a document such as the Standards of Knowledge should include and how it can be used to guide the training and work scope of prevention practitioners.

We are seeking your assistance in identifying and recruiting potential focus group participants, including yourself, to meet [insert time frame]. Ideal focus group participants include prevention practitioners particularly those who work on prevention efforts in their communities whom you feel could help inform the revision of the SPR Standards of Knowledge.

The focus group discussion will be confidential and follow a protocol that has been certified exempt by the Washington State University Human Research Protection Program. In addition, the focus group will last about 90 minutes and participants will receive a $25 gift card as a thank you for their time.

If you are willing to assist with our recruitment of prevention practitioners, could you please send the following message that includes links for the consent and focus group times to potential focus group participants:

> *I hope you are doing well. I am emailing you today in hopes you'll be willing to support work being done by the Society for Prevention Research (SPR) to update the Standards of Knowledge in Prevention Science, which was published in June of 2011. Unsurprisingly, much has changed in Prevention Science over the last 11 years and so in 2021, the SPR Board of Directors approved a new task force dedicated to updating the SPR Standards of Knowledge.*
>
> *Here is the link to current SPR Standards of Knowledge: https://www.preventionresearch.org/Society%20for%20Prevention%20Research%20Standards%20of%20Knowledge.pdf*
>
> *One phase of our efforts involves conducting focus groups with up to 20 prevention science practitioners. Our goal in these focus groups is to gain a deeper understanding of how representatives in the field of prevention view the purpose of the current SPR Standards of Knowledge and learn about what recommendations they have for revising the Standards of Knowledge.*

We are reaching out to see if you would be interested in participating in a focus group via Zoom. The focus group will last approximately 90 minutes, and we are offering a few different time options to be flexible around your schedule. Participants will also receive a $25 gift card as a thank you for your time.

If you are interested in participation, please complete the following brief consent and survey to schedule the focus group: [link].

Please let me know if you have any questions, and I hope you will be interested in participating!

If you are interested in participating yourself, please complete the following brief consent and survey to schedule the focus group: *[link]*.

With great appreciation for any assistance you can provide.

Best,
[Add email signature of sender]

Focus Group Prevention Practitioner Recruitment Email
Hello [insert name],

I hope you are doing well. I am emailing you today in hopes you'll be willing to support work being done by the Society for Prevention Research (SPR) to update the Standards of Knowledge in Prevention Science, which was published in June of 2011. Unsurprisingly, much has changed in Prevention Science over the last 11 years and so in 2021, the SPR Board of Directors approved a new task force dedicated to updating the SPR Standards of Knowledge.

Here is the link to current SPR Standards of Knowledge:
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One phase of our efforts involves conducting focus groups with up to 20 prevention science practitioners. Our goal in these focus groups is to gain a deeper understanding of how representatives in the field of prevention view the purpose of the current SPR Standards of Knowledge and learn about what recommendations they have for revising the Standards of Knowledge.

We are reaching out to see if you would be interested in participating in a focus group via Zoom. The focus group will last approximately 90 minutes, and we are offering a few different time options to be flexible around your schedule. Participants will also receive a $25 gift card as a thank you for your time.

If you are interested in participation, please complete the following brief consent and survey to schedule the focus group: *[link]*.

Please let me know if you have any questions, and I hope you will be interested in participating!

Best,
[Add email signature of sender]

Focus Group Script

Introduction (15 mins)

Interviewer: Hi! Thank you so much for coming to meet with us today.

Interviewer: My name is [insert name] and I work at [insert place of work and job title]. I will be leading the focus group with you today.

Note-taker: And my name is [insert name] and I work as a [insert job] at [insert place of work].

Interviewer: We are meeting with you today to try to gain a deep understanding of how representatives in the field of prevention view the purpose of the current SPR Standards of Knowledge and what recommendations you may have for updating the Standards of Knowledge.

Learning from and with practitioners like you is important to me, and it is an important value for our whole team. We'll be talking about prevention science and prevention practice standards.

