

The background of the slide features a large, faint, circular watermark of the Vanderbilt University seal. The seal depicts a central shield with a cross, surrounded by a wreath and the university's name in Latin.

Vanderbilt University

Corporate Health Achievement Award

**American Occupational Health Conference
April 17, 2002**

**Mary Yarbrough MD MPH, Director
Vanderbilt Health and Wellness**

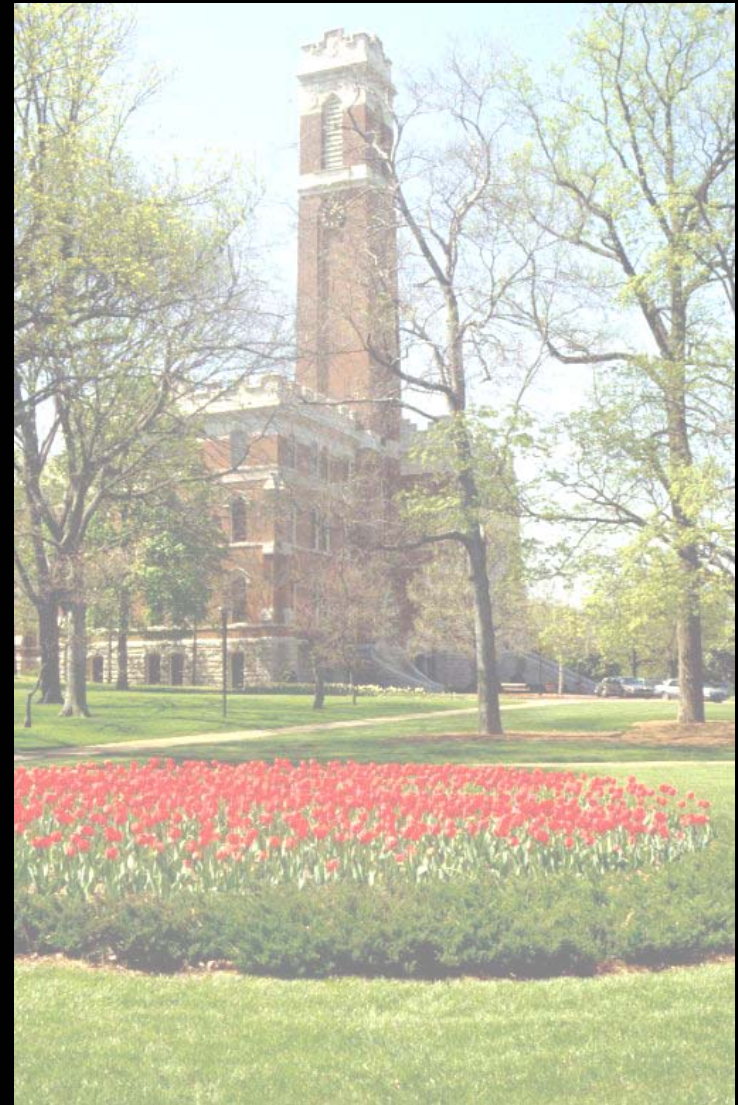
Objectives

- Introduce *Vanderbilt University* and its *Health and Wellness Programs, including Occupational Health*
- Discuss the *Health and Wellness Programs* evaluation process
- Review selected evaluation projects

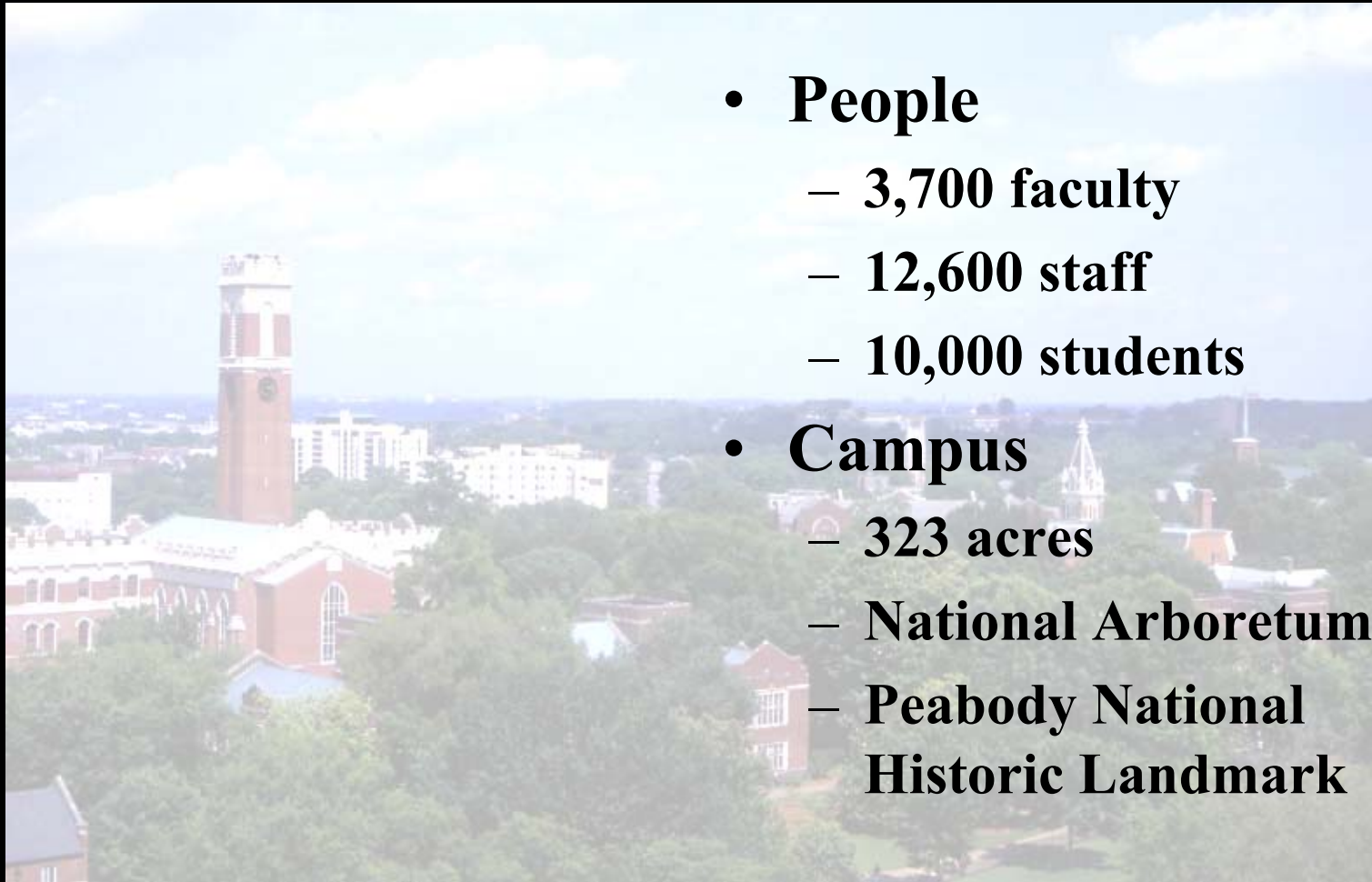


Mission

- Education
- Research
- Patient Care



Vanderbilt “Demographics”



- **People**
 - 3,700 faculty
 - 12,600 staff
 - 10,000 students
- **Campus**
 - 323 acres
 - National Arboretum
 - Peabody National Historic Landmark



Vanderbilt University

- **10 Schools**
- **Medical Center**
- **Public Policy Institute**
- **Freedom Forum First Amendment Center**



Vanderbilt University Medical Center

- Hospital
- Children's Hospital
- The Vanderbilt Clinics
- School of Medicine
- School of Nursing





Mission

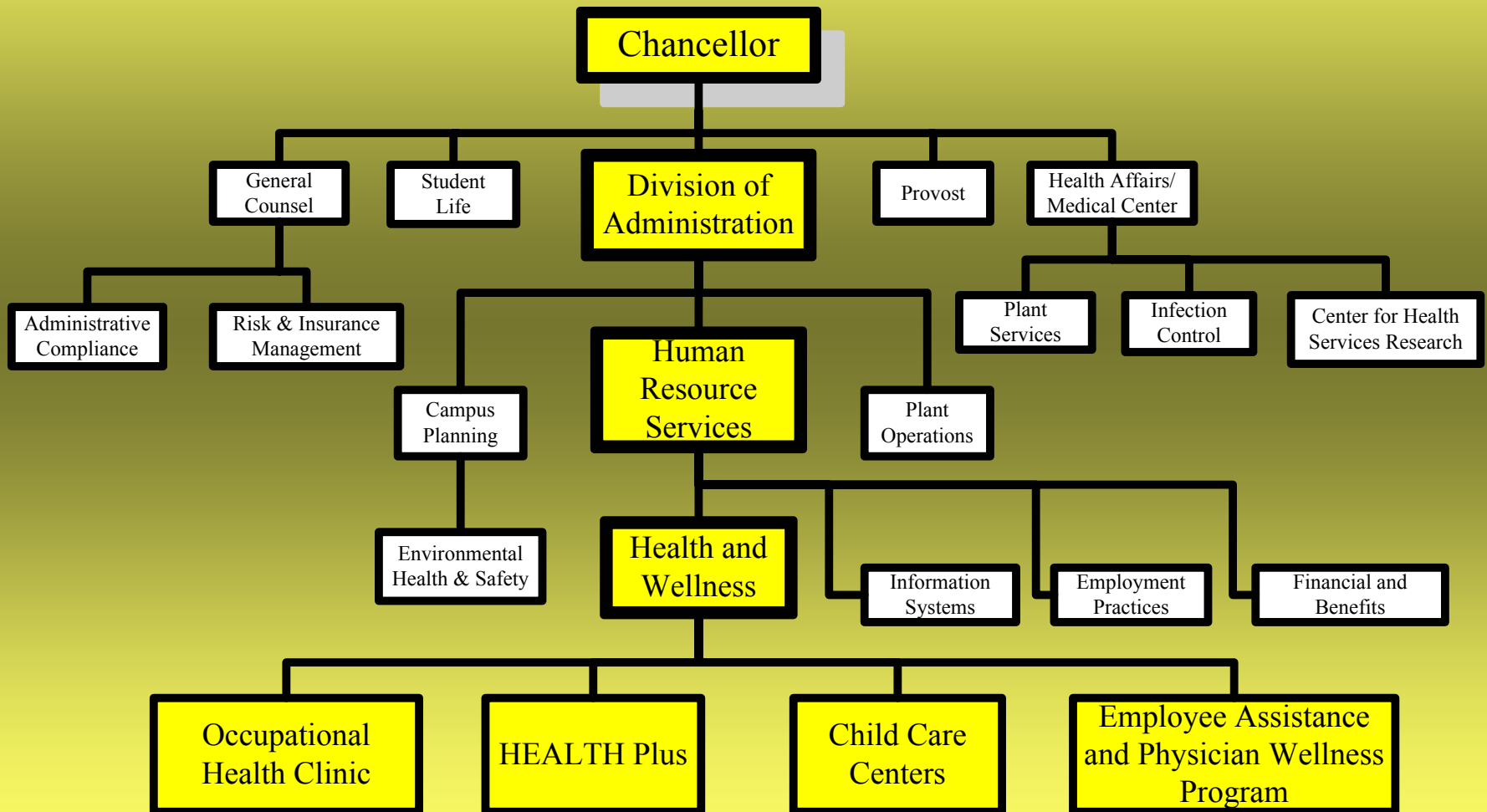
To protect and support Vanderbilt's most valuable asset,
its faculty and staff





"Here, Fifi! C'mon! ... Faster, Fifi!"

Organizational Structure*



* Partial VU Org Structure

Evaluation Conflicts

- Administrators expect prompt problem resolution
- Academic leaders expect scientific assessment
 - Not funded for research
 - Operational value of data collection for publication limited
- Employee Confidentiality



Integrate CQI and Scientific Method

State the Aim

Define Change

Select Intervention

Plan

State the problem

Formulate null hypothesis

Design the study

Do

Collect the data

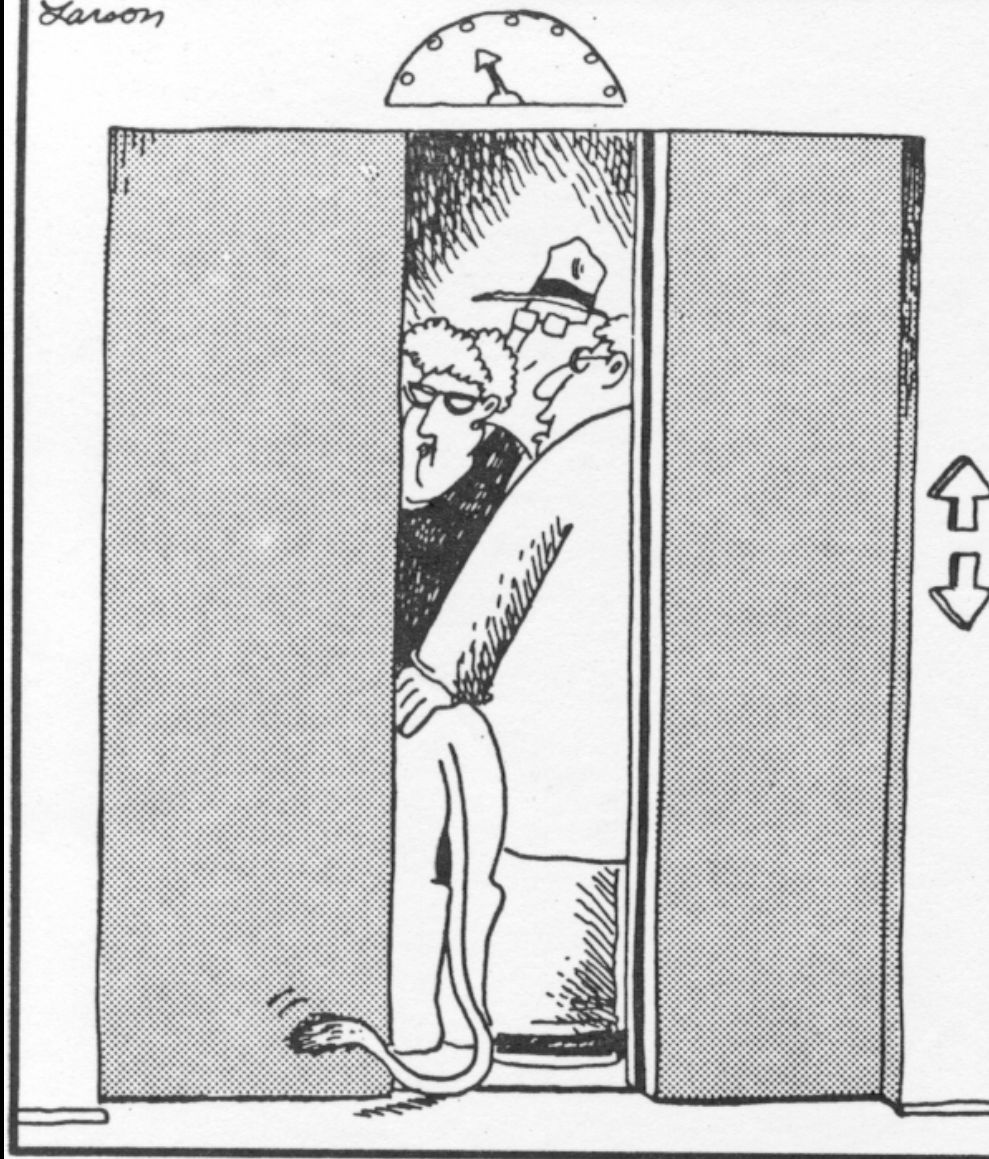
Study

Interpret the data

Act

Draw conclusions

Larson



"Don't be alarmed, folks. ... He's completely harmless unless something startles him."

Evaluation Process

- Identify problem
 - Review and discuss current process
- Propose change
 - Chart revised process
- Select metric to guide
 - State null hypothesis and study design

Evaluation Process

- Implement
 - Educate stakeholders
- Monitor metric continuously
 - i.e., graph-on-the-wall or “watch the dashboard”
- Judge value
 - Interpret results
 - Draw conclusions



Creating “Enthusiasm” for Evaluation

- State it is important
- Include in personal and program goals
- Provide time and resources, incl. technology and statistical support
- **Just do it !**
- Share the findings along the way

Vanderbilt Occupational Health Information System

RTW: Mary I. Yarbrough (07/21/2000) - Lotus Notes


File Edit View Create Actions Help

Welcome Leah Cannon - Inbox Data Entry Employee Information - Act... ENC: Mary I. Yarb... RTW: Mary I. Yarbrough (07/21/... notes

Tracking - Data Entry

Close Save & Close

[Administration](#)
[Data Analysis](#)
[Data Entry](#)
[Departments & Jobs](#)
[Employees](#)
[Medical History](#)
[Reports](#)

**Vanderbilt University Medical Center**
Mary I. Yarbrough
2035 - Asst Professor
104366 - General Internal Medicine
Encounter Type: Other (Surveillance/Physicals/Etc)
Encounter Date: 07/21/2000
Diagnosis: -Data Migrated From Access-
Services:

Data Entry

- Basics
- Exp. Source - Animal
- Exp. Source - Human
- Preventive Actions
- Screening
- Treatment/Restrictions
- Referral
- RTW Program
- PPE
- Training

RTW Program	ADA/FMLA	Comments	History	Restrictions
RTW Status: At Work (Modified Duty)				
Injury Date: 16				
Program Start Date: 7/21/2000 16				
Expected End Date: 16				
Date(s) On Leave: 0				
Total Days On Leave: 0				
Date(s) On Full Duty: 0				
Total Days On Full Duty: 0				
Program Cutoff Date: 10/19/2000				
Days in Program: 628				
Days Remaining in Program: 0				
Date(s) Pt Contacted by RTW Coordinator:				

Select the appropriate status in the RTW program

Employee Assistance Program Evaluation Projects

- **Physician Wellness Program Utilization**
- Stress Reduction
- Satisfaction with the Employee Assistance Program
- Internationals Program
- Physician Stress Reduction Program

Occupational Health Evaluation Projects

- TB Skin Test Compliance Rates
- Compliance with OSHA Medical Surveillance
- Blood and Body Fluid Exposure Injury Reduction
- Ergonomic Assessment Satisfaction
- Patient Satisfaction
- Knowledge of Services
- Return to Work Program ROI
- FMLA Utilization
- Influenza Vaccination Rates
- Health Indicator Tracking
- Non-Work Related Employee Mortality Analysis



HEALTH *Plus*

Evaluation Projects

- **Health Risk Assessment (HRA) Participation**
- **Fitness Facility Utilization**
- **Fruit and Vegetable Consumption**
- Smoking Cessation Program Evaluation
- The 5-Year Health Change Evaluation
- Aerobic Program Satisfaction
- Swim School Program Satisfaction
- Housestaff Health Status at Baseline and During Residency
- Weight Management Program Evaluation
- Longitudinal Analysis of a High Risk Subgroup
- Self-Reported v. Measured Biometric Data on an HRA
- Analysis of Employees Completing an HRA
- Diabetes Prevention Project



Example Evaluation Project #1

Physician Wellness Program Utilization

Physician Wellness Program Utilization

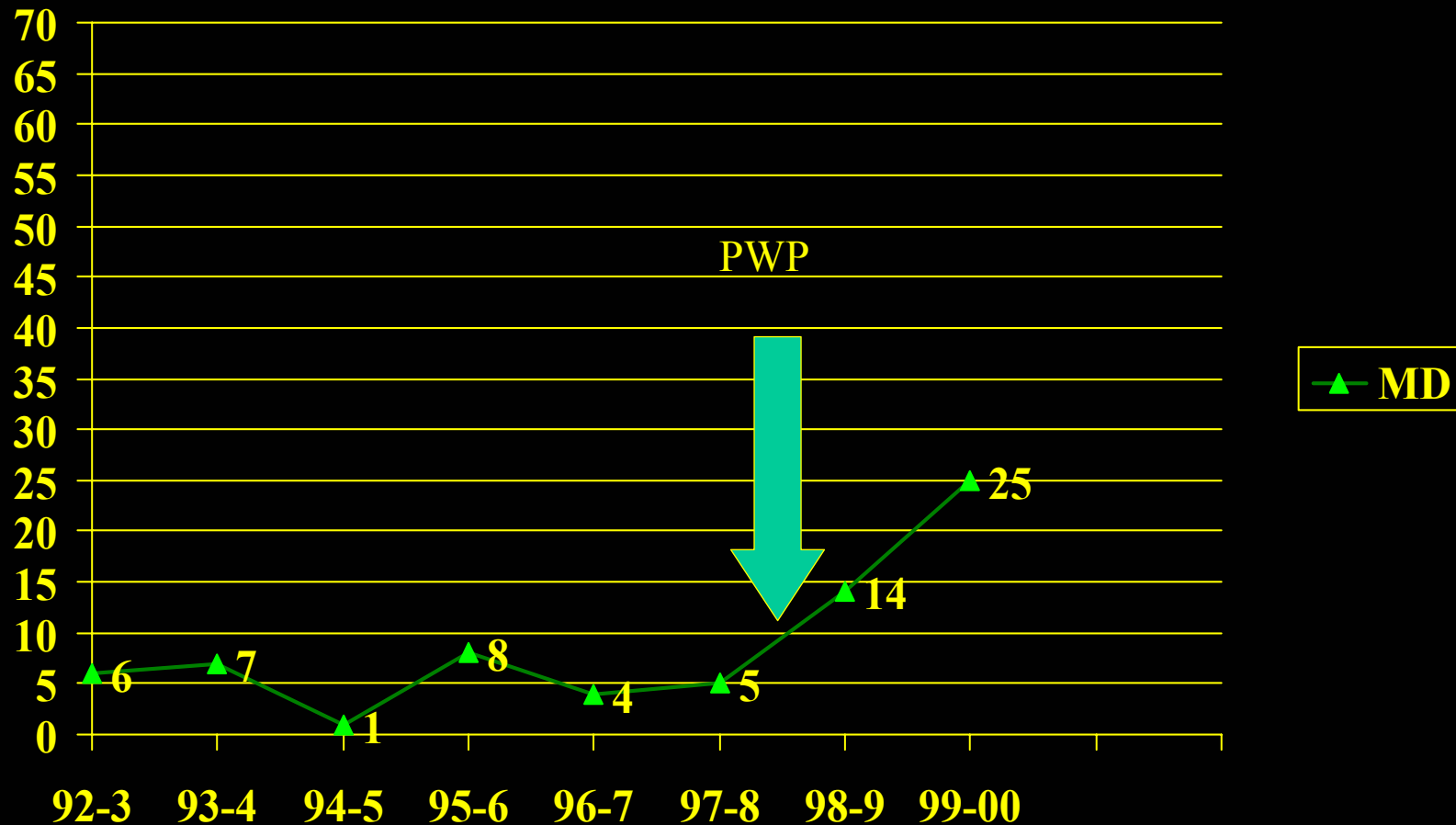
- Problem
 - Limited physician utilization of EAP
- Change
 - Physician Wellness Committee
 - Physician Wellness Program within EAP

Physician Wellness Program Utilization

- Metric
 - Physician utilization (and physician loss)
 - Null hypothesis: No significant change in physician utilization after 18 months
- Implement
 - Educate physicians and staff
- Monitor

Utilization Before and After

Introduction of Physician Wellness Program



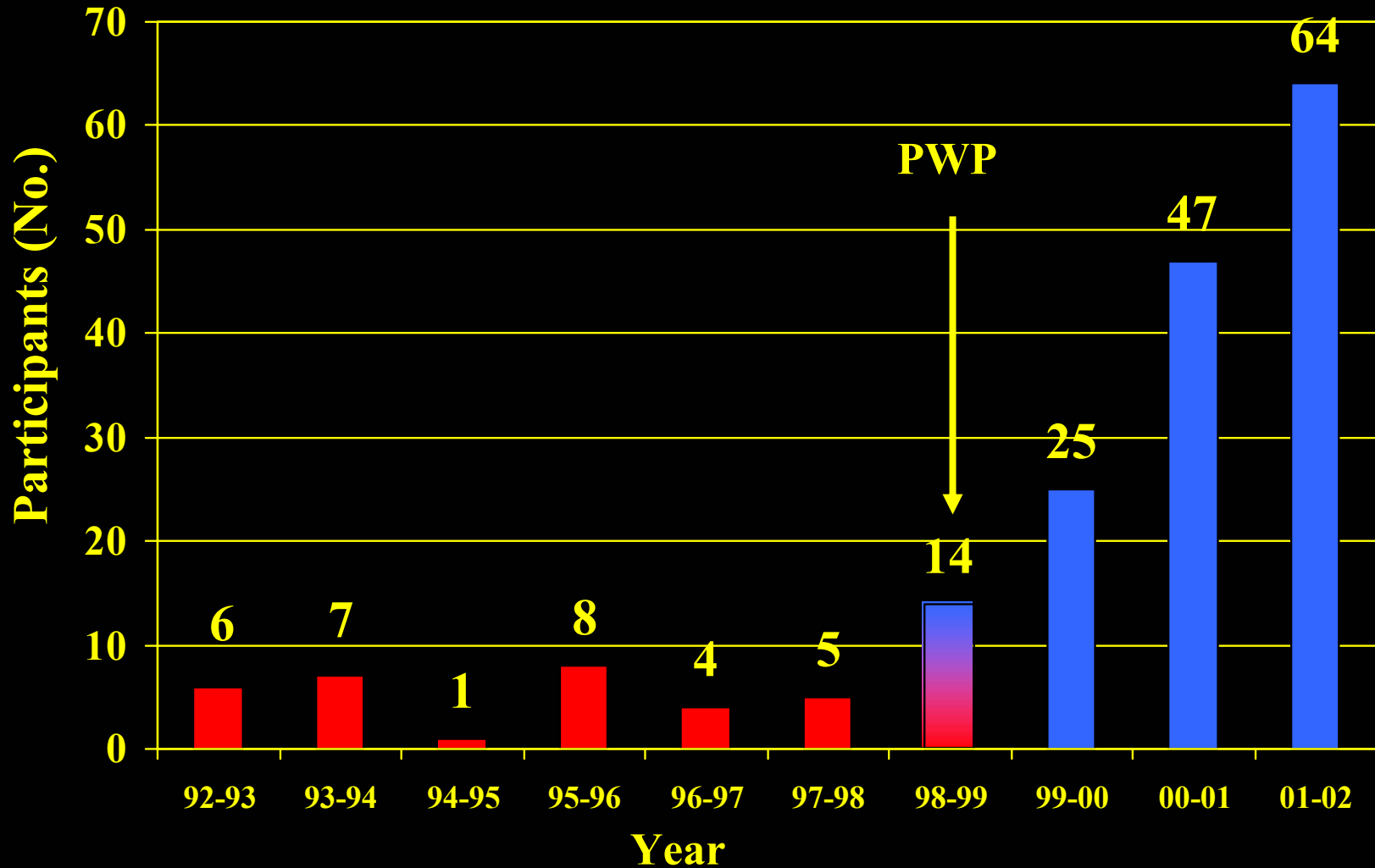
Physician Wellness Utilization

- Judge value
 - No unexpected physician loss
 - Significant increase in utilization
 - chi-square, $p < 0.05$
 - Program funded

Utilization Before and After

Introduction of

Physician Wellness Program



Example Evaluation Project #2

TB Skin Test Compliance

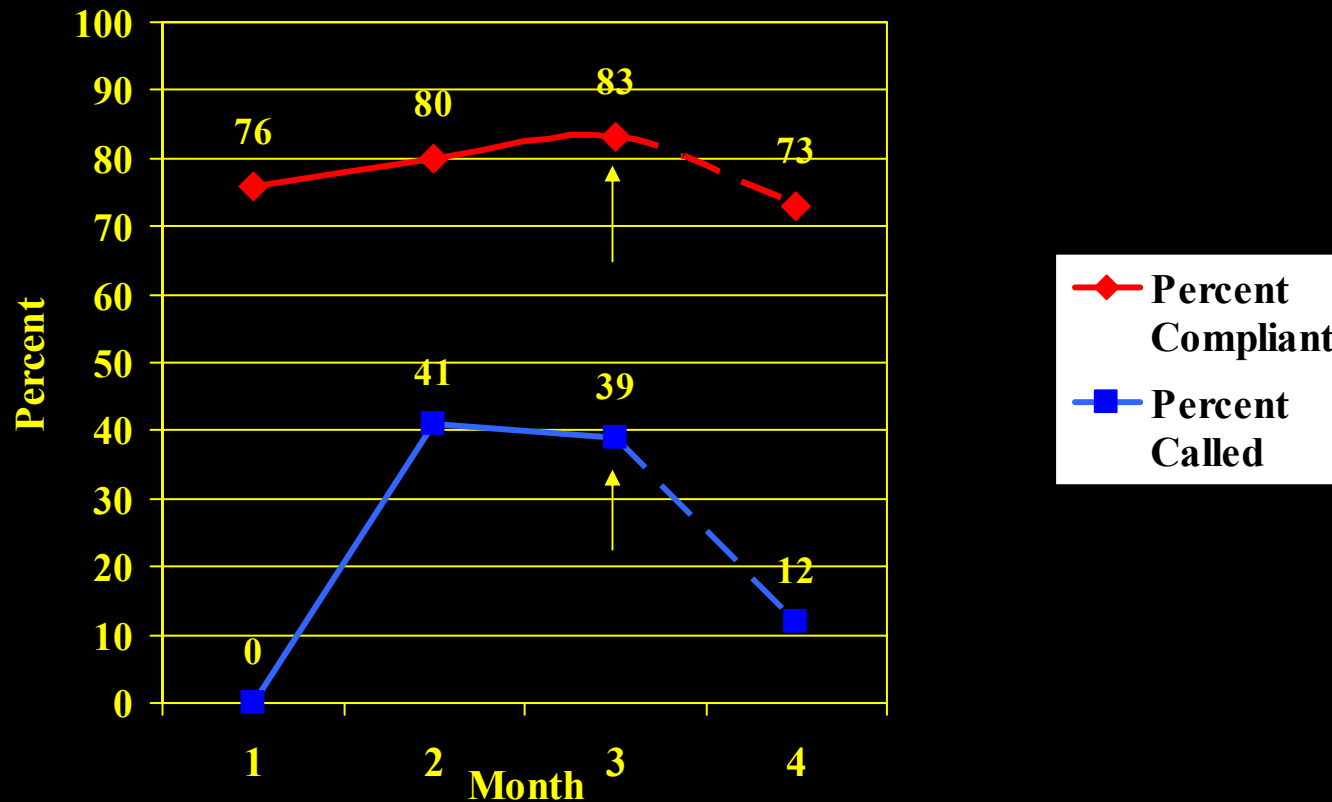


TB Skin Test Compliance

- Problem
 - TB skin test compliance ~70%
- Change
 - RN reminder call at 48-72 hrs
- Metric
 - Compliance rate
 - Null hypothesis: No change in compliance
- Implement
- Monitor

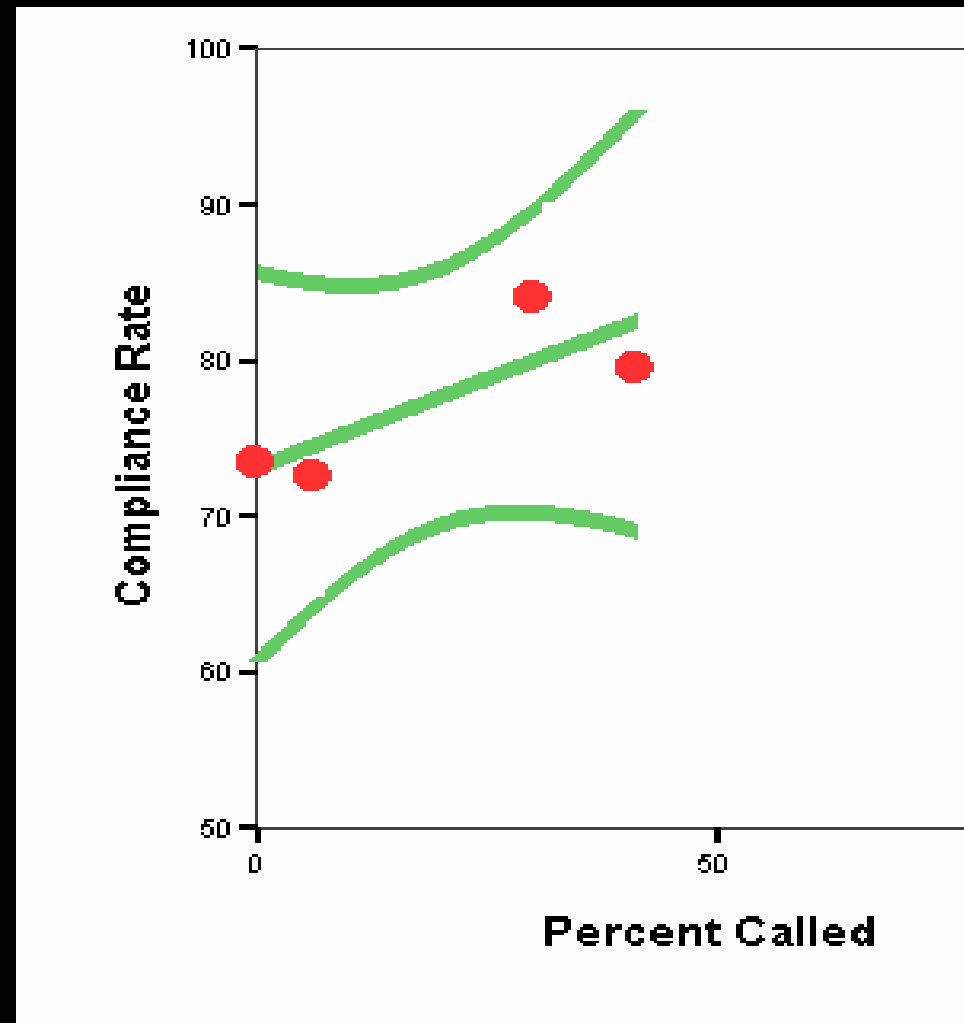


TB Compliance Related to Percent Called



TB Skin Test Compliance

- Judge value
 - 1 in 4 responded to call
 - Cost intensive with RN
 - Continue calls by clerical staff



Example Evaluation Project #3

Compliance with Non-Infectious Regulatory Programs

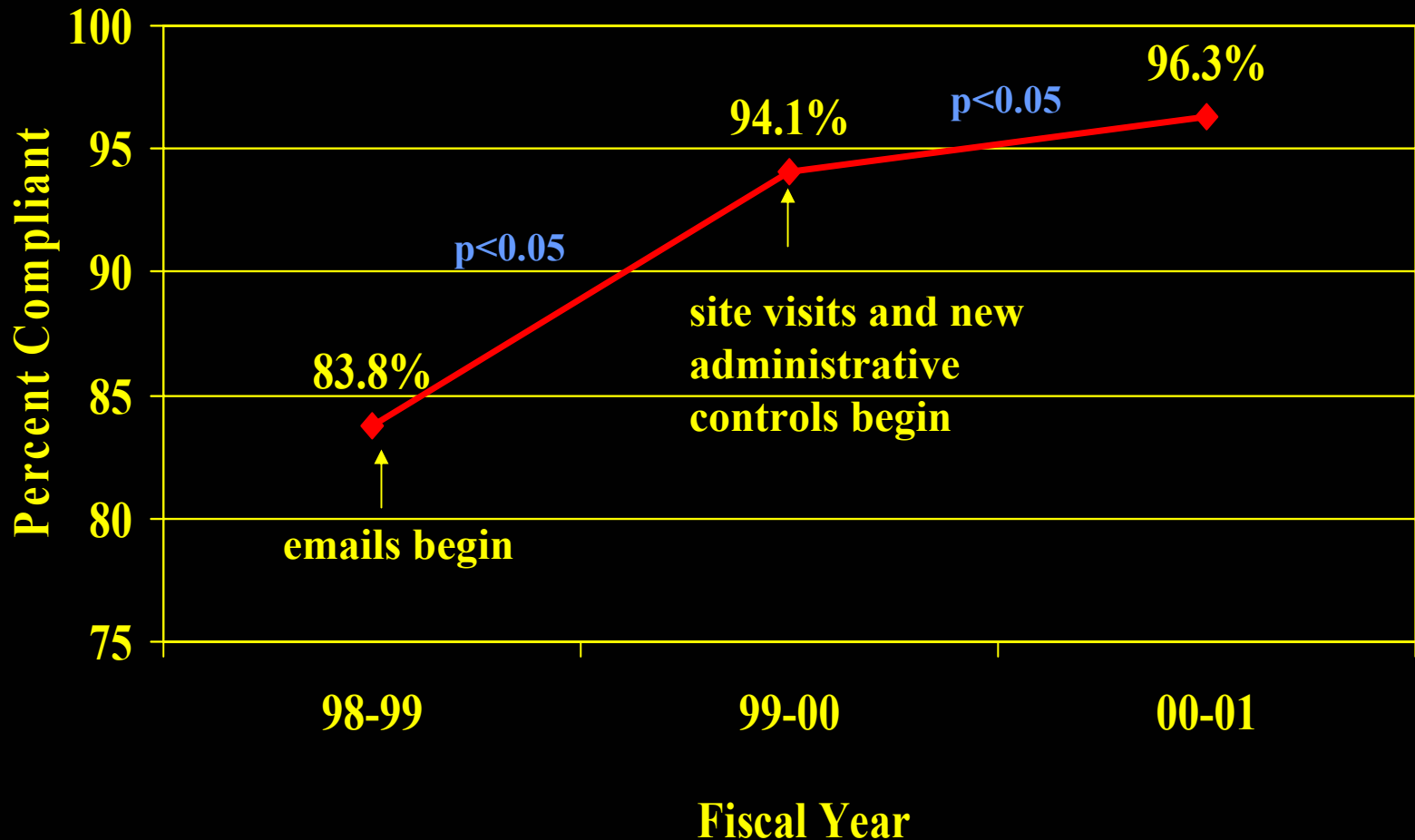


Compliance with Non-Infectious Regulatory Programs

- Problem
 - Non-infectious programs compliance ~80%
- Change
 - Email supervisors
 - medical surveillance information
 - compliance rates for all departments
- Metric
 - Compliance rates
- Implement
- Monitor



Compliance with Regulatory Programs



Example Evaluation Project #4 Injuries Related to Sharps Disposal

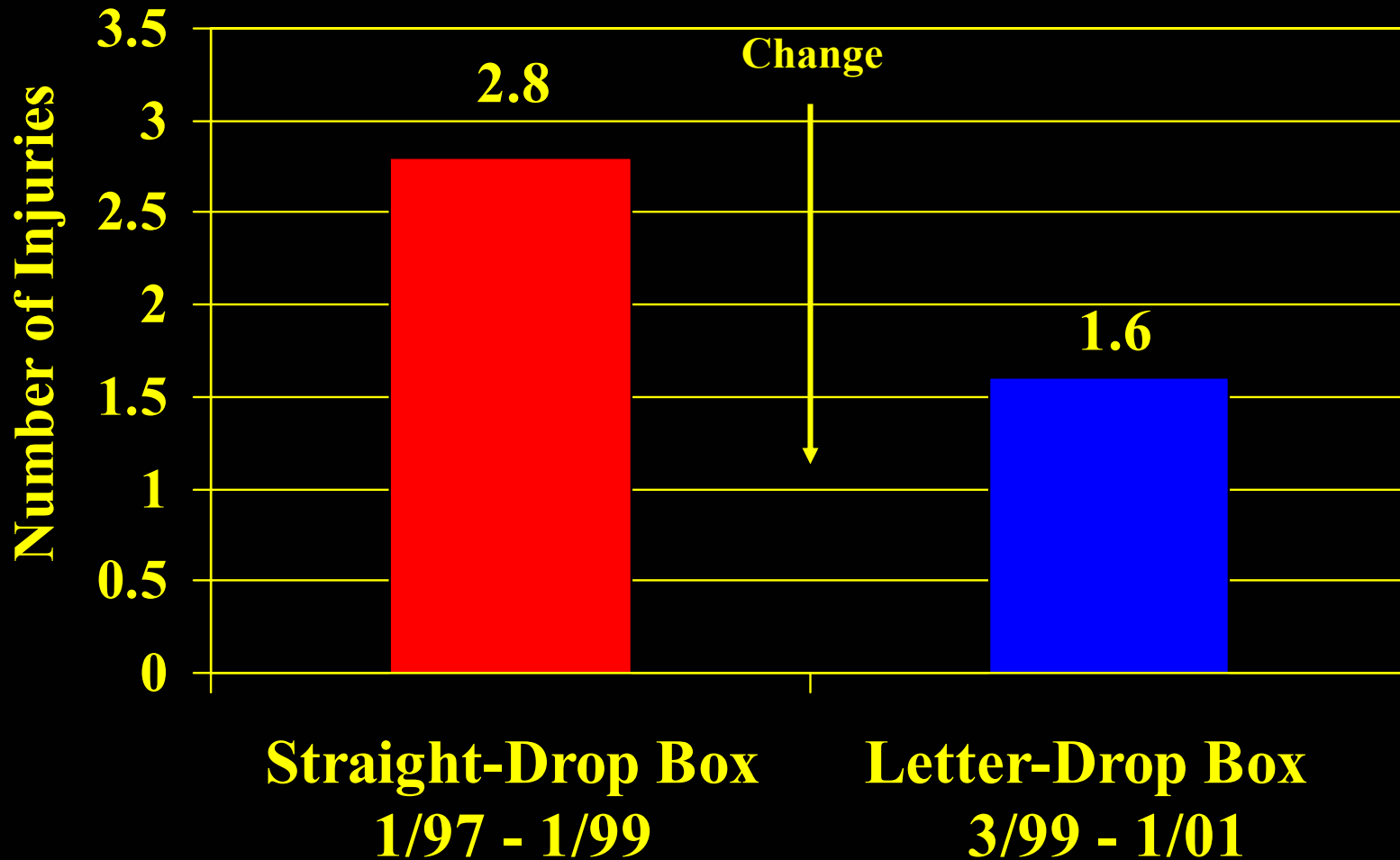


Injuries Related to Sharps Disposal

- Problem
 - Sharps disposal significant cause of work-related injury
- Change
 - Straight-drop box replaced with letter-drop box
- Metric
 - Number of disposal-related sharps injuries
- Implement
- Monitor



Average Disposal-Related Sharps Injuries per Month



Injuries Related to Sharps Disposal

- Judge value of change to letter-drop boxes
 - Financial Impact
 - Cost \$10,000 greater per year
 - Savings of \$8,800 per year, not considering cost of infectious disease conversion
 - Compliance with BBP Standard
 - Decreased stress



Example Evaluation Project #5

**Satisfaction with Ergonomic
Workstation Assessments**

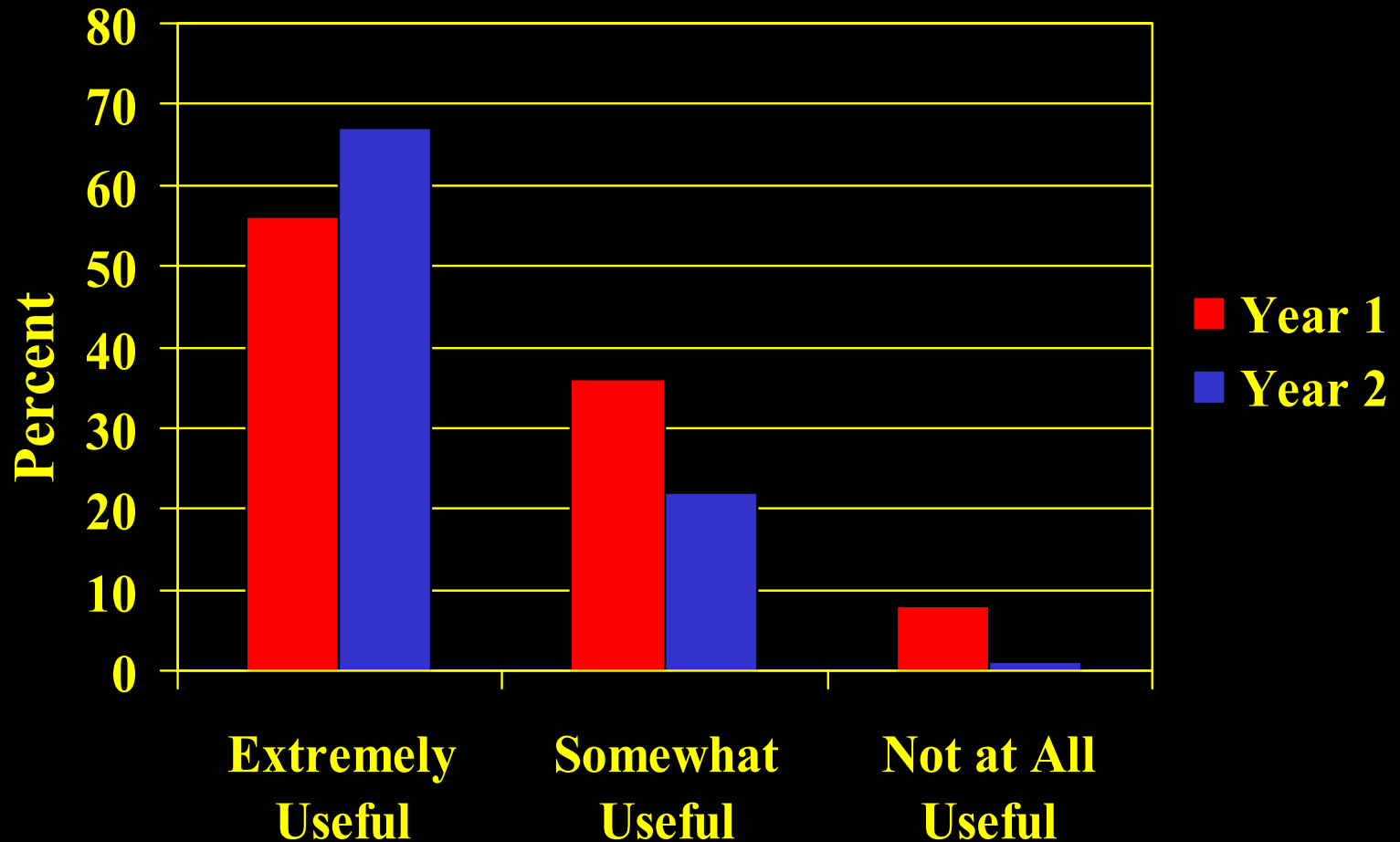


Satisfaction with Ergonomic Workstation Assessments

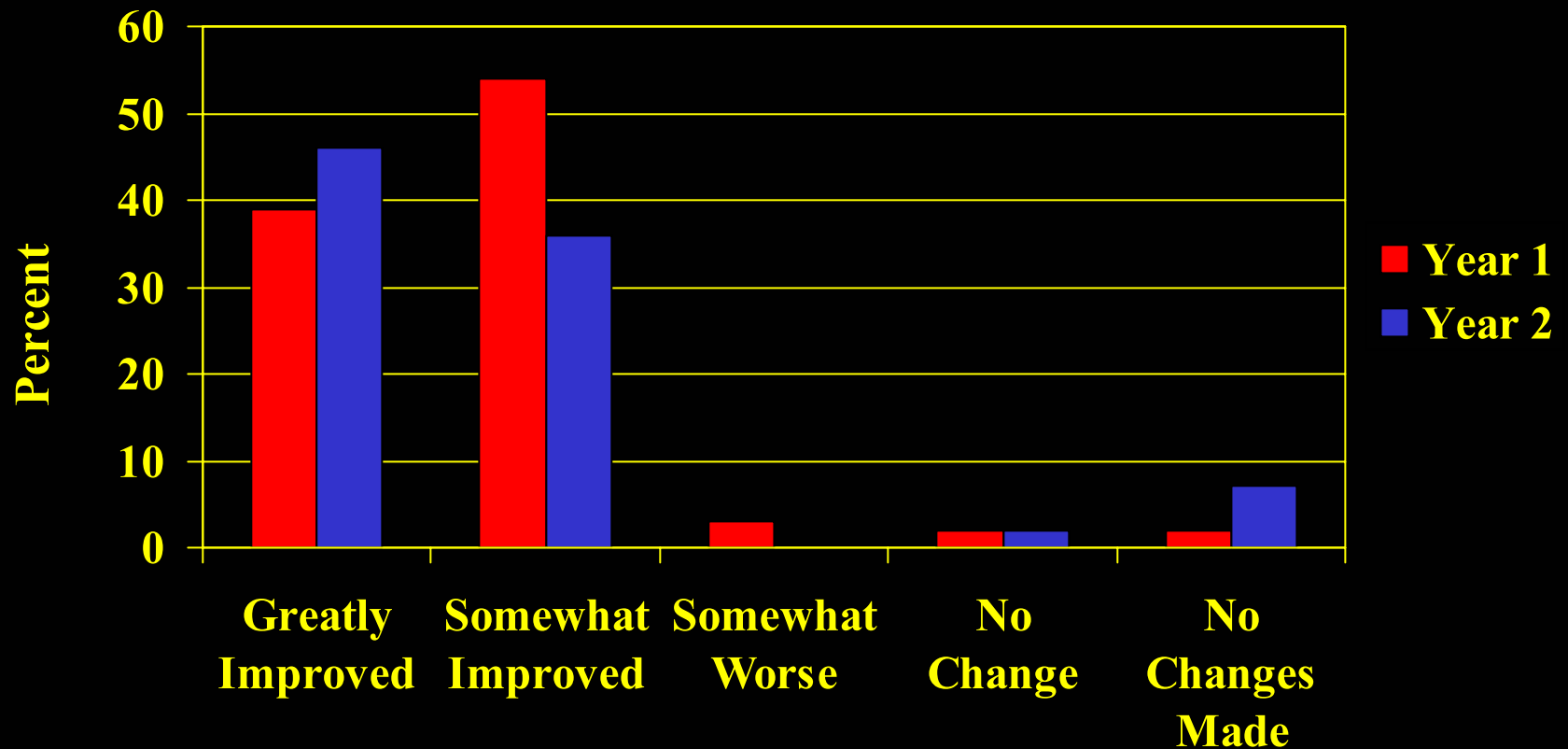
- Problem
 - Value of ergonomic assessments unknown
- Change
 - Annual satisfaction survey
- Metric
 - Faculty and staff satisfaction
- Implement
- Monitor



Ergonomic Assessment Satisfaction



Satisfaction with Work Environment After Changes



Example Evaluation Project #6

**Health Risk Assessments
Completed**

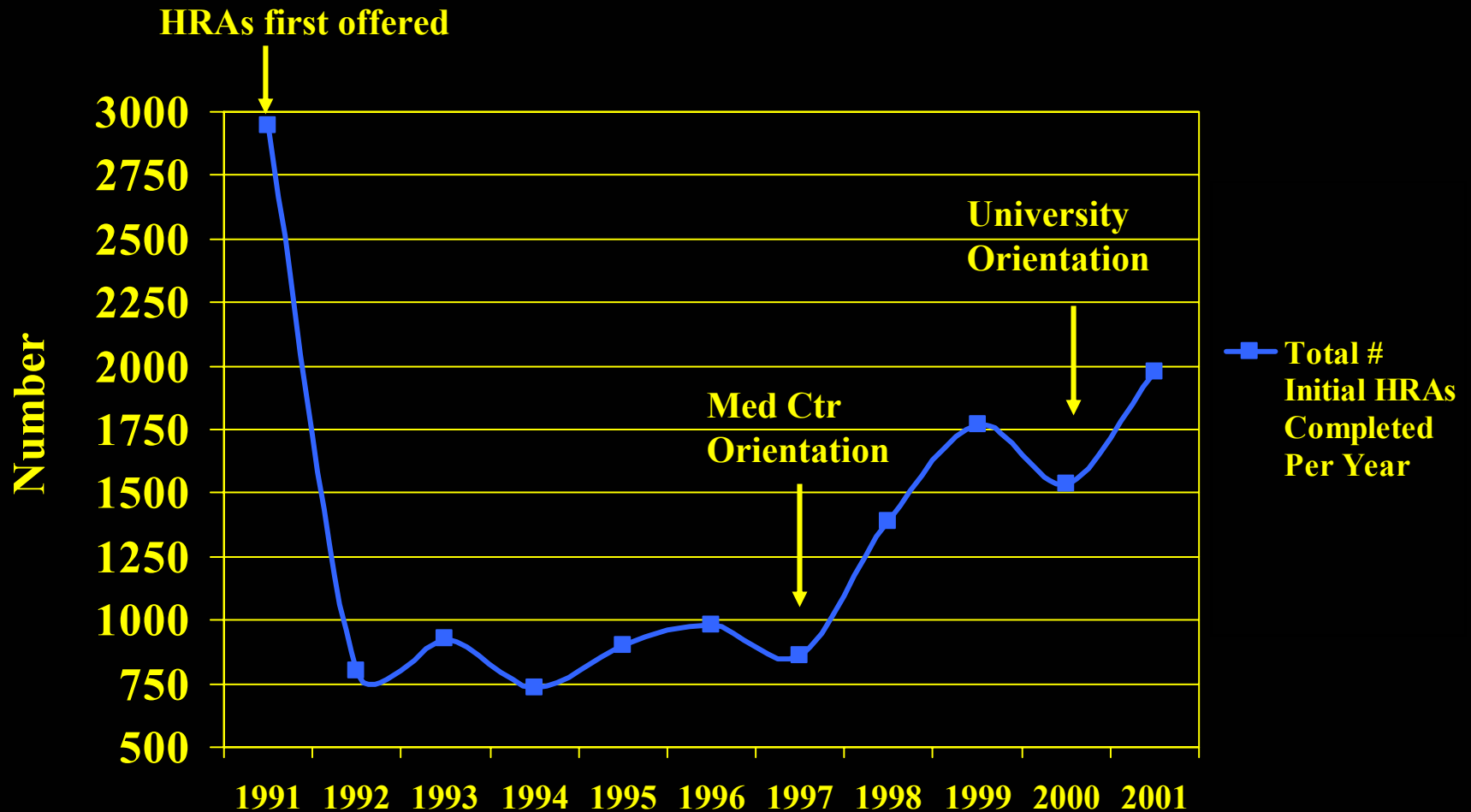


Health Risk Assessments (HRAs) Completed

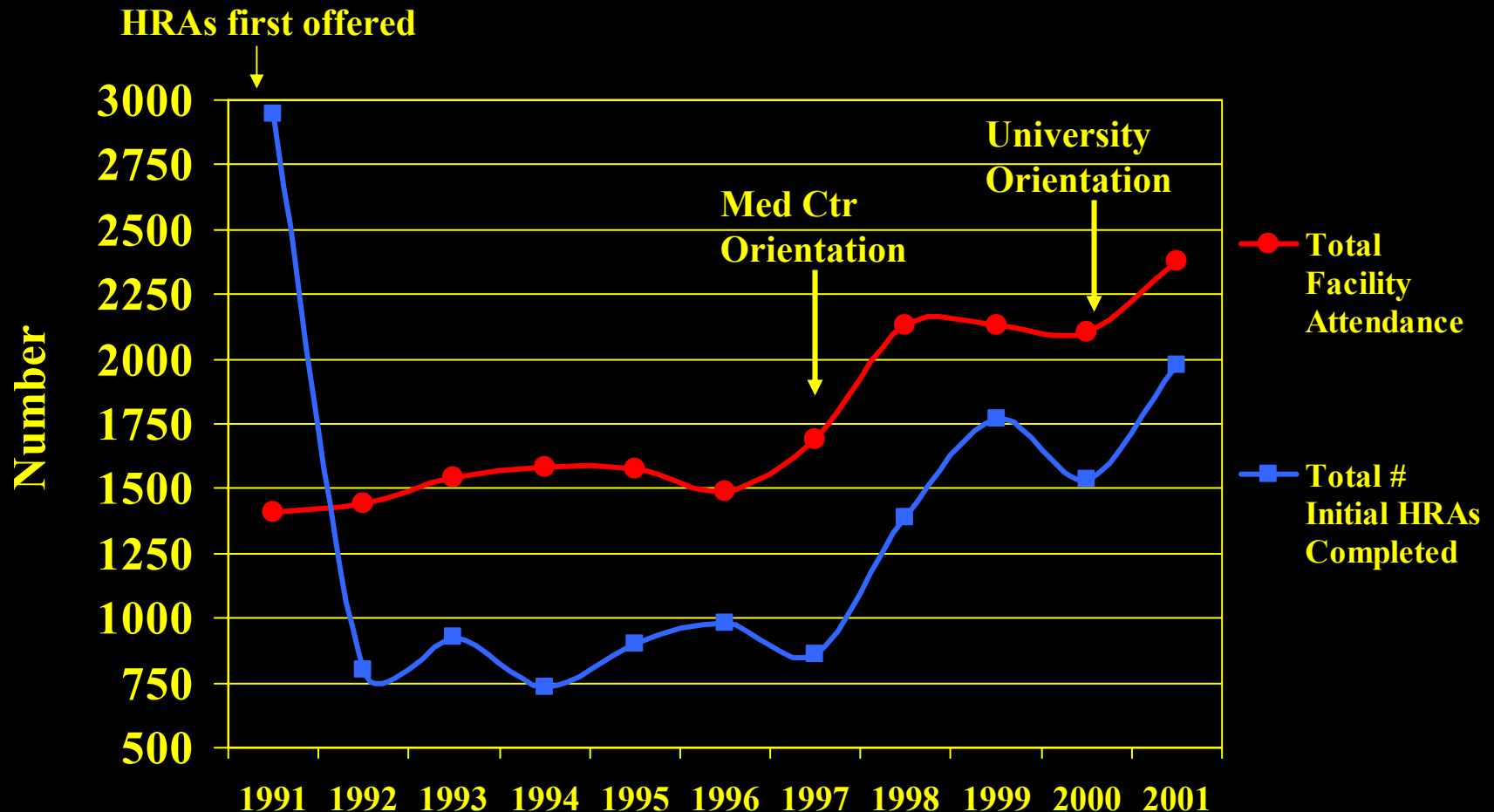
- Problem
 - Incomplete health risk data
- Change
 - Offer HRAs at Medical Center New Staff Orientation
- Metric
 - Number of HRAs completed
- Implement
- Monitor



Completion of HRAs



Added Value: Exercise Facility Utilization Increase



Example Evaluation Project #7

Fruit and Vegetable Consumption

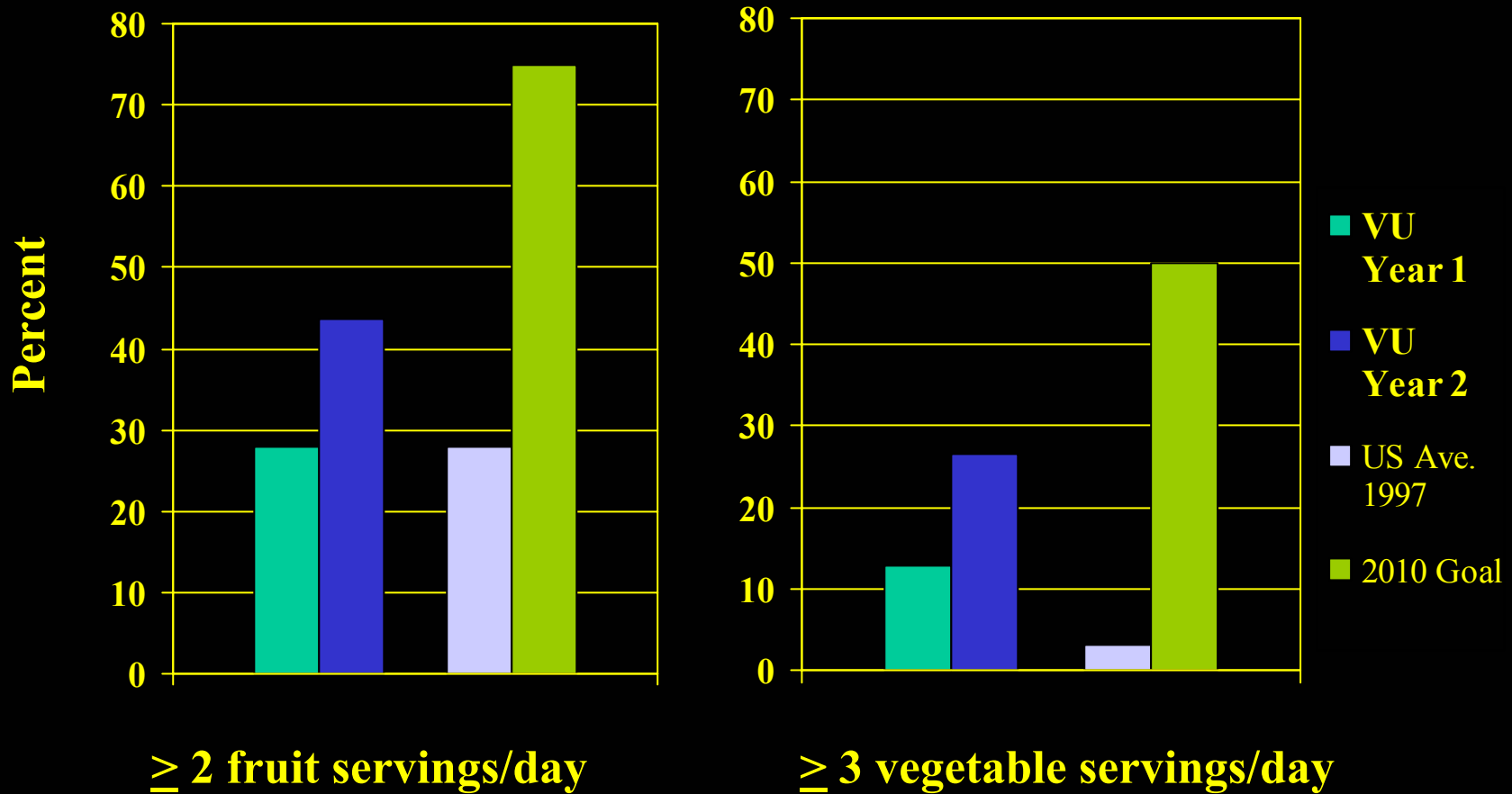


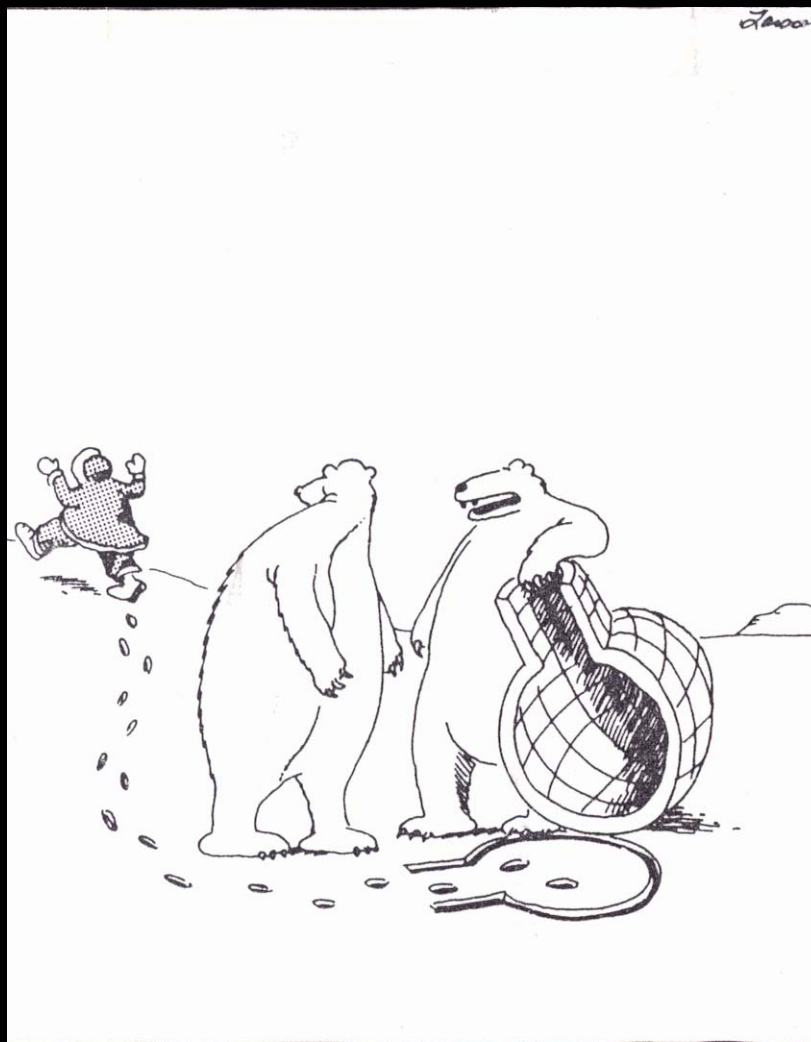
Fruit and Vegetable Consumption

- Problem
 - Inadequate consumption of fruits and vegetables
- Change
 - Nutrition education campaign
- Metric
 - Consumption reported on Health Risk Assessments
- Implement
- Monitor



Fruit and Vegetable Consumption





"I lift, you grab. ... Was that concept just a little too complex, Carl?"

Health and Wellness Project Leaders

- Mary Yarbrough
- Paula McGown
- Patricia Kinman
- Alice Warren
- Sharon Sulkin
- Susan Harris
- Helen Scott
- Judy Woods
- Ellen Trice
- James Kendall
- Paul Ragan
- Marilyn Holmes
- Lisa Connor
- Cindy Dorminy
- Susan Walker
- Brad Awalt
- June MacNeil

Center for Health Services Research

- Daniel Byrne
- Robert Dittus

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 - Leah Cannon
- Occupational Health Clinic
 - Melanie Swift
 - Cindy Harrison
 - Willow Price
 - Aimee Paschall
- Child Care Centers
 - Diane Neighbors
- Employee Assistance and Physician Wellness Programs
 - Ellen Clark
 - Susan Lescher
 - Helena Guo
- Center for Occupational and Environmental Medicine
 - Roy DeHart
- HEALTH *Plus*
 - Lori Cowan
 - Cassandra McClain-Evans
 - Kelly McClain
- Physician Wellness Committee
 - Anderson Spickard, Jr.
- Plant Services
 - Ken Browning
- Environmental Health and Safety
 - Robert Wheaton
 - Susan Johnson
 - Alex LeHocky
 - Andrea George
 - LouAnn Burnette
- Infection Control
 - Vicki Brinsko

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 - Lana Clay
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 - Donna Thomas
 - Jane Bruce
 - Lisa Ponton
 - Veronica Burns
- Center for Clinical Improvement
 - Doris Quinn
 - Ted Sperhoff
- InfoWorks
 - Misty Leopper
 - John Mason
 - Rick Pineda
- Risk Management
 - Tracy Hamilton
 - John MacCauley
- General Counsel
 - Sheree Wright
 - Julia Morris
- TN Physician Health Program
 - David Dodd
- