



Advancing the Use of Implementation Science in the Ryan White HIV/AIDS Program to End the HIV Epidemic in the United States

Technical Expert Panel Executive Summary

The Health Resources and Services Administration (HRSA) Ryan White HIV/AIDS Program (RWHAP) Part F Special Projects of National Significance (SPNS) Program supports the development of innovative models of HIV care and treatment to respond quickly to the emerging needs of clients served by RWHAP recipients. In recent years, implementation science (IS) has become essential to this work. IS is the “scientific study of methods to promote or improve the systematic uptake of intervention strategies with demonstrated effectiveness into practice, program, and policy.”¹

Through its demonstration, implementation, and information technology projects, the HRSA HIV/AIDS Bureau (HAB), which administers the RWHAP and SPNS, uses IS to inform its approach to evaluation and provision of assistance to RWHAP-funded sites. HAB’s IS evaluations assess the design, implementation, utilization, cost, and health-related outcomes of evidence-based interventions, evidence-informed interventions, and emerging interventions—hereafter collectively referred to as intervention strategies—and other treatment strategies while promoting the dissemination and replication of successful intervention strategies.

HRSA HAB convened a Technical Expert Panel (TEP) on IS in June 2022. This executive summary of the TEP includes the following sections:

- Overview: How Implementation Science Is Used in the RWHAP and SPNS Initiatives
- Opportunities to Increase the Impact of IS Within the RWHAP and SPNS Initiatives
- Considerations for HRSA HAB to Stay at the Forefront of IS
- Conclusion

Overview: How Implementation Science Is Used in the RWHAP and SPNS Initiatives

HAB has leveraged IS across a variety of SPNS initiatives to develop and test intervention strategies, each with the ultimate goal of eliminating disparities and reaching optimal health outcomes for all RWHAP clients. Specifically, IS has made an impact on how SPNS initiatives identify innovative and promising intervention strategies, evaluate implementation and effectiveness, and disseminate intervention strategies.

Identify innovative and promising intervention strategies. SPNS initiatives use IS approaches to test whether intervention strategies with demonstrated effectiveness at improving the quality of HIV care can be implemented successfully in RWHAP settings to improve client outcomes. “Demonstrated effectiveness” can be measured in a variety of ways. It is important that a body of evidence exists to support the intervention or that the “emerging intervention” demonstrates “real-world” validity and effectiveness.

Evaluate implementation and effectiveness. IS evaluation focuses on identifying and assessing implementation processes, strategies, and outcomes.^{2,3} For the RWHAP, evaluation study designs may assess individual sites, multiple sites, or system-level interventions and may make within-group or between-group comparisons. Evaluation studies include the following:

- Assessing the uptake and integration of interventions;
- Understanding the implementation process, including factors affecting implementation; and
- Measuring the associated impact of the intervention on client outcomes along the HIV care continuum, such as viral suppression.

IS evaluations in SPNS initiatives are always hybrid studies,⁴ meaning that they measure more than the implementation process alone. IS evaluations always include the following two elements:



Background: Implementation Science Technical Expert Panel

The Health Resources and Services Administration HIV/AIDS Bureau, which oversees the Ryan White HIV/AIDS Program (RWHAP), convened a Technical Expert Panel (TEP) in June 2022. The Implementation Science (IS) TEP explored the following topics:

- Effective evaluation of RWHAP Part F Special Projects of National Significance (SPNS) demonstration and implementation sites using IS approaches
- Provision of assistance to sites from an IS perspective
- Other needs and challenges related to implementation of intervention strategies

Thirteen panelists representing IS researchers, RWHAP SPNS sites, evaluators, and technical assistance providers took part in the discussions.

- **Implementation outcomes**, or the effectiveness of the implementation strategies used to promote adoption and use/uptake of the intervention; and
- **Client outcomes**, or the associated impact of the intervention strategy on health outcomes for people with HIV along the HIV care continuum.