When I think of "standards of knowledge," one thing I think of is a list of topics, methods, and approaches that some people think professionals in prevention should have in order to be prevention experts or to be "good" at what they do. But, what SPR drafted 10 years ago is not the end of what standards could or should be. I want to open this conversation up to you.

And, people have different levels of exposure to these things - if I ask you about something that you don't know, then it's my job to help explain it. This focus group is most helpful if I help you feel comfortable being honest with me, even if you think your feedback or ideas might hurt my or other researchers' feelings. Please know that I truly want to hear your unfiltered thoughts.

Today you will be participating in a focus group. Once we get started, I am going to ask you questions and ask that you share your thoughts and opinions. [Insert notetaker name] and I will mostly just be listening today because we are here to learn from you. Please keep in mind that there are no right or wrong answers to my questions. We want to hear your opinion. If you have decided that you do not want to participate at any point in time today, that is okay. Just let me or [Insert notetaker name] know, and you can leave the focus group.

Before we get started, we are going to talk about audio recording permissions and discuss the timing of the focus group.

Audio Recording Consent

For audio recording permissions, I need to let you know that we will be recording our conversation and taking notes. Please know that we will keep your responses confidential. Although we will share the things that are said here today, only those of us in the room will know who said them. If we discuss topics brought up in this meeting with others, we will talk about you in general terms so you cannot be personally identified. Again, all of this should help to keep your responses private.

Do you have any questions or concerns?

[Pause for answering questions and concerns.]

Timing

For timing, we expect to be here until about [insert time 90 number of minutes away from start]. We appreciate you coming and want to make sure we end on time, so [insert notetaker's name] will be keeping an eye on the clock and we may need to interrupt our conversation.

To preserve confidentiality (although this cannot be guaranteed), please do not share what the other participants say with people outside of this group. This way everyone can feel more comfortable about sharing their real thoughts and feelings.

What questions do you have for me before we get started?
[Answer questions.]

Brief introductions: name, role in px, organization (10 mins)

Exposure to standards; standards pros and cons (40 mins)
As prevention practitioners, you focus on preventing mental, emotional, behavioral health problems, etc. We are going to start by discussing your prevention experiences and exposure to the Standards of Knowledge.

1. What do you want researchers to know about practitioner's needs and experiences with prevention?
2. What do you think the most important issues will be in prevention over the next 10 years? How does training need to prepare for this?
3. Do you use research to inform your work as a preventionist? If so, how? If not, why not?
    a. How much experience do you have implementing evidence-based programs or practices?
    b. What was that experience like?
    c. What skills or competencies do you feel that prevention practitioners need to to successfully implement evidence-based programs or practices?
4. How have you worked with or collaborated with prevention researchers and evaluators in the past?
    a. What was the experience like?
    b. How successful was the experience?
    c. How did the results of the collaboration inform your practice?
    d. What skills or competencies do you feel that researchers need to have to successfully collaborate with communities and prevention practitioners?
5. When you think of health equity, what do you think of?
    a. In what ways did your prevention work involve health equity in the last year?

Selected document feedback & suggestions for researchers (30 mins)

6. Prior to signing up for this focus group, have you ever read or been presented with the Society for Prevention Research's Standards of Knowledge?

a. *If no:* No problem. When you hear that title, does that sound like something you would want to read? Why or why not?
b. *If yes:* Do you think most of your colleagues are also familiar with them? Why or why not?
    i. How have you used them in your work?

Next, I want to get your initial feedback on some pieces of SPR's Standards of Knowledge, but first I want to provide some background information. [share screen to display and present summary slides].

7. These are the main sections [show slide #4 with table].
    a. Overall, what are your thoughts on the Standards of Knowledge?
    b. In what ways are these topics useful to you as a preventionist?
    c. In what ways are these topics not useful to you as a preventionist?
8. What would you want to see in Standards of Knowledge for prevention science?
    a. What is missing?

