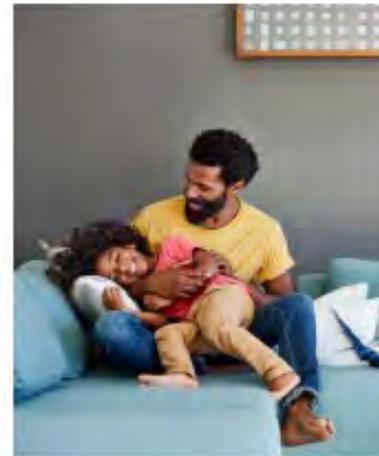




Using the Energy-Plus-Health Playbook

September 9, 2019

Energy-Plus-Health Playbook



July 2019



Today's Agenda

- Welcome from E4TheFuture (Julie Michals)
- Overview of the Energy-Plus-Health Playbook (Liz Curry)
- Q&A Session with Case Study Panelists (facilitated by Ellen Tohn)



Julie Michals,
Director of Valuation,
E4TheFuture



Ellen Tohn,
Founder and Principal,
Tohn Environmental
Strategies

First, let us know your organizational affiliation.

The Energy-Plus-Health Playbook Overview



Liz Curry Consultant, VEIC

- Part of the VEIC consulting group with expertise in program design and finance for low-income and multifamily markets
- Research on healthy homes programs and non-energy benefits
- 25 years of experience in affordable housing development, program administration, finance, housing rehab, and rental code enforcement



What I'll Cover

- Playbook Overview
- Industry Trends Creating Opportunities
- Cross-Sector Collaboration
- Program Designs – Tier 1, 2, 3
- Playbook Resources
- Tier 1 Focus



Playbook Overview

<u>Section 1</u>	Introduction and Playbook Organization: This section provides an overview of the Energy-Plus-Health Playbook, and quick links to help readers easily navigate to the sections that are most relevant to them.
<u>Section 2</u>	Making the Case for Energy-Plus-Health Programs: For readers who are considering starting an Energy-Plus-Health program and want to understand the benefits that Energy-Plus-Health programs can offer – and how best to make the case for healthy homes programming to utility decision-makers, regulators, ratepayers, and other stakeholders.
<u>Section 3</u>	Choosing the Energy-Plus-Health Program Model that is Right for You: For readers who plan to develop Energy-Plus-Health programs and need support finding the right program model and tips for getting started. This section reviews three program tiers and helps readers determine which is the best fit for their situation.
<u>Section 4</u>	Designing a Successful Energy-Plus-Health Program: For readers who are committed to developing a Tier 2 or 3 program and want in-depth program design guidance.
<u>Section 5</u>	Navigating Health Care Industry Partners as You Build Collaboration: For readers who want in-depth information on health care industry trends, key health care providers and funders, and the emerging delivery and payment models that are opening new opportunities for Energy-Plus-Health collaborations.
<u>Section 6</u>	Energy-Plus-Health Program Case Studies: For readers interested in learning from real-world experience implementing Energy-Plus-Health Programs, including information on program designs, key partners, and lessons learned. Provides detailed case studies from seven states.
<u>Section 7</u>	Energy-Plus-Health Program Resources and Sample Materials: For readers seeking further resources, templates, and training and marketing materials to support development of Energy-Plus-Health programs.

Energy Sector Trends

- **Changing value of energy efficiency:** Diminished savings opportunities from lighting, grid challenges, and need for higher customer engagement and engagement with customers not currently reached.
- **Growing desire to reach low-income customers:** Address weatherization deferrals due to health and safety issues and cost-effectiveness.
- **Workforce training now integrates health:** Healthy homes assessments and formal credentialing, safe work practices around hazardous materials.



Health Sector Trends

- **Healthy homes:** Integration of energy efficiency into healthy homes framework.
- **Health care industry:** Disruption in health care payment structures to reward outcomes rather than reimburse visits to medical services.
- **Public health policy:** Many public health departments adopting Health in All Policies and integrating Social Determinants of Health indicators.



Building Cross-Sector Collaboration

- **Building buy-in:**
Understanding mutual goals and each partner's value proposition.
- **Partner identification:**
Recommendations for finding appropriate health sector partners.
- **Key roles:**
Critical step of identifying coordinating entity.
- **Addressing cross-sector challenges:**
Language and protocols.
- **Leveraging for success:**
Working together to braid resources that support positive health outcomes.



