



A NIOSH Center for Excellence to Promote a Healthier Workforce

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

**Robert Henning, PhD, CPE
University of Connecticut**

**Michelle Robertson, PhD, CPE
Liberty Mutual Research Institute for Safety**



**Laura Punnett, ScD, & Suzanne Nobrega, MS
University of Massachusetts Lowell**

and the CPH-NEW Research Team

www.uml.edu/centers/CPH-NEW



With thanks...

-  The Center for the Promotion of Health in the New England Workplace is supported by Grant Number U19-OH008857 from the U.S. National Institute for Occupational Safety and Health.
-  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

(Henning, R.A., Warren, N.D., Robertson, M., Faghri, P., Cherniack, M. Workplace health protection and promotion through participatory ergonomics: An integrated approach. Public Health Rep 2009; 124 S1:26-35).



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.

Action & feedback

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.

Action & feedback



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

Main Reason for Using the Business Decision Scorecard (BDS) Tool

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.

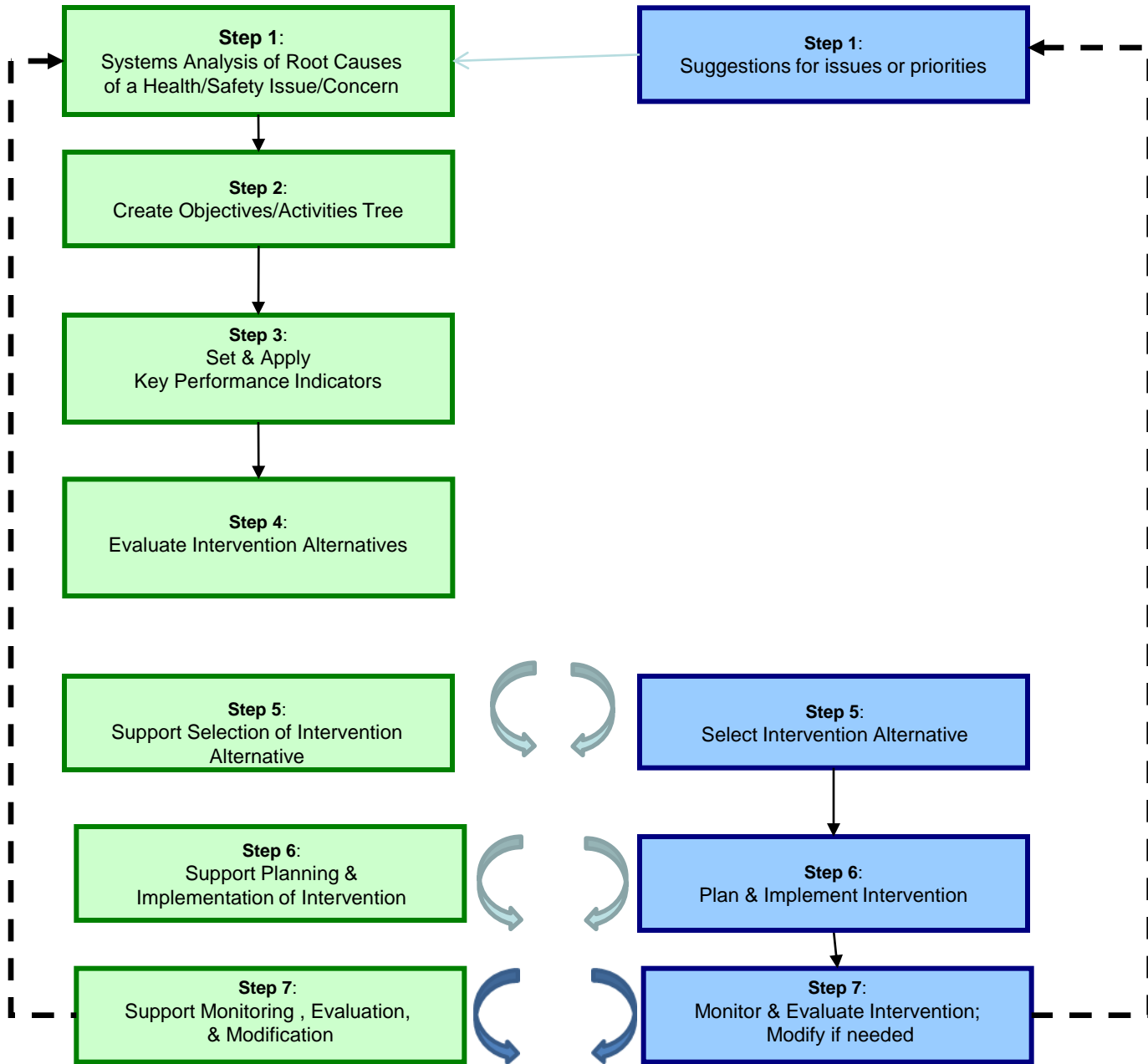


Designing and implementing interventions with the BDS is an iterative process



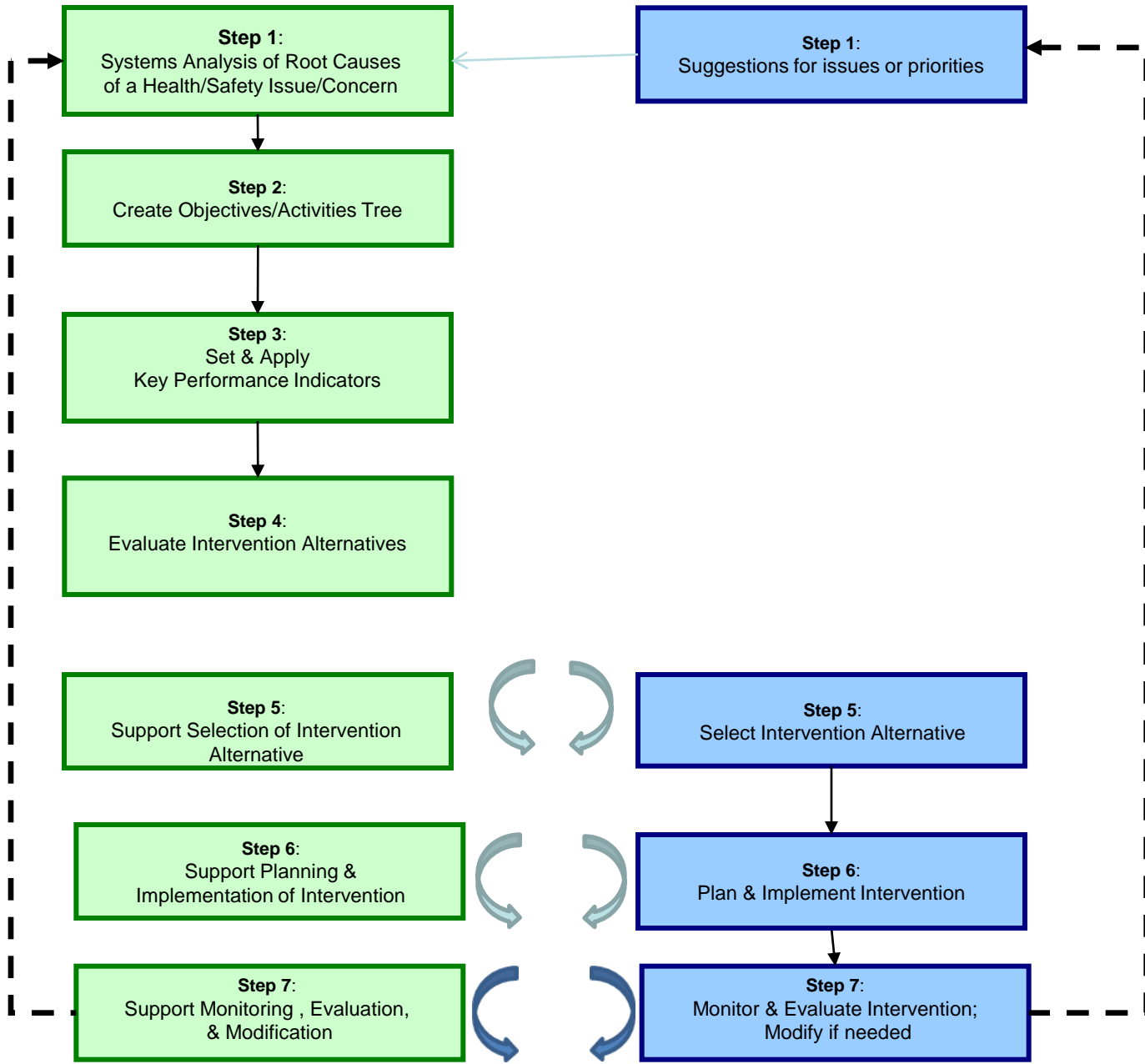
Design Team

Steering Committee



Design Team

Steering Committee



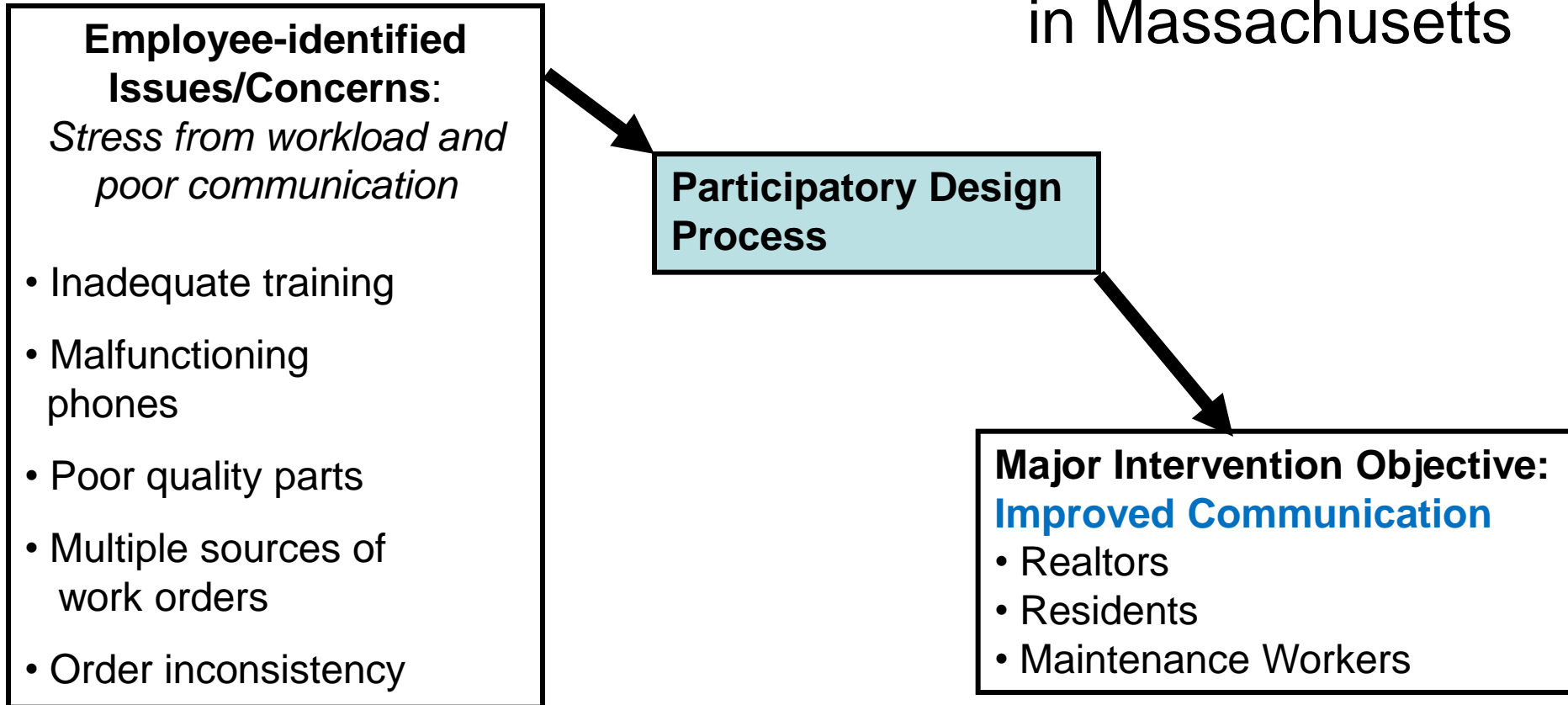
Sets the stage for integrated interventions

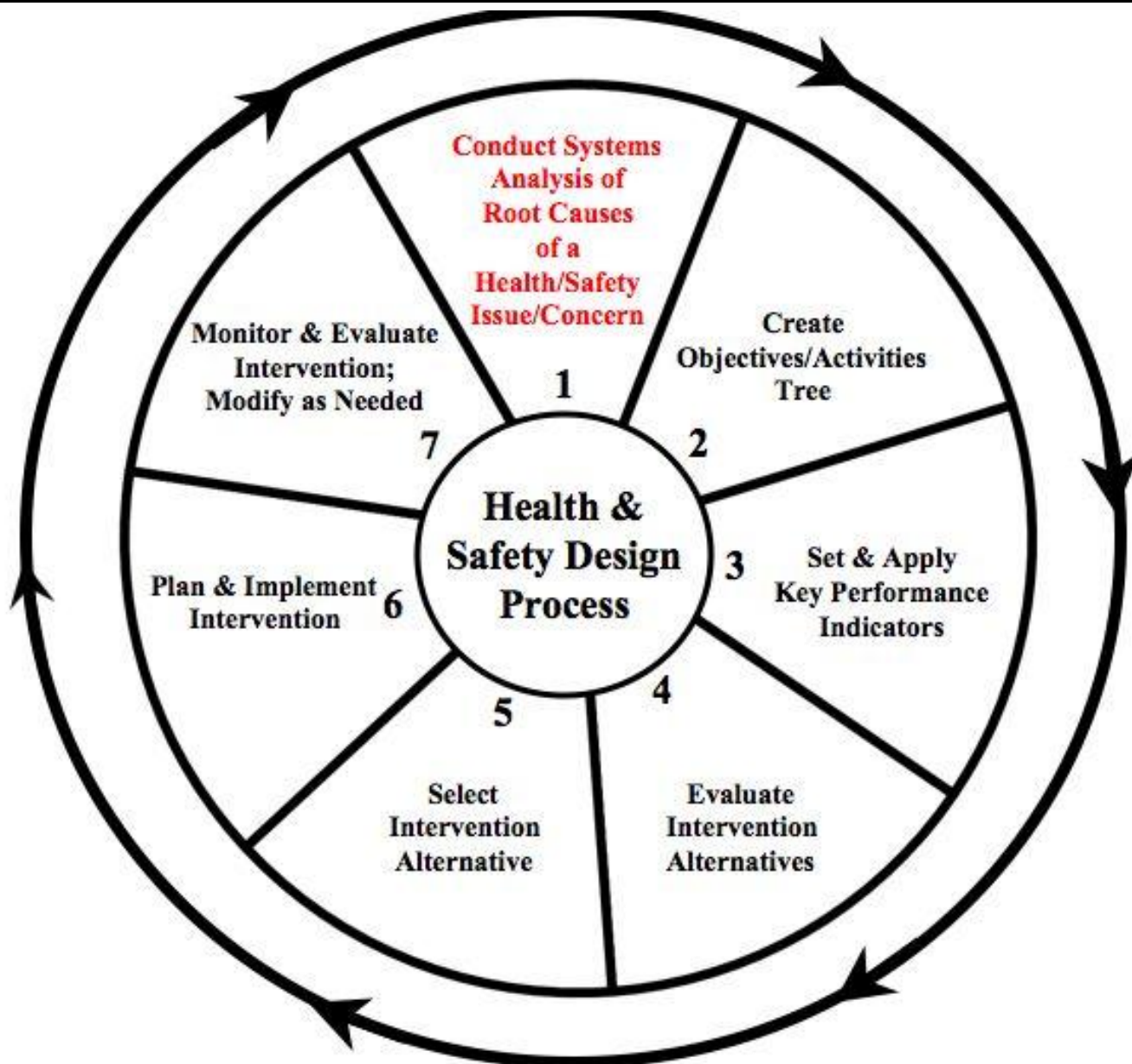
Strong ergo focus



A Field Site Success Story

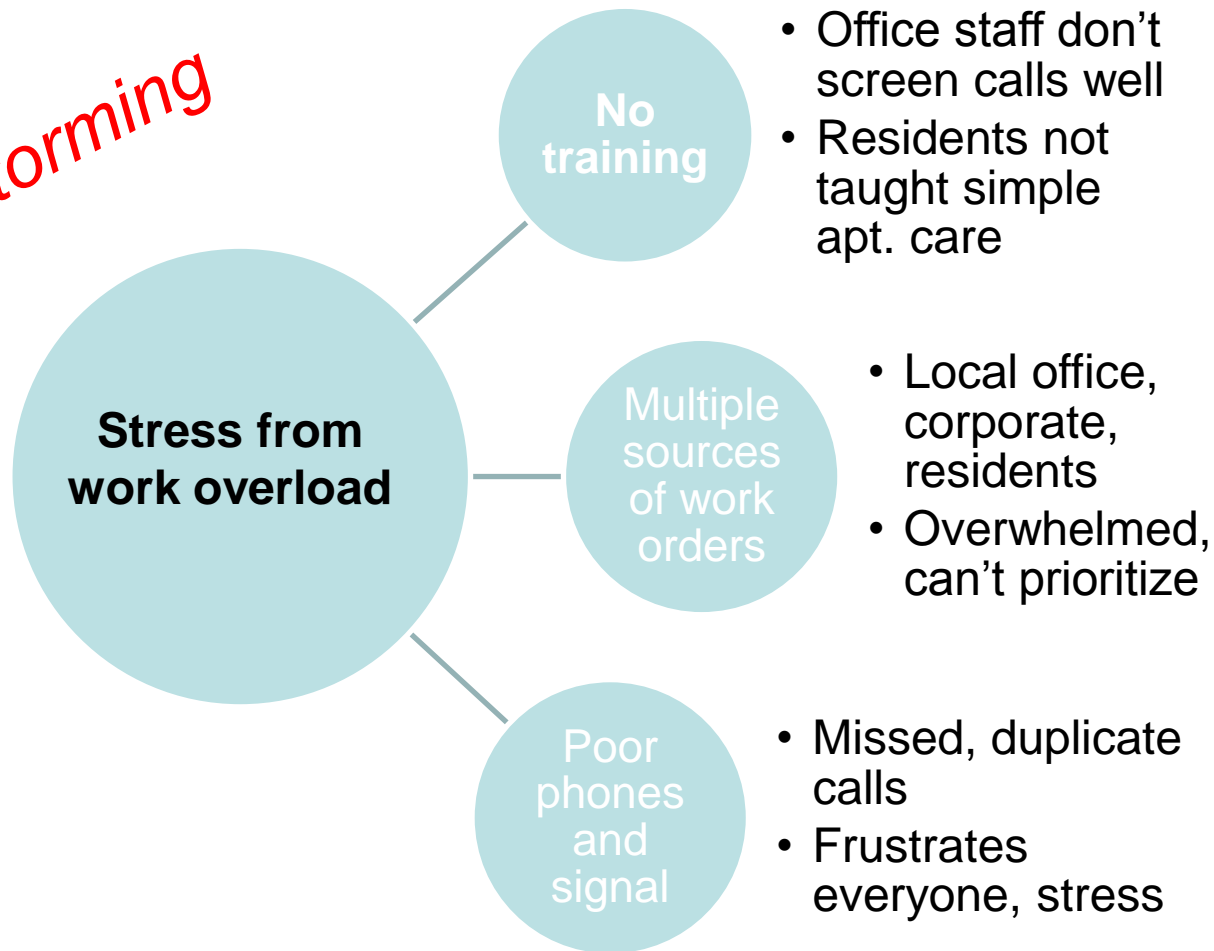
Property Management Company in Massachusetts





Root Causes group activity

Brainstorming



Conduct a Root Cause Analysis



**Health & Safety
Worksheet Series:
Step 1**

H&S Issue/Concern

Sub-Issue/Concern

Contributing Factors:

Sub-Issue/Concern

Contributing Factors:

Sub-Issue/Concern

Contributing Factors:



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

C 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

C Lack of screening

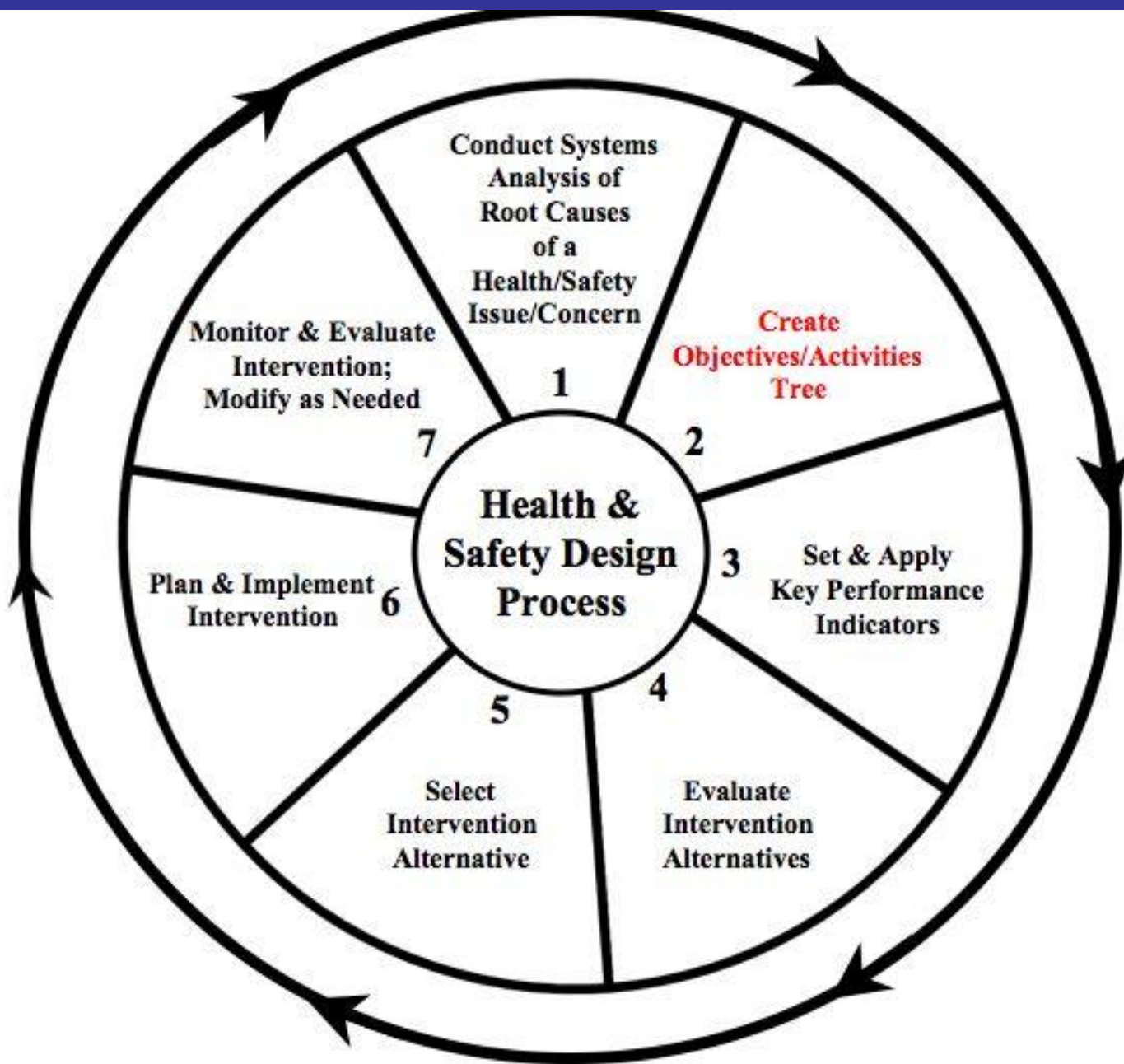
C Malfunctioning
paggers

C Corporate calls
directly

C Lack of use of work
order system

C Leasing office calls
directly

 **Note: “C” indicates communication-related issues**



Create an Objective/Activities Tree

Specific
measurable
improvements

Objective
Tree

Major Objective/Solution

Sub-objective/solution #1

Sub-objective/solution #2

Sub-objective/solution #3

Sets of solution
activities

Activities
Tree

Intervention Alternative A

Intervention Alternative B

Intervention Alternative C (Hybrid)

(A mix of solution activities can be used to create a new alternative)



Sub-objective/Solution

Sub-Issue: **Multiple sources of work orders**
Expand use of technology to streamline work orders for prioritizing and control.

Contributing Factors:

Lack of system to prioritize tasks

Solutions:

Streamline all work orders using work order software

Contributing Factors:

Malfunctioning pagers/phones

Solutions:

Replace broken equipment, switch to ATT for better signal



Explore portable devices for work order software access.

Contributing Factors:

Calls come from too many people

Solutions:

Use software to log all work orders



Allow techs access to computers so they can manage orders.

Contributing Factors:

Yardi not used consistently

Solutions:

Train all office personnel on W/O system



Train techs on system

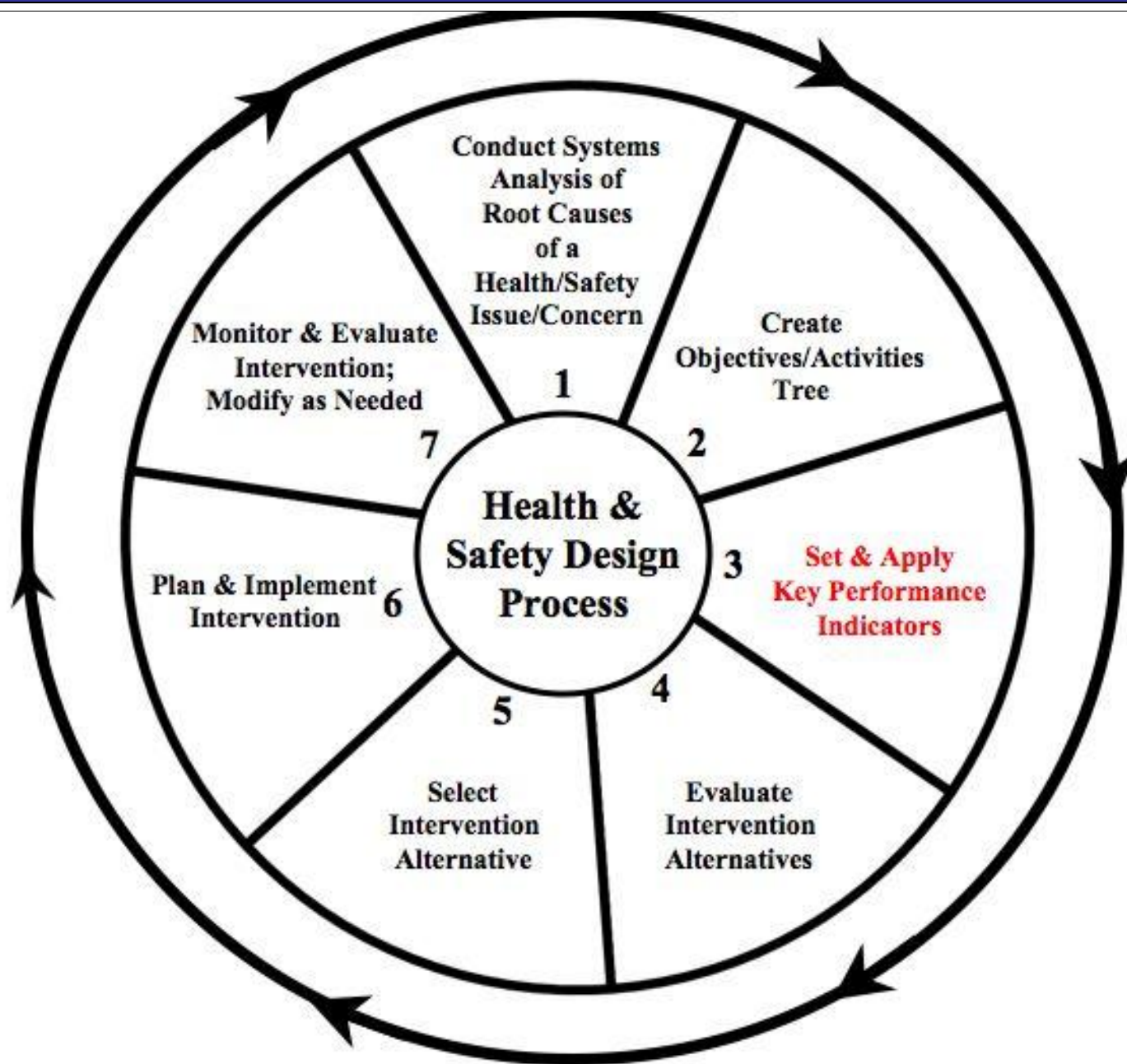


Create policy on computer work order use and tech access



Techs have access to computer or mobile device to interact with system





Set Key Performance Indicators

Scope/Impact Who benefits? (individuals, groups, whole organization)	Benefits/Effectiveness (short & long term)	Resources/Costs (short & long term)	Obstacles/Barriers



Apply Key Performance Indicators

Intervention Alternative: Use Yardi consistently

Training on the Yardi System

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

Create policy on Yardi use and MT access

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

MT access to Yardi via computers/mobile phones

Scope/Impact:

- All MTs
- Residents

Benefits/Effectiveness:

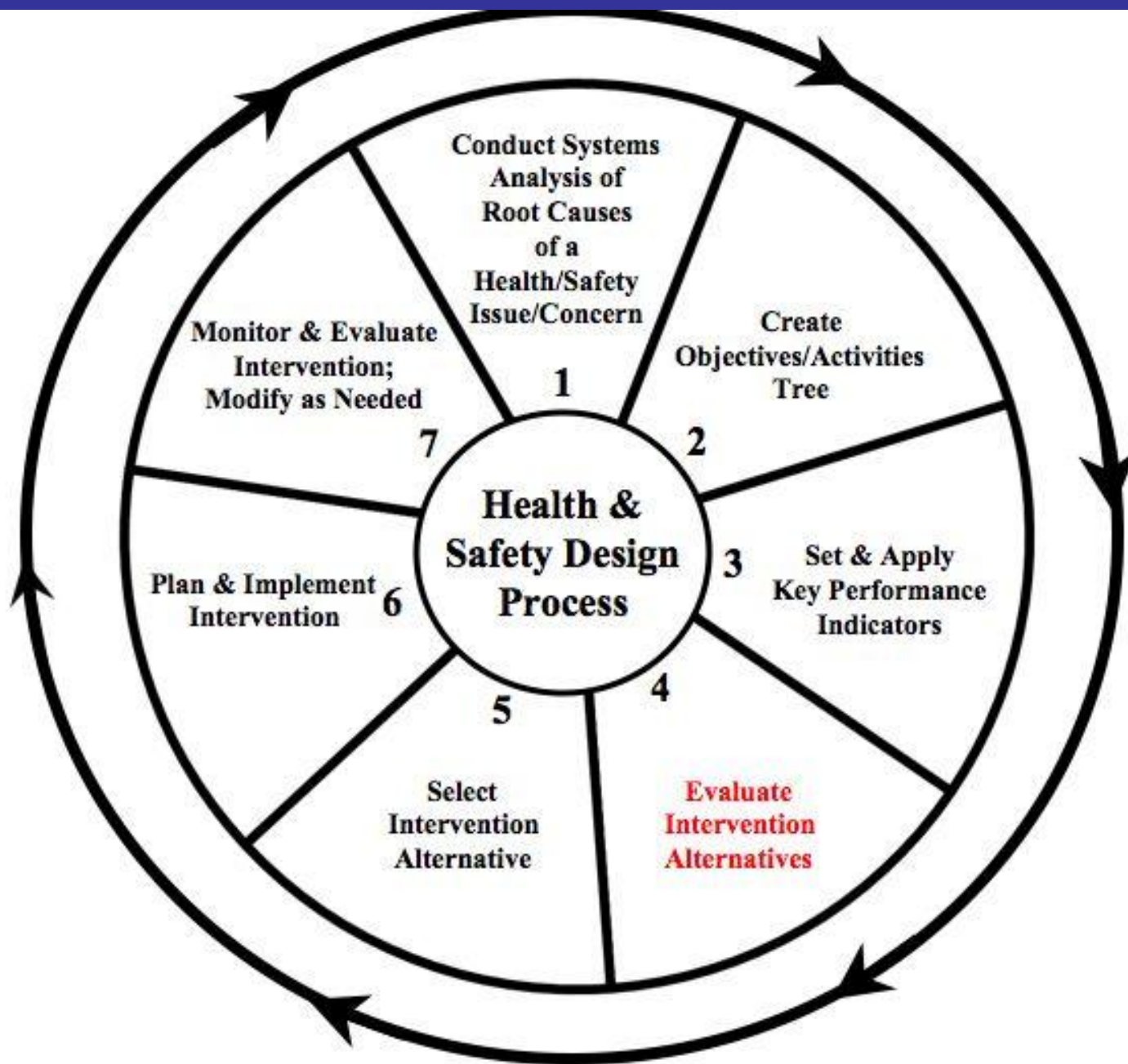
- Efficient order processing
- Easier communication between MTs and with residents

Resources/costs:

- Cost of mobile phones
- Cost of trainers for phone system

Obstacles:

- Getting approval from property and corporate managers



Evaluate Intervention Alternatives Using a Scorecard Approach

Alternative

A

Scope/Impact	Resources/costs	Benefits/Effectiveness	Obstacles/Barriers	Overall Rating = _____
Rating = _____	Rating = _____	Rating = _____	Rating = _____	

B

Scope/Impact	Resources/costs	Benefits/Effectiveness	Obstacles/Barriers	Overall Rating = _____
Rating = _____	Rating = _____	Rating = _____	Rating = _____	

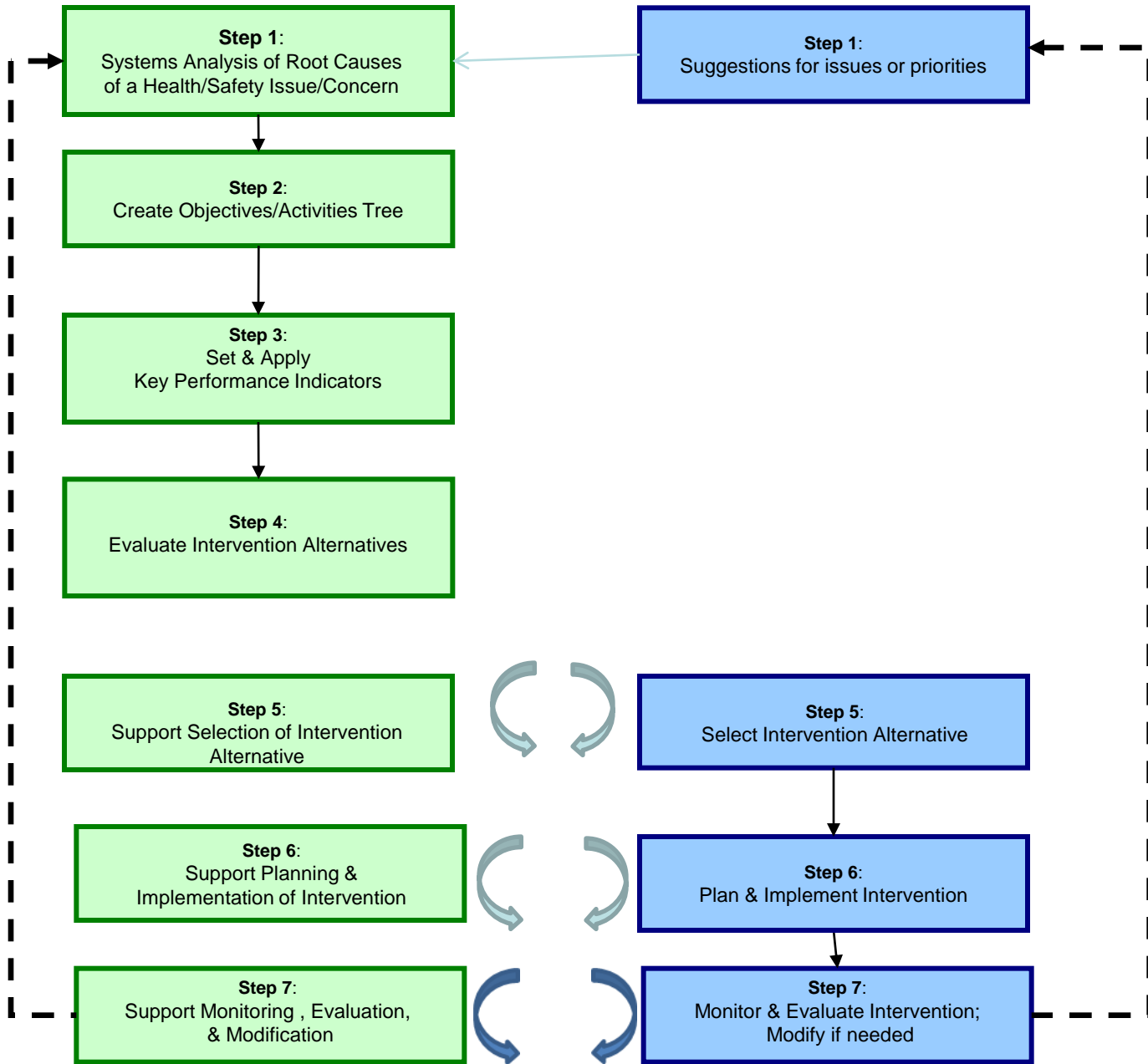
C

Scope/Impact	Resources/costs	Benefits/Effectiveness	Obstacles/Barriers	Overall Rating = _____
Rating = _____	Rating = _____	Rating = _____	Rating = _____	



Design Team

Steering Committee



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*



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

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

- ☛ Suzanne_Nobrega@uml.edu





Contacts and Acknowledgements

University of Massachusetts

CPH-NEW general email:

CPHNEW@UML.EDU

Tel: 978-934-3268

CPH-NEW main website:

www.uml.edu/centers/CPH-NEW

University of Connecticut

Dr. Jeff Dussetschleger

Email: JDussetschleger@uchc.edu

Tel: 860-679-1393

CPH-NEW website at Univ. Conn.:

<http://www.oehc.uchc.edu/healthywork/index.asp>

The Center for the Promotion of Health in the New England Workplace is supported by Grant Number U19-OH008857 from the U.S. National Institute for Occupational Safety and Health. This material is solely the responsibility of the authors and does not necessarily represent the official views of NIOSH.