Closing reflection (5 mins)

Thank you so much for being part of this! I already know this focus group was so helpful for our work. Just to make sure I captured everything:

9. Is there anything else you're thinking about that you want to share? Even if you're just thinking out loud.
10. What questions do you have for me?

Thank you for taking time out of your day to share your thoughts with us. To show our appreciation, we will email each of you that indicated that you would like the $25 gift card.

Alright, that is it from me, then!

Appendix B: Table of Core Competencies by Domain

Research & Evaluation Methods
1. Knowledge of a variety of research and evaluation designs for qualitative (e.g., case study, narrative, ethnographic, phenomenological, grounded theory), quantitative (e.g., non-experimental, quasi-experimental, experimental), and mixed methods (e.g., sequential, convergent, multiphasic) studies
2. Knowledge of the advantages and limitations of the various research and evaluation designs within different settings, involving different populations, and with consideration for the type of research or evaluation study being conducted (e.g., etiologic, intervention development and adaptation, efficacy or effectiveness trials, implementation studies, and economic analysis), including intended and unintended consequences of applying various research and evaluation methods.
3. Knowledge of sampling theory and design (e.g., systematic, stratified, planned missingness, cluster), including various sampling approaches (e.g., convenience, response driven sampling), and the conditions in which each approach can be used effectively.
4. Understanding of best practices for participant recruitment, assignment, and retention, and minimization of selection bias and differential attrition.
5. Ability to apply a variety of quantitative, qualitative, and mixed methods data collection practices (e.g., in-person or virtual interviews and focus groups, observational data collection, biological data collection, ecological momentary assessment) and their appropriate analytic techniques.
6. Understanding of the various types of, and approaches to, handling missing data (e.g., missing completely at random, missing at random, not missing at random).
7. Knowledge of mediation and moderation analyses as methods to examine etiology and intervention development, adaptation, evaluation, and implementation/dissemination
8. Ability to understand methods for managing and analyzing complex data structures and ensuring measurement validity (e.g., multilevel and longitudinal analyses, multi-dimensional methods, and confirmatory factor analytic techniques).
9. Following and attending to rapidly changing research and evaluation methods and related technologies (e.g., artificial intelligence).
Epidemiology & Etiology
1. Knowledge of behavioral, developmental, and systems theories that describe and explain the processes and mechanisms through which risk, promotive, protective factors and processes are related to outcomes.
2. Knowledge of risk, promotive, protective factors and processes for specific positive outcomes and negative outcomes, their general distribution within and between groups and populations, and their relations to the onset, maintenance, and progression of these outcomes.
3. Ability to determine and understand implications of the incidence and prevalence of specific positive outcomes and negative outcomes, including how to diaggragate data to determine disparities in outcomes and if an intervention affects those outcomes for specific subgroups.
4. Ability to use findings from epidemiological and etiological research to address diversity, equity, inclusion, social justice, and ethical issues in preventive interventions.

5. Ability to interpret and communicate epidemiological and etiological research in non-stigmatizing and equitable ways to academic and non-academic audiences, with attention to culture and context.
6. Ability to leverage epidemiological and etiological research to advocate for effective prevention.

Intervention Development & Adaptation

1. Knowledge of relevant theories and research/evaluation findings from relevant disciplines (e.g., biological, developmental, psychological, social, behavioral, environmental) that explain the relationships among risk, promotive, and protective factors and outcomes.
2. An understanding of both common and contextual and/or culturally specific risk, protective, and promotive factors to support underserved and high-risk populations.
3. Skills for partnering with communities to develop and test community-based preventive interventions, which already may be established within communities and have evidence of implementation.
4. Skills for engaging community partners in culturally and contextually relevant development and adaptation of preventive interventions.
5. Knowledge of relevant methods and theories related to behavior change, therapeutic methods, and curriculum development to develop and adapt interventions that are effective in addressing risk, promotive, and protective factors and outcomes within the focal population.
6. Knowledge of frameworks for applying evidence and community input to the development and adaptation of preventive interventions. This includes frameworks for contextually grounded intervention development and adaptation.
7. Knowledge of products, practices, and interventions that research reviews have shown to be unsafe and that increase negative outcomes.
8. Knowledge of products, practices, and interventions that research reviews have shown to be effective and that increase positive outcomes.
9. Ability to use findings from intervention development and adaptation research/evaluation to address diversity, equity, inclusion, social justice, and ethical issues.
10. Ability to interpret and communicate intervention development and adaptation research/evaluation in non-stigmatizing and equitable ways to academic and non-academic audiences, with attention to culture and context.
11. Ability to leverage intervention development and adaptation research/evaluation to advocate for effective preventive intervention.

