

Health and Wellness Task Group Update

OCTOBER 24, 2017

WHO Definition of Health

The World Health Organization (WHO) defined health in its broader sense in its 1948 constitution as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

Health & Wellness Task Group

Motion:

Propose evidence-based criteria to integrate health and wellness into all government facilities programs, drawing from approaches including buildings and health rating systems and biophilic design strategies.

Benefits:

Enhance employee health and performance and support agency mission achievement through the adoption of health focused building design and operations strategies

Identify a compelling business case for building-owning or managing agencies to adopt such practices

Summary of Presentations

Fitwel

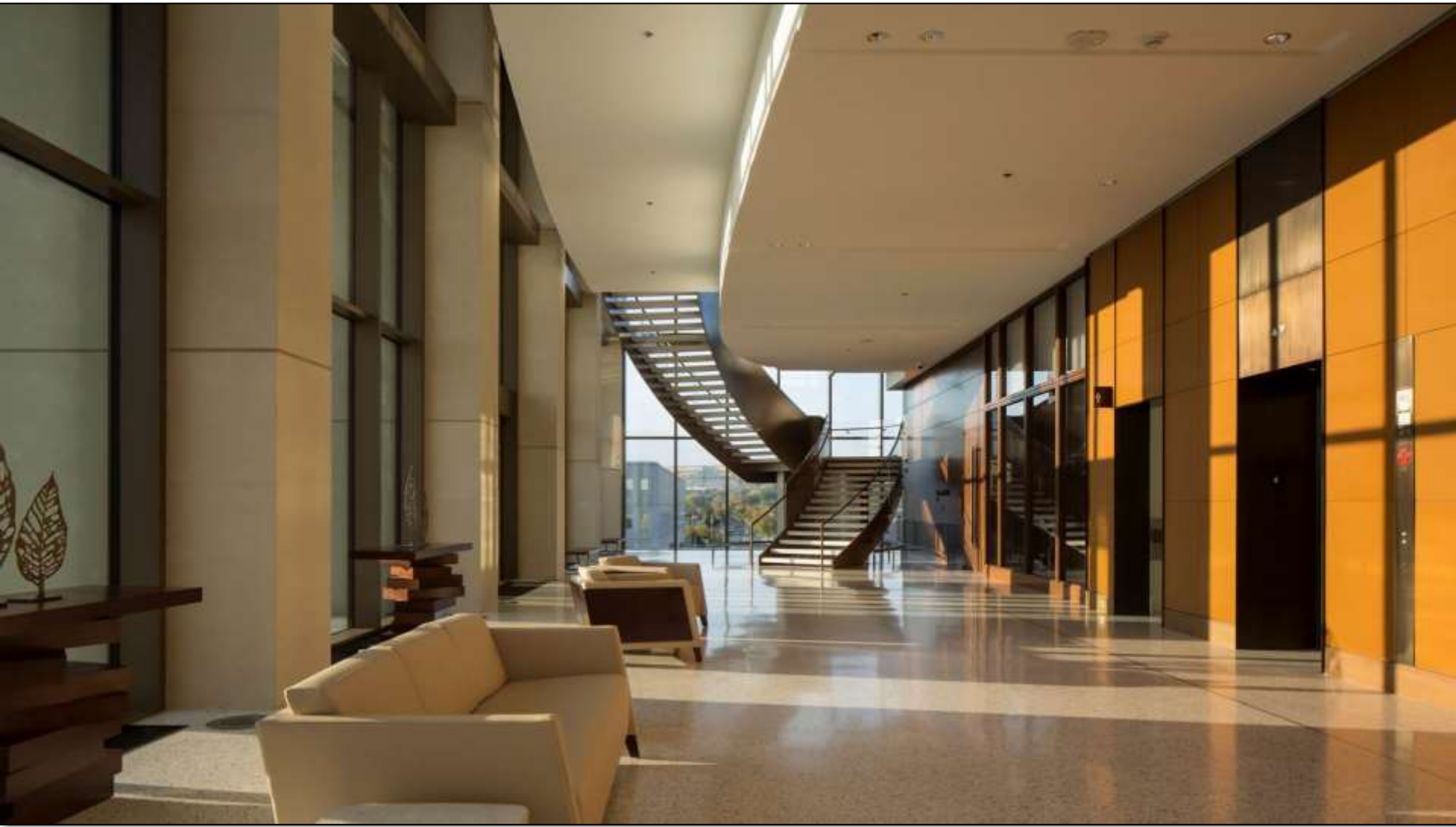
- Liz York & Joel Kimmons from CDC presented on Fitwel's origins
- Eleni Reed & Denise Funkhouser shared GSA's experience piloting and using the Fitwel program
- Joanna Frank & Giselle Sebag from the Center for Active Design (CfAD) provided a deeper look at the Fitwel scorecard and certification process