SPNS evaluations focus on the design, implementation, utilization, cost, and health-related outcomes of intervention strategies while promoting the dissemination and replication of successful interventions. IS is used to conduct standardized and systematic assessments of the following: (1) impact of the intervention strategy on client outcomes, (2) penetration of the intervention strategy in a specific setting, (3) utility of specific implementation strategies to achieve uptake and integration of the intervention strategy, and (4) broader contextual factors that affect implementation.

Disseminate intervention strategies. To disseminate findings and products from SPNS initiatives, HAB uses multiple strategies informed by lessons learned from these initiatives, as well as community and stakeholder input. Strategies include peer-to-peer capacity building, instructional materials to support uptake, technical assistance for RWHAP-funded recipients, maximized accessibility of written and oral communications, and technical communications designed to reach researchers and policymakers through peer-reviewed journal publications.

Additionally, to simplify and streamline access to dissemination products, HAB introduced the [RWHAP Best Practices Compilation](#) in 2021. The Compilation is a centralized, online knowledge-sharing tool designed to allow RWHAP-funded and other HIV service delivery organizations to rapidly identify intervention strategies that can be implemented in their settings to eliminate disparities among their clients; it provides accessible tools and resources to support successful implementation. The tool also encourages RWHAP-funded and other HIV service delivery organizations to submit information about emerging interventions and other intervention strategies that then are profiled and disseminated through the Compilation so that others can replicate those intervention strategies in their settings.

More guidance and a framework for conceptualizing IS projects within HAB are provided in the article [“Implementation Science and the Health Resources and Services Administration’s Ryan White HIV/AIDS Program’s Work Towards Ending the HIV Epidemic in the United States.”](#)

Opportunities to Increase the Impact of IS Within the RWHAP and SPNS Initiatives

Increase the awareness and understanding of IS. Panelists emphasized the need to increase the understanding of IS by SPNS participants and in the larger RWHAP community. The lack of a common understanding and standardized terminology potentially impedes SPNS evaluations and dissemination activities.

Explain how IS can enhance the work of RWHAP recipients.

The RWHAP focuses on disparities, and IS can help this effort through tailored interventions and a focus on those populations that have not been reached, individuals who are out of care, or those who struggle with adherence to treatment. As a methodology, IS shifts the evaluation focus from client outcomes to the clinical settings and other sites and explores the processes that can be improved or changed to improve

workflows, training, and other aspects of clinical care and client interaction. Given the focus on targeted rather than random adaptation, IS increases the likelihood of achieving similar positive outcomes as the original intervention.

Differentiate between the needs of SPNS recipients and the broader RWHAP community. Panelists noted that different informational needs related to IS are recognized across the RWHAP community. Recipients participating in a SPNS initiative need more information about the implementation and evaluation process and how their efforts will serve to inform the work of other RWHAP recipients. RWHAP recipients that are considering adopting an intervention need information that instills confidence that the intervention will be effective within their setting (i.e., evidence of effectiveness) and tools that allow them to implement the intervention effectively and realize the expected outcomes.

HAB Implementation Science Approach

The HIV/AIDS Bureau implementation science (IS) approach is used in Special Projects of National Significance initiatives; it involves two core components. The first is rapid implementation—a systematic process for identifying intervention strategies with demonstrated effectiveness at improving outcomes for people with HIV and disseminating them through accessible multimedia toolkits for rapid replication. The second component is an evaluation framework grounded in IS that simultaneously assesses the impact of an intervention strategy on client outcomes (client outcomes), the penetration of an intervention strategy in a specific setting (implementation outcomes), the utility of specific implementation strategies to achieve uptake and integration of the intervention strategy (implementation strategies), and the effect of broader contextual factors that affect implementation (barriers/facilitators).

Source: Pshoupaidas D, Cohen SM, West T, Avery L, Dempsey A, Brown K, et al. 2020. “Implementation Science and the Health Resources and Services Administration’s Ryan White HIV/AIDS Program’s Work Towards Ending the HIV Epidemic in the United States.” *PLoS Med.* Nov 6;17(11):e1003128. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7647058>

Provide flexibility. RWHAP recipients are very diverse, with unique circumstances and challenges. The implementation process is made more difficult by both internal factors and external factors. Although adherence to the core elements of an intervention strategy is important, flexibility is essential to allow recipients to tailor the intervention to meet their needs. Clarifying the degree to which an intervention strategy must be replicated to see the intended effects or whether it can be adapted to meet specific needs could increase uptake of intervention strategies among both SPNS sites and RWHAP recipients.

