Making the Business Case for Integrated Worksite Health Promotion/Protection Interventions, One Intervention at a Time

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With thanks…

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This material is solely the responsibility of the authors and does not necessarily represent the official views of NIOSH.
CPH-NEW main goals:

1. To implement and evaluate models for improving worker health by combining:
   - Worksite health promotion
   - Workplace health & safety interventions

2. Promote participatory approaches that engages all levels of an organization in the design of effective, sustainable workplace interventions.
A Research-to-Practice (R2P) Toolkit to promote Total Worker Health™ has been developed by the CPH-NEW research team.

- Program start up guides
- Workforce assessment instruments
- Intervention planning tools (Business Decision Scorecard)

R2P Toolkit addresses 3 recognized shortcomings of conventional workplace HP programs:

- Little sense of employee ownership, participation
- Little attention to conditions of work/job demands
- Activities can be event driven, lack sustainability

Program Structure

Management Steering Committee (SC)

- **Program oversight** & promotion.
- Creates an Employee Design Team.
- Refines DT proposals & decides which to implement.
- **Provides needed resources** for interventions.
- Evaluates & refines interventions.
- **Can initiate interventions** and ask for DT help.

Employee Design Team (DT)

- Line-level employees recruited by SC.
- Applies health promotion & ergonomics basics.
- **Identifies & prioritizes employee health issues.**
- Develops creative ideas for workplace interventions.
- **Proposes best intervention ideas to SC.**
- Helps promote, evaluate & refine interventions.
CPH-NEW R2P Toolkit promotes Total Worker Health™

**Engages** employees in setting priorities and developing solutions

Improves organizational **communication** & collaboration about H&S

**Integrates** ergonomics with health promotion initiatives

Establishes a **sustainable** process for continuous health/safety improvement

Develops a **contextual business case** for H&S interventions, one intervention at a time.

The R2P Toolkit promotes a healthy organization
The BDS is a structured intervention planning process to help employees develop and make a business case for workplace interventions, one intervention at a time.
Designing and implementing interventions with the BDS is an iterative process.
Step 1: Suggestions for issues or priorities

Step 1: Systems Analysis of Root Causes of a Health/Safety Issue/Concern

Step 2: Create Objectives/Activities Tree

Step 3: Set & Apply Key Performance Indicators

Step 4: Evaluate Intervention Alternatives

Step 5: Support Selection of Intervention Alternative

Step 6: Support Planning & Implementation of Intervention

Step 7: Support Monitoring, Evaluation, & Modification

Step 5: Select Intervention Alternative

Step 6: Plan & Implement Intervention

Step 7: Monitor & Evaluate Intervention; Modify if needed
Step 1: Suggestions for issues or priorities

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Sets the stage for integrated interventions

Strong ergo focus
A Field Site Success Story

Property Management Company in Massachusetts

Employee-identified Issues/Concerns:

- Stress from workload and poor communication
- Inadequate training
- Malfunctioning phones
- Poor quality parts
- Multiple sources of work orders
- Order inconsistency

Participatory Design Process

Major Intervention Objective:

Improved Communication
- Realtors
- Residents
- Maintenance Workers
Health & Safety Design Process

1. Conduct Systems Analysis of Root Causes of a Health/Safety Issue/Concern
2. Create Objectives/Activities Tree
3. Set & Apply Key Performance Indicators
4. Evaluate Intervention Alternatives
5. Select Intervention Alternative
6. Plan & Implement Intervention
7. Monitor & Evaluate Intervention; Modify as Needed
Root Causes group activity

Brainstorming

Stress from work overload

No training
- Office staff don’t screen calls well
- Residents not taught simple apt. care

Multiple sources of work orders
- Local office, corporate, residents
- Overwhelmed, can’t prioritize

Poor phones and signal
- Missed, duplicate calls
- Frustrates everyone, stress
Conduct a Root Cause Analysis

H&S Issue/Concern

Sub-Issue/Concern

Contributing Factors:

Sub-Issue/Concern

Contributing Factors:

Sub-Issue/Concern

Contributing Factors:

Health & Safety Worksheet Series:
Step 1

www.uml.edu/centers/CPH-NEW
Sample from study site

**PRIORITY ISSUE/CONCERN:**
High Work Volume

$255K estimated for overtime

**Sub-Issue/Concern A**
New tasks added

- No contractors
- Budget is low
- Save $
- New construction – diverted $ from service vendors

**Sub-Issue/Concern B**
Low value work / Unnecessary work

- Inadequate call screening
- Use of maintenance for non-maintenance tasks
- Too few staff

**Sub-Issue/Concern C**
Extra time to fix/replace poor quality parts

- Tenants complaints;
- Poor quality materials break
- Buy discounted, lower cost products
- Cost control

**Sub-Issue/Concern D**
Multiple sources of work orders

- Lack of screening
- Malfunctioning pagers
- Corporate calls directly
- Lack of use of work order system
- Leasing office calls directly