WELL Building Standard

- Rachel Gutter from the International WELL Building Institute (IWBI) presented the history and mission of the WELL Building Standard
- Susan Chung & Randy Fiser from the American Society for Interior Designers (ASID) shared their experiences implementing WELL at their new Washington DC headquarters



Fitwel Certified: Outdoor spaces: GSA: Reagan Building, Washington, DC



Fitwel Certified: Stairwells: GSA: Battin CT Billings, MT. Photo courtesy of NBBJ



WELL Certified: Mindful Eating Space: Structure Tone NYC Photo courtesy of IWBI



WELL Certified: Daylight: ASID Headquarters, Washington, DC
Photo courtesy of IWBI

Recommendations

The Committee fully supports the inclusion of health and wellness requirements within the 2016 Federal Guiding Principles and other Federal design guidelines (i.e. GSA's P-100, VA, DoD Unified Facilities Criteria, etc.). The Committee advises the Federal Government to **consistently extend these health and wellness requirements to all Federal buildings where possible and applicable.**



Daylighting: DOE: National Renewable Energy Laboratory (NREL)

The Committee recommends that the Federal government **use the guidance crosswalk developed by the Health and Wellness Task Group** to assist in supporting building project Health and Wellness goals and the Health and Wellness requirements in the current version of the Guiding Principles for Sustainable Federal Buildings.



Active Work Station: DOC-NOAA National Water Center on University of Alabama Campus

The Committee advises that Federal building programs **expand the existing integrated design process to include additional consideration of health impacts** to assist project teams to understand and include the evaluation of human health outcomes alongside more familiar environmental outcomes.



The Committee recommends that GSA **support additional research into health and wellness behaviors of workplace occupants in relationship to spaces and systems** to improve understanding of the impacts that the built environment has on human health and the productivity of the workforce.



Defined Research Needs

1. Identify links between health outcomes to environmental interventions and subsequent behavioral responses.
2. Identify economic links between built environment capital expenditures and return on investment (ROI) based on health outcomes.
3. Improve definition and measurement of “presenteeism” in relationship to environmental conditions and productivity
4. Validate the environmental factors and the underlying physiological, cognitive and social mechanisms that are most likely to influence individual and group work effectiveness.

The Committee recommends that GSA integrate additional health and wellness concepts into the Model Commercial Leasing Provisions previously recommended by the Committee on December 12, 2016.

1. Tenants and owners evaluate their health and wellness goals and considerations at the onset of leasing a property.
2. Tailor the leasing language to the specific needs of the lessee and the lessor.
3. Some large national real estate companies have formally embraced H&W concepts into standard business practices and policies.
4. With tools, such as Fitwel and WELL reflecting the trend of H&W concepts in the workplace, it is anticipated that in the future the evaluation of leasing language will reflect this trend.