Promote community-engaged IS. Panelists suggested that the work of SPNS demonstration and implementation sites could be strengthened by involving the community (e.g., people with lived experience and other stakeholders) in the design and implementation of intervention strategies. Capacity building is needed to help providers engage community members in designing, adapting, and evaluating interventions and services. HRSA HAB could continue to fund initiatives to engage communities and support the participation and meaningful engagement of people with lived experience as they carry out these efforts.

Improve dissemination and evaluation of implementation tools and activities. Most SPNS initiatives include dissemination tools and activities designed to promote uptake of the intervention strategies within the RWHAP community. These mechanisms include toolkits, webinars, online trainings, and the sharing of tools. To support greater uptake of intervention strategies, panelists suggested more extensive evaluation of these dissemination tools and activities to determine their effectiveness and reach.

Support sustainment of interventions. SPNS initiatives are of limited duration—typically three years. SPNS sites explore whether an intervention is sustainable in the real world and are provided the resources to do this. Sites have had varying degrees of success in sustaining interventions beyond the project period—mostly due to an inability to secure additional funding. For RWHAP recipients, implementing a new intervention may require shifting funds allocated to other services. In both of these circumstances, assistance in identifying alternative funding sources could support the uptake and sustainment of interventions.

Considerations for HRSA HAB to Stay at the Forefront of IS

Increase the understanding of IS within the RWHAP community.

- Create a glossary of IS terms to facilitate the use of common terminology.
- Disseminate articles on IS.
- Compile IS tools and resources (e.g., a clearinghouse) for SPNS and other IS initiatives.
- Use logic models to depict the implementation process.

Examples of SPNS Initiatives Utilizing Implementation Science Approaches

Improving Care and Treatment Coordination: Focusing on Black Women With HIV, Black Women First, 2020–2023.

The HIV/AIDS Bureau (HAB) funded an evaluation and technical assistance provider (ETAP) and directly funded 12 demonstration sites for bundled, evidence-informed interventions. The ETAP is helping to design and evaluate innovative bundled interventions for Black women with HIV.

Using Evidence-Informed Interventions to Improve Health Outcomes Among People With HIV Initiative, 2017–2022.

HAB funded two organizations, a coordinating center for technical assistance (CCTA) to support the implementation of 11 evidence-informed interventions and an evaluation center. Twenty-six implementation sites were funded through the CCTA.

Dissemination of Evidence-Informed Interventions, 2015–2020. HAB funded two organizations, a dissemination and evaluation center and an implementation technical assistance center. These centers supported implementation, evaluation, and replication of evidence-informed interventions at 12 implementation sites.

Improve dissemination efforts and tools to increase uptake of interventions by RWHAP recipients.

- Focus on what motivates recipients (e.g., delivering better care, providing services more efficiently and effectively) when designing implementation tools.
- Use multiple platforms, in addition to a toolkit and manual, to support uptake (e.g., webinars, videos depicting the intervention in a real-world setting).
- Tailor tools to different audiences (e.g., clinicians, administrators, planning groups, policymakers) and different settings (e.g., community-based organization, hospital, multisite provider, health department).
- Market implementation tools to RWHAP recipients more effectively.
- Use HAB platforms (e.g., [RWHAP Best Practices Compilation](#), National Ryan White Conference on HIV Care and Treatment, [TargetHIV website](#)), to communicate about IS and intervention strategies.

Conclusion

By supporting the effective implementation of intervention strategies to improve engagement and retention in care of RWHAP clients and to produce better health outcomes, IS is an important tool for the RWHAP. Its focus on targeted adaptation ensures that core elements of intervention strategies are implemented with fidelity while still providing flexibility to adapt to the unique circumstances and challenges of each RWHAP recipient. By increasing the understanding of IS and improving dissemination of SPNS implementation tools, HRSA HAB can support greater uptake of intervention strategies by RWHAP recipients.

References

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