Dissemination & Implementation Science

1. Knowledge of current theories, frameworks, and models in dissemination and implementation science to identify relevant dissemination/implementation outcomes in diverse settings.
2. Ability to partner with both recipients and deliverers of interventions, and local prevention implementation delivery systems to understand the context, planning, and actuation of dissemination/implementation studies that are focused on relevant determinants, strategies, and outcomes.
3. Ability to develop conceptual models explicating the mechanisms by which implementation determinants and strategies relate to targeted outcomes.

4. Knowledge of relevant theories, models, and frameworks to inform the development and adaptation of implementation strategies, including safety risks.
5. Ability to use findings from dissemination/implementation science to address diversity, equity, inclusion, social justice, safety, and ethical issues.
6. Ability to interpret and communicate dissemination/implementation science in non-stigmatizing ways to academic and non-academic audiences, with attention to culture and context.
7. Ability to leverage dissemination/implementation science to advocate for effective, and against ineffective, prevention strategies.

Appendix C: Prevention Research & Practice Competencies

Prevention Practitioners & Prevention Researchers Have A Lot In Common

Many of us are both practitioners and researchers. Even for those of us who think of ourselves as only practitioners or only researchers, we still have a lot in common. Below are example shared competencies across practitioners competencies (e.g., SAMSHA's Prevention Core Competencies and IC&RC's competencies) and SPR's Core Competencies for Prevention Researchers.

We Both Want To...

- Improve peoples' lives in a thoughtful, collaborative way
- Know as much as we can about what problems exist
  - **Practitioners**: conduct needs assessments, know research and community knowledge regarding health concerns, and how these concerns differ among different people and places
  - **Researchers**: thoughtfully study health concerns at international, national, and more local levels, including how health concerns differ among different people and places
- Select or recommend the right approach(es) because we know what we're talking about
  - **Practitioners**: know multiple prevention strategies and when they might work best with different people and places
  - **Researchers**: know multiple diverse research methods, from different ways to select participants to different analyses (qualitative, quantitative, and mixed)
- Systematically and thoughtfully understand what we're doing
  - **Practitioners**: conduct local evaluations
  - **Researchers**: investigate how interventions work, if they work, and under what conditions interventions work or problems exist/persist
- Know as much as we can about why problems exist and how problems continue
  - **Practitioners**: know research and community knowledge regarding the how and why of problem (and solution) development, including oppressions and environment
  - **Researchers**: investigate mediators and moderators, attend to context, including oppressions and environment
- Partner with people who are impacted by the problems we want to change
  - **Practitioners**: listen to communities, actively engage people in prevention efforts, attend to culture and context
  - **Researchers**: listen to communities, actively engage people in research design, data collection, analysis, and/or dissemination; attend to culture and context
- Attend to the context in which people live and problems occur
  - **Practitioners**: adapt and tailor interventions
  - **Researchers**: study the role of environment in the existence and maintenance of problems, and in how interventions work/can be implemented
- Develop a broader, longer-term vision and understanding for prevention
  - **Practitioners**: create strategic planning
  - **Researchers**: develop and use theory
- Share what we know and do with people who can help advance prevention
  - **Practitioners**: market prevention programs, advocate for prevention and for prevention efforts
  - **Researchers**: science communication and advocacy with research findings
- Hold ourselves accountable based on professional standards and consultation
- Stay organized so we can keep track of and follow through on what we're doing