
Executive Summary

As the energy efficiency industry faces disruptive market changes, program administrators (PAs) seek new strategies for reaching and engaging low- and middle-income customers. In parallel, the health industry is undergoing structural changes to make the transition from a fee-for-service reimbursement system to payment models that are increasingly tied to outcomes. Many health care providers treating patients with chronic respiratory illnesses such as asthma and chronic obstructive pulmonary disorder (COPD) are testing new approaches that include in-home assessment of patients' housing conditions. Energy efficiency PAs have the technical knowledge and trained workforce to conduct the in-home assessments and upgrades needed to address substandard housing conditions that affect health.

The transformations taking place for both industries create new program design opportunities that target a shared barrier: unhealthy and substandard housing conditions that cause high energy burdens and compromise household health. By leveraging each other's resources, customer access, workforce, and policy frameworks, the energy and health industries can achieve mutually beneficial outcomes.

New collaborations nationwide are addressing these challenges by coordinating energy efficiency and health resources. This Playbook is designed to help energy efficiency PAs develop or expand healthy home programming, referred to as **Energy-Plus-Health** programs. Integrated Energy-Plus-Health programs offer PAs the opportunity to:

- Reach more customers and provide more extensive services,
- Increase participation in weatherization and residential retrofit programs,
- Improve the quality of life of low-income households and communities,
- Improve health outcomes and reduce health care utilization rates and costs, and
- Unlock new health-related funding streams to leverage utility ratepayer dollars for improved program outcomes.

This Playbook starts off in [Section 1](#) by describing how the document is organized, with the intent to make this a user-friendly, easy-to-follow guidebook that walks the reader through key concepts, steps, and options for developing and implementing Energy-Plus-Health programs.

Making the Case for Energy-Plus-Health Programs

Understanding the drivers of the dynamic changes and challenges affecting the energy efficiency and health industries is essential to exploring the opportunities for coordinated program approaches. [Section 2](#) reviews these trends and offers rationales for both efficiency PAs and health care providers to make a defensible pitch to internal stakeholders, decision-makers, regulators, and health care partners for an Energy-Plus-Health program.

Drivers for change. A growing body of research demonstrates that energy efficiency retrofits can improve indoor environments, air quality and health outcomes, such as asthma, COPD, and other chronic respiratory conditions. Drawing on this body of research, training programs such as the Building Performance Institute's Healthy Home Evaluator certification and guidance from Weatherization Assistance Program's health and safety requirements are now giving weatherization and home energy contractors the tools to assess homes more holistically.

Several trends affecting the energy efficiency and health care industries are now coming together in ways that make this a favorable time to work together to improve both energy and health outcomes. Both the energy efficiency and health sectors face systemic challenges to — and emerging opportunities to improve—their existing customer and patient engagement levels and business models. Efficiency programs are increasingly focused on reaching low-income and hard-to-reach customers, while market changes are creating new pressures on ratepayer funding for energy efficiency programs that challenge the cost-effectiveness of residential programs. The health care industry is undergoing a dramatic transformation from a fee-for-service model to a value-based reimbursement structure, with increasing recognition of how the social determinants of health (SDOH) affect health outcomes. Increasing the effectiveness of in-home patient care encourages new collaborations for cross-sector engagement, prevention, and treatment of patients and their homes.

New value streams for efficiency programs. Energy-Plus-Health programs, particularly fully integrated programs, can unlock new value streams for the energy efficiency industry. States like Missouri, Maryland, and New York are now advancing changes to Medicaid rules to enable Medicaid payments for in-home assessments, providing models for replication in other states. Other states, including Connecticut, Massachusetts, Rhode Island, and Vermont recognize the value of non-energy impacts such as health and safety, in energy efficiency cost-benefit calculations, which allows for more robust program offerings.

Designing an Energy-Plus-Health Program

The Playbook provides resources, program design guidance, and case studies to help efficiency PAs develop Efficiency-Plus-Health programs, engage community-based organizations (CBOs) and health partners, and understand health care system changes.

[Section 3](#) offers a three-tier assessment framework to help efficiency PAs understand which Energy-Plus-Health program model is the best fit for their goals and resources. The tiers vary in their level of complexity, collaboration, comprehensiveness, and impact.



Tier 1: Basic health and safety

- Do no harm during or resulting from an energy retrofit (adhere to combustion safety and minimum health and safety standards)
- Certain measures packaged and delivered directly or through community partners, such as efficiency kits, direct install measures, and HVAC safety checks



Tier 2: Cross-sector referrals

- Agreements between energy efficiency and community partners for systematized cross-sector referrals to local healthy home information and services
- Possible use of electronic tracking platforms such as [One Touch](#)
- Partners deliver their own program services for either energy efficiency or health, or PAs may contract with CBOs to deliver services



Tier 3: Integration

- Formal collaboration integrates energy efficiency and healthy homes service delivery
- Targeting of households with health conditions for which energy efficiency upgrades offer a remediation strategy
- Health impact data collection and tracking
- Privacy and liability issues addressed through legal documents
- Opportunities for health care funds to cover efficiency measures are being explored in some markets.

[Section 4](#) offers in-depth program design steps and considerations for PAs who are committed to developing a Tier 2 or 3 program.

[Section 5](#) reviews health care industry trends, players, treatment models, and funding options to help efficiency PAs understand the industry and find opportunities for collaboration.

[Section 6](#) provides detailed case studies from seven states, with information on program designs, partnerships, and key lessons learned for Energy-Plus-Health programs across all three tiers.

Energy-Plus-Health Case Studies		
Tier 1	Tier 2	Tier 3
<ul style="list-style-type: none"> Columbia Gas of Ohio WarmChoice® 	<ul style="list-style-type: none"> Connecticut Children's Hospital Healthy Homes Program Fort Collins Utility and City of Fort Collins Efficiency Vermont - One Touch 	<ul style="list-style-type: none"> Washington State Weatherization plus Health North Berkshire Healthy Homes Initiative, Center for EcoTechnology Efficiency Vermont Healthy Homes Initiative New York State Health Homes Value Based Payment Pilot

Sharing Resources and Lessons Learned

[Section 7](#) provides tools such as templates, partner agreements, training resources, and outreach materials to support development of Energy-Plus-Health programs. As early Energy-Plus-Health collaborations expand, sharing the tools that facilitate progress increases the likelihood of success. E4TheFuture funded the development of this Playbook to help efficiency PAs advance innovative partnerships that yield multiple energy and health benefits. PAs are encouraged to connect with each other to foster ongoing communication, collaboration, and learning as the Energy-Plus-Health market evolves.