Guidance Crosswalk

1. Health & Wellness Impact Areas
2. Means for Achieving Guiding Principle
3. Guiding Principles for Sustainable Federal Buildings
4. Applicable Guidelines, Standards, and Rating Systems

Health & Wellness Impact Areas

1. General Health & Wellness
2. **Diet**
3. **Exercise**
4. **Smoking Reduction / Cessation**
5. Daylight
6. Improved Indoor Air Quality
7. Views of Nature
8. Control of Temperature
9. Reduce Risk of Radon Exposure
10. Reduce/Eliminate Mold & Mildew Exposure
11. Reduce VOC Exposure
12. IAQ Management during Construction
13. Pest Management
14. Reduce Potential Exposure Risk to Occupants

Means for Achieving Guiding Principle



WELL Certified: Active Work Station: ASID Headquarters, Washington, DC
Photo courtesy of IWBI

Federal Guiding Principles and H&W

GP I. Employ Integrated Design Principles (NC) / Employ Integrated Assessment, Operation, and Management Principles (EB)

1. Integrated Design/ Integrated Assessment, Operation, and Management

GP IV. Enhance Indoor Environmental Quality

11. Ventilation and Thermal Comfort

12. Daylighting and Lighting Controls

13. Indoor Air Quality

14. Occupant Health and Wellness: *Promote opportunities for voluntary increased physical movement of building occupants such as making stairwells an option for circulation, active workstations, fitness centers, and bicycle commuter facilities; and support convenient access to healthy dining options, potable water, daylight, plants, and exterior views*

GP V. Reduce the Environmental Impact of Materials

15. Material Content and Performance

Applicable Guidelines, Standards, and Rating Systems

[Fitwel](#)

[The WELL Building Standard](#)

[DoD Unified Facilities Criteria 1-200-02 \(Dec 2016\)](#)

[GSA PBS-P100 Facilities Standards \(April 2017\) for Federally Owned Facilities](#)

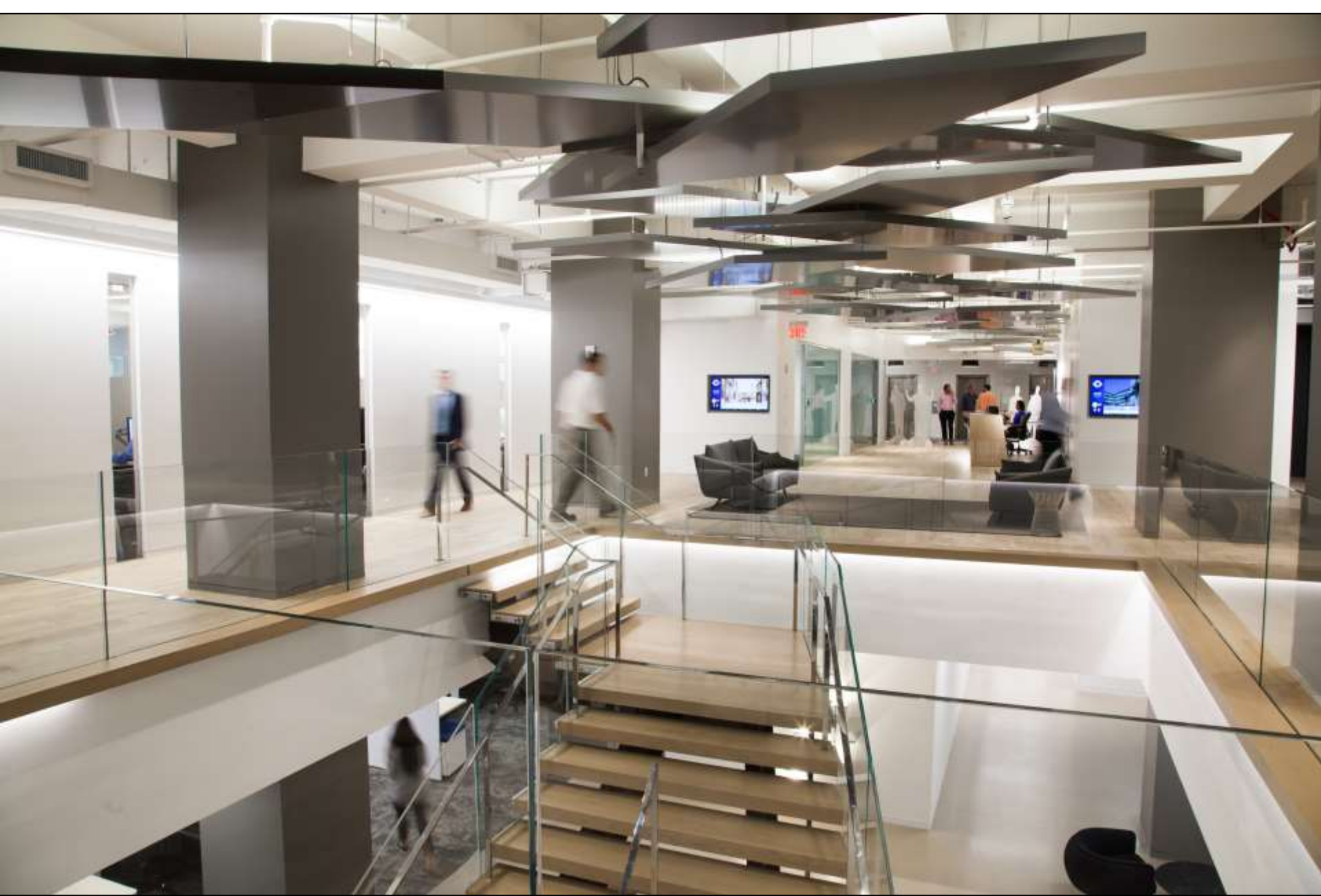
[Green Globes – NC & Green Globes – EB](#)