Note: “C” indicates communication-related issues
Create an Objective/Activities Tree

Major Objective/Solution

Sub-objective/solution #1

Sub-objective/solution #2

Sub-objective/solution #3

Intervention Alternative A

Intervention Alternative B

Intervention Alternative C (Hybrid)

Specific measurable improvements

Sets of solution activities

Objective Tree

Activities Tree

(A mix of solution activities can be used to create a new alternative)
<table>
<thead>
<tr>
<th>Sub-issue: Multiple sources of work orders</th>
<th>Contributing Factors: Malfunctioning pagers/phones</th>
<th>Contributing Factors: Calls come from too many people</th>
<th>Contributing Factors: Yardi not used consistently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand use of technology to streamline work orders for prioritizing and control.</td>
<td>Lack of system to prioritize tasks</td>
<td>Solutions: Replace broken equipment, switch to ATT for better signal</td>
<td>Solutions: Use software to log all work orders</td>
</tr>
<tr>
<td>Solutions: Streamline all work orders using work order software</td>
<td>Explore portable devices for work order software access.</td>
<td>Allow techs access to computers so they can manage orders.</td>
<td>Solutions: Train all office personnel on W/O system</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Solutions: Train techs on system</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Solutions: Create policy on computer work order use and tech access</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Solutions: Techs have access to computer or mobile device to interact with system</td>
</tr>
</tbody>
</table>
## Set Key Performance Indicators

<table>
<thead>
<tr>
<th>Scope/Impact</th>
<th>Benefits/Effectiveness (short &amp; long term)</th>
<th>Resources/Costs (short &amp; long term)</th>
<th>Obstacles/Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who benefits?</strong> (individuals, groups, whole organization)</td>
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</tbody>
</table>
## Apply Key Performance Indicators

### Intervention Alternative: Use Yardi consistently

<table>
<thead>
<tr>
<th>Training on the Yardi System</th>
<th>Create policy on Yardi use and MT access</th>
<th>MT access to Yardi via computers/mobile phones</th>
</tr>
</thead>
</table>

### Scope/Impact:
- All office personnel
- All MTs

### Benefits/Effectiveness:
- Get employees on the same page
- Efficient order processing

### Resources/costs:
- Employee time spent in training
- Paid training hours

### Obstacles:
- Co-workers resistant to change from status quo
- Time required to train/change over from old systems

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### Scope/Impact:
- All employees using the Yardi system

### Benefits/Effectiveness:
- Unites co-workers around using the system
- Reduce confusion on how to use the system

### Resources/costs:
- Paid time to write the policy
- Money to print/distribute the policy to employees

### Obstacles:
- Convincing co-workers to read and adhere to policy

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### Scope/Impact:
- All MTs
- Residents

### Benefits/Effectiveness:
- Efficient order processing
- Easier communication between MTs and with residents

### Resources/costs:
- Cost of mobile phones
- Cost of trainers for phone system

### Obstacles:
- Getting approval from property and corporate managers

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**Health & Safety Worksheet Series:**
Step 3B

**www.uml.edu/centers/CPH-NEW**
1. Create Objectives/Activities Tree
2. Set & Apply Key Performance Indicators
3. Evaluate Intervention Alternatives
4. Select Intervention Alternative
5. Conduct Systems Analysis of Root Causes of a Health/Safety Issue/Concern
6. Plan & Implement Intervention
7. Monitor & Evaluate Intervention; Modify as Needed

Health & Safety Design Process
Evaluate Intervention Alternatives
Using a Scorecard Approach

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Scope/Impact</th>
<th>Resources/costs</th>
<th>Benefits/Effectiveness</th>
<th>Obstacles/Barriers</th>
<th>Overall Rating</th>
</tr>
</thead>
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<tr>
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Design Team

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Steering Committee

Step 1: Suggestions for issues or priorities

Step 5: Select Intervention Alternative

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Step 7: Monitor & Evaluate Intervention; Modify if needed
Summary of Site Interventions to Date

1. Resident education materials for move ins
2. New uniforms to address overheating
3. Work order process and policy changes
4. New hiring addressed staffing issue
5. Email for all technicians

Note: Study site to fund new program facilitator after CPH-NEW researchers leave
Impacts to Organization

- Raised awareness
  - Employee health & wellness, safety

- Improved Communication
  - Between workers and supervisors

- New ideas for interventions
  - Made change happen, solution-driven

“If this group was not around, our ideas would not be heard as much and less would be accomplished.” - DT member
Personal Impacts

Design team
- New Skills- problem solving, communication, ergo
- Feelings of value, pride and respect
- Team building, meeting other co-workers

“He looked forward to the meetings and felt empowered to go and have a say in things” - Manager interviewee
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Materials coming soon….

- Check out CPH-NEW website this spring for web-based Toolkit materials
  www.uml.edu/research/centers/cph-new

- Employer training planned for spring—state wellness training program for employers—Working on Wellness

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