Energy-Plus-Health Program Models

- Three-tier framework
 - Each tier engages health and safety and increasingly integrates health focus.
 - Helps PA's decide which program model is feasible and aligns with local circumstances
 - Identifies stakeholders and roles
 - Offers options for increasing impact and outcomes
- Case studies included for each tier



Tier 1: Health and Safety



- **Promote health and safety**
 - Do no harm
 - Combustion and ventilation safety
- **Key stakeholders**
 - Program administrators
 - Home energy contractors with approved training and certification
 - Community-based organizations
- **Cost-effective upgrades**

Tier 2: Cross-Sector Referrals



- **Formal partnerships and referral network**
 - leverage partner resources to deliver healthy homes services or coordinated referrals with systems for tracking follow-up
- **Key stakeholders**
 - Program administrators
 - Home visiting programs related to energy, health and/or housing
 - Other community-based organizations or public health offices
 - Home energy contractors with approved training and certification
- **Customer engagement, and community or low-income impact**

Tier 3: Health Integration



- **Integrated Energy-Plus-Health Services**
 - Include health sector partners at the table from the start
 - Focus on collecting, tracking and documenting health outcome data
- **Key stakeholders**
 - Program administrators
 - Health care providers
 - Healthy homes assessors
 - Trained contractors
- **Braids multi-sector funding sources to address health needs**
 - Addresses policy goals to quantify non-energy health benefits

Playbook Resources

- **Section 4:** guidance for building collaborative partnerships and program design considerations
- **Section 5:** navigating health care partners
- **Section 6:** case studies
- **Section 7:** Sample materials, templates and resources



Tier 1: Basic Health and Safety

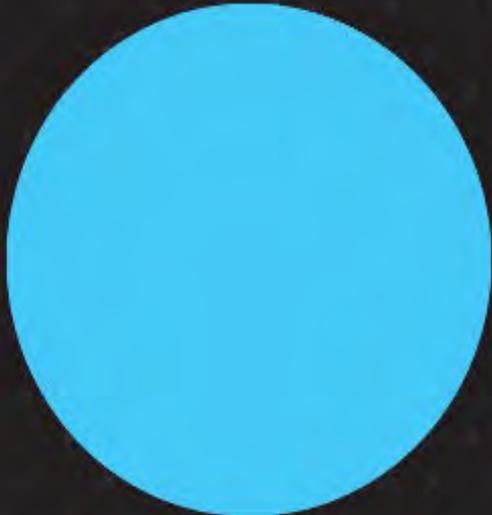


Tier 1 Required Elements	Tier 1 Optional Elements	Elements Not Usually Present in Tier 1 Programs
<ul style="list-style-type: none">• Do no harm health and safety checks during energy assessments and retrofits	<ul style="list-style-type: none">• Health and safety messaging included in program marketing• Certain measures packaged and delivered directly or through community partners, such as efficiency kits, direct install measures, and HVAC safety checks• Health-related non-energy impact adders in cost-benefit tests	<ul style="list-style-type: none">• Dedicated funding from Medicaid or other health funding sources to pay for in-home assessments for eligible patients• Formal referral and tracking systems between efficiency and health or housing providers• Comprehensive in-home assessments addressing energy and health



Tier 1: Evaluation of Cost-Effectiveness

- APPRISE evaluation of Pennsylvania Utility Mandated Programs assessed cost-effectiveness of health and safety investments in low-income homes.
- Found potential to invest more in health & safety for homes with high usage and still achieve cost-effective savings.
- Recommended pilot approach to assess savings in high usage homes with significant health & safety barriers.
- Berger & Davis Presentation at ACEEE Summer Study, August 15, 2018:
<http://www.appriseinc.org/wp-content/uploads/2018/08/13-409-Berger-seconddraft-PDF.pdf>.



Thank You!

Liz Curry,
Low-Income & Multifamily Consultant, VEIC
September 9, 2019

Do you have clarifying questions? (put your question in the Q&A at the bottom of the screen)

Energy-Plus-Health Program Tiers and Case Studies

What can we learn from Tier 2 and 3 case studies?

Energy-Plus-Health Program Tiers

 Tier 1: Basic health and safety	 Tier 2: Cross-sector referrals	 Tier 3: Integration
<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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.

Tier 2: Cross Sector Referrals



- **Vermont One Touch**
 - Statewide program led by Weatherization.
 - All single-family low-income weatherization projects use One Touch to make and track electronic referrals to and receive referrals from health, housing and energy partners.
 - Implemented in over 2600 households since 2014.
- **Fort Collins, Colorado**
 - Collaboration between City's Healthy Homes program and the Fort Collins Utilities Efficiency Works™ Home (EWH) program.
 - Healthy homes clients receive referrals to EWH, which can track these referrals. After energy audits, EWH advisors recommend Healthy Home assessments.
 - Over 5000 EWH energy assessments and 3000 upgrade projects since 2010. Since 2011, over 900 homes assessed.
- **Hartford, Connecticut; Building for Health**
 - Led by Local Initiatives Support Corporation (LISC), CT Children's Medical Center, Eversource, and SINA/community-based organization.
 - Neighborhood focused effort providing electronic referrals and tracking among lead, healthy homes, low income energy services, and workforce training programs.
 - Field delivery began in 2019.

Tier 2 – Case Study Panelists

State of Vermont



Geoff Wilcox,
Weatherization
Program
Administrator
State of Vermont

City of Fort Collins Environmental Services Department



Selina Lujan,
Sr. Indoor Air
Quality Specialist
Healthy Homes
Program



Kim DeVoe,
Energy Services
Engineer
Home Efficiency
Program

Connecticut – Building for Health



Tasha Perreault,
Program
Administrator
Eversource Energy



Marcus Minor-Smith,
Senior Manager,
Healthy Homes
Program
Connecticut Children's
Office for Community
Child Health

Tier 2 – Program Overview



Vermont One Touch



Fort Collins, Colorado



**Hartford Connecticut,
Building for Health**

- What motivated you to start your program?
- Which key players were involved and how do they coordinate the program (e.g., is one program taking the lead, or is it a partnership with different roles for different organizations)?

Tier 2 – Questions



- What were the biggest successes?
What are continued challenges?
- What did you learn in your work with hospitals or healthcare providers?
What advice did hospitals or healthcare partners provide to you?
- What did you learn in your work with the utilities (where applicable)?

**What's your burning question?
(put your question in the Q&A at
the bottom of the screen)**

Energy-Plus-Health Program Tiers

 Tier 1: Basic health and safety	 Tier 2: Cross-sector referrals	 Tier 3: Integration
<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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.

Tier 3 - Integrated Energy Plus Health Services

- **New York State Healthy Homes Value-Based Payment Pilot**

- NYSERDA and NYS Department of Health partnership to develop framework that allows managed care organizations (health plans) to fund residential healthy homes interventions.
- Interventions funded as part of their value-based payment arrangements within the Medicaid Healthcare Delivery System.
- Intervention combines energy efficiency upgrades, asthma trigger reduction measures, and injury prevention measures with asthma self-management education provided by a home-visiting registered nurse.
- Referrals will be made by participating Medicaid managed care organizations.
- NYSERDA's Clean Energy Fund is funding Pilot activities at approximately \$10M.

- **Washington Weatherization Plus Health Program**

- WA Department of Commerce manages statewide initiative supporting weatherization plus supplemental healthy homes repairs, focusing on high risk respiratory clients.
- Some programs also offer community health worker visits.
- Over 240 households served with positive health outcomes documented.
- Clients identified by health partners or weatherization agencies.
- Funding provided by the legislature (\$4.3 million in 2015) and available through a competitive grant process to weatherization agencies.

Tier 3 – Case Study Panelists

Mishel Filisha

Low- to Moderate Income
Initiatives,
New York State Energy and
Research Development
Authority (NYSERDA)



Tim Bernthal

Program/Communication Coordinator
Housing Improvements and
Preservation Unit/ Energy Division,
Washington State Department of
Commerce



Tier 3 – Program Overview



**New York State Healthy
Homes Value-Based
Payment Pilot**



**Washington
Weatherization Plus
Health Program**

- What motivated you to start your program?
- Which key players were involved and how do they coordinate the program (e.g., is one program taking the lead or is it a partnership with different roles for different organizations)?

Tier 3 – Questions



- What were the biggest successes? What are continued challenges and barriers?
- What did you learn in your work with hospitals or healthcare providers and/or what advice did hospitals or healthcare partners provide to you?

Some questions for you...

**What's your burning question?
(put your question in the Q&A)**

Program Contacts

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- Marcus Smith - Msmith06@connecticutchildrens.org

NYSERDA

- Mishel Filisha - Mishel.Filisha@nyserda.ny.gov

Washington

- Tim Bernthal at tim.bernthal@commerce.wa.gov. After October 1, contact Amanda Rains at amanda.rains@commerce.wa.gov

Thank You!

E4TheFuture Health Resources Webpage: <https://e4thefuture.org/health-resources/>

Hope to see you at the ACEEE Conference on Health and Energy Efficiency, January 21-23, 2020 New Orleans, LA. More info here: <https://aceee.org/conferences/2020/chee>