[LEED v4: BD+C: New Construction & LEED v4: EBOM](#)

[ANSI/ASHRAE/IES/USGBC Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings](#)

Guidance Crosswalk

Health & Wellness Impact Areas	Means for Achieving Guiding Principle	Guiding Principles for Sustainable Federal Bldgs	✓	Applicable Guidelines, Standards, and Rating Systems
Exercise ²	Stairwell Vertical Circulation	GP IV. Enhance Indoor Environmental Quality 14. Occupant Health and Wellness		FitWel 5 Stairwells
		Promote opportunities for occupants to voluntarily increase physical movement. Stairwells as a desirable option for circulation.		WELL Building Standard v1: Fitness Feature 64 Interior Fitness Circulation (Precondition)
				DoD Unified Facilities Criteria 1-200-02 (Dec 2016): Chapter 2 Building Design & Construction 2.2 Employ Integrated Design Principles 2.2.1.1 Integrated Planning 2.2.1.4 Site Integration and Design of the Building Chapter 3 Employ Integrated Assessment, Operation, and Management Principles 3-5.4 Occupant Health and Wellness: Making stairwells a desirable option for circulation.
				GSA PBS-P100 Facilities Standards (April 2017) 3.5 Interior Construction and Interior Finishes Performance Attributes 3.5.7 Promote the Use of Stairs
				GBI Addressing 2-5.4 and 2-2.1.1 Stairwell Vertical Circulation from the DoD UFC 1-200-02 in revised Guiding Principles Compliance Assessment Program.
				LEED v.4: EBOM/NC Pilot Credit 78: Design for Active Occupants
				ASHRAE/ICC/IES/USGBC 189.1 Not addressed



WELL Certified: Stairwell: Structure Tone NYC Photo courtesy of IWBI

Guidance Crosswalk

Health & Wellness Impact Areas	Means for Achieving Potential Outcome	Guiding Principles for Sustainable Federal Bldgs	✓	Applicable Guidelines, Standards, and Rating Systems
Contribute to improved indoor air quality	Provide access to indoor and outdoor plants	GP IV. Enhance indoor Environmental Quality 14. Occupant Health and Wellness		FitWel 3 Outdoor Spaces
		Provide convenient access to: Plants		WELL Building Standard v1: Nourishment Feature 51 Food Production (Optimization) Mind Feature 88 Biophilia I - Qualitative (Precondition) 100 Biophilia II - Quantitative (Optimization)
				DoD Unified Facilities Criteria 1-200-02 (Dec 2016): Chapter 2 Building Design & Construction 2-2.1.1 Integrated Planning: include how convenient access to plants is being considered and accommodated from the beginning of the design process. Chapter 3 Employ Integrated Assessment, Operation, and Management Principles 3-5.4 Occupant Health and Wellness: Convenient Access to Plants
				GSA PBS-P100 Facilities Standards (April 2017) Not addressed
				GBI Addressing 2-5.4 and 2-2.1.1 Convenient Access to Plants from the DoD UFC 1-200-02 in revised Guiding Principles Compliance Assessment Program.
				LEED v4 EBOM Pilot Credit 82: Local Food Production: EBOM Projects (except Schools)
				ASHRAE/ICC/IES/USGBC 189.1 Not addressed



WELL Certified: Biophilia – Herb Garden: ASID Headquarters, Washington, DC
Photo courtesy of IWBI

Guidance Crosswalk

Health & Wellness Impact Areas	Means for Achieving Guiding Principle	Guiding Principles for Sustainable Federal Bldgs	✓	Applicable Guidelines, Standards, and Rating Systems
General Health & Wellness	Integrated Team Approach for Assessment, Operation and Management of Existing Buildings.	GP 1. Employ Integrated Design Principles (NC)/Employ Integrated Assessment, Operation, and Management Principles (EB)		Fitwel. No specific requirement. Operational policies & recommendations included in each credit.
		1. Integrated Design/ Integrated Assessment, Operation, and Management		WELL Building Standard v1: Mind Feature: Precondition 85 Integrative Design
				DoD Unified Facilities Criteria 1-200-02 (Dec 2016): Chapter 2 Building Design & Construction 2-2 Employ Integrated Design Principles Chapter 3 Assessment of Existing Buildings for High Performance and Sustainable Building (HPSB) Compliance 3-2 Employ Integrated Assessment, Operation, and Management Principles
				GSA PBS-P100 Facilities Standards (April 2017) Appendix Submission Requirements Integrated Design Review
				Green Globes - NC 3.1 Project Management Green Globes - EB 4.0 Emissions, Effluents, & Pollutant Controls 4.12.5 Is there a Health & Safety Committee that meets regularly and carries out regular inspections of the property? 6.1 Environmental Management System
				LEED v4: BD+C: New Construction (NC) Pilot Credit 108: Integrative Process for Health Promotion Credit: Integrative Process
				ASHRAE/ICC/IES/USGBC 189.1 Informative Appendix F: Integrated Design



Integrated Design Principles / Integrated Assessment, Operation, & Management Principles

Design Intervention & Operational Support: Exercise Example

**Design
Intervention**
Staircase with
Signage & Cues

**Operational
Support**
Building Ops
provides a smart
phone app to
measure activity

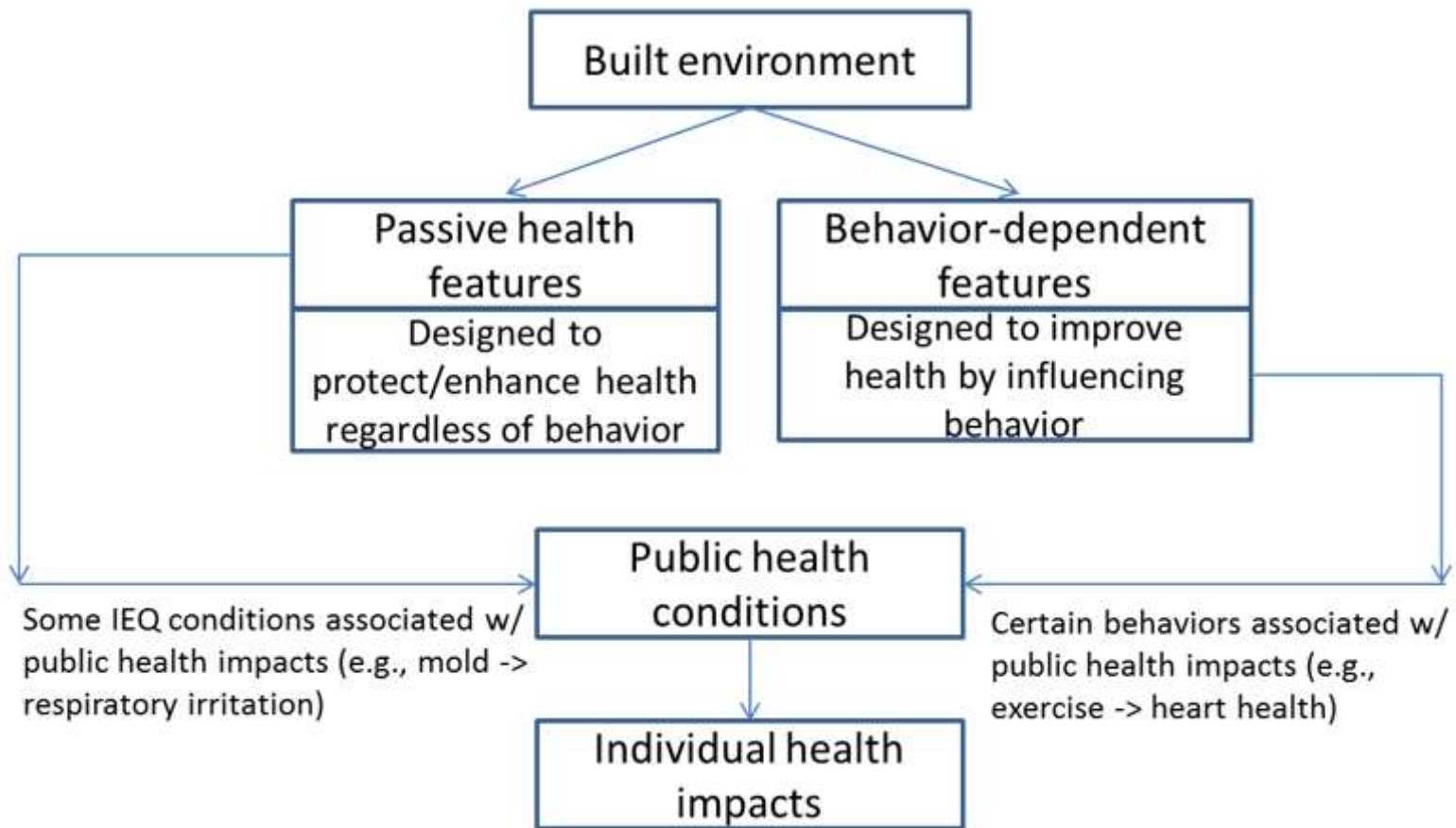


WELL Certified: Stairwell: Structure Tone NYC
Photo courtesy of IWBI

Business Case Challenges

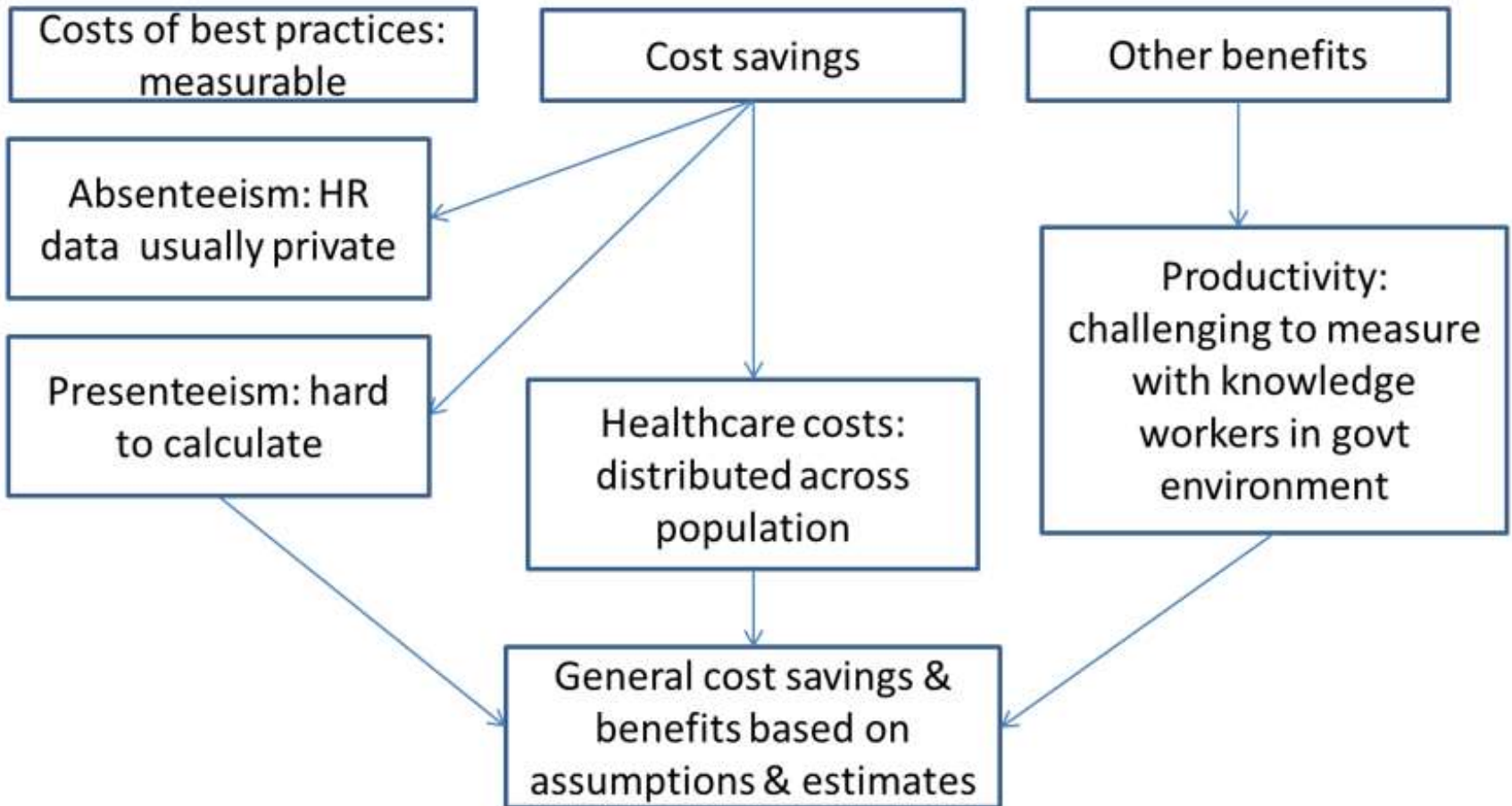
1. Requires calculating combined effects of multiple changes in design or operations to enhance health.
2. To be useful, business case needs to prioritize investments & identify the changes that have the greatest positive impact on health and for whom.

Making the Link Between the Built Environment & Occupant Health



Challenge: individual health impacts depend on many factors – including the complex interactions of the indoor environment, individual susceptibility and many non-IEQ factors – making it difficult to directly associate designed building features with individual health outcomes

Making the Link Between Built Environment Investments & ROI



A Way Forward

1. Utilization of Fitwel and WELL provides an opportunity to assess specific EBD and operational practices that influence changes in health outcomes.
2. Federal employees represent an enormous investment and health and wellness can impact their performance.
3. Conditions of the workplace can negatively or positively affect employees' physical and mental conditions.
4. Therefore, investing in workplaces that promote health and wellness is a valid and reasonable approach, even if an absolute ROI cannot be calculated at this time.

Conclusion

1. By implementing the recommendations provided, GSA and the Federal government could lead the building sector forward in promoting wellness within the workplace to support occupant health.
2. Recommendation to collaborate with health and wellness professionals, researchers, and economists in the Federal government, the commercial sector, throughout the country on integration of health and wellness criteria into building design, construction, and operation.
3. The private sector looks to GSA for sustainability direction and GSA making health and wellness a priority encourages the private sector to follow suit.

Thank you.

QUESTIONS & ANSWERS

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