A Framework for Developing and Implementing TWH Interventions across Industries

Harvard School of Public Health
Center for Work, Health and Wellbeing
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Session Objectives

• Present Center’s conceptual framework
  • To shape intervention development
  • To inform evaluation design

• Describe how the framework guides intervention design across three industries
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**Be Well, Work Well**  
Integrated approaches for health care workers  
2007-

**All the Right Moves**  
Integrated approaches for construction workers  
2011-

**SafeWell**  
Disseminating integrated programs to small, medium businesses  
2011 -
Common Conceptual Model

Global Context
Modifying Conditions
- External context (Labor, economy, market)

Modifying Conditions
- Organizational Characteristics (Sector, size, private/public)

Worksite/Unit Context
Modifying Conditions
- e.g. Job and Manager Characteristics

Integrated Intervention
- Policies
- Programs
- Practices

Intervention Targets
Work Environment
- e.g. Exposures/Hazards, Opportunities for Health Behaviors
Work Organization
- e.g. Organizational Culture and Leadership, Climate
Psychosocial Factors
- e.g., Supervisor/coworker Support, Social Norms

Modifying Conditions
- Worker Characteristics

Proximal Outcomes
- e.g. Health & Safety Behaviors, Worker Capability, Self-efficacy

Worker Health:
- Symptoms
- General Health

Economical & Social Outcomes
- Disability (Worker Compensation)
- Productivity
- Absenteeism

Outcomes
Worker Context
Theoretical Foundations

Occupational health & safety
- Hierarchy of controls
- Job strain model
- Ergonomic sciences
- Socio-technical systems theory

Behavioral & social sciences
- Social ecological model
- Social epidemiology
- Organizational change models
- Participatory frameworks
Key Components

• Intervention targets – pathways through which the intervention is intended to impact the outcomes
• Modifying factors – variables outside the causal pathway that are important to intervention planning

Understanding the context of work for improved effectiveness
Conceptual Model

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## Using the Conceptual Model in Three Settings

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Health Care</th>
<th>Construction</th>
<th>Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>24 hour care, fast-paced, care-driven, patient care unit as settings</td>
<td>Transient workforce, varying trades</td>
<td>Small/medium sized, dependent on vendor for programs</td>
</tr>
<tr>
<td>Job</td>
<td>Physically demanding, long shifts, possible nights, irregular breaks</td>
<td>Physically demanding, trade-specific exposures</td>
<td>Sedentary and physically demanding jobs, possible nights</td>
</tr>
<tr>
<td>Worker</td>
<td>Female dominated, mostly nurses, work-family challenges</td>
<td>Male dominated, mostly skilled, likely long commutes</td>
<td>Mixed gender</td>
</tr>
<tr>
<td>Key challenges</td>
<td>Competing demands, little time to participate</td>
<td>Short window of contact and limited follow-up</td>
<td>Production schedules, organizational change adaptability/ scalability potential for vendor to use</td>
</tr>
</tbody>
</table>

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Adapting to the Setting

• Organizational, job and worker characteristics
• Risks related to the job and setting
  • Nature of work/job
  • Work environment/organization
• Existing resources—budget, staff, prior programs, leadership support
• Key priorities as gatekeepers to TWH
  • Examples: Safe patient handling in health care; project planning in construction; continuous improvement processes in manufacturing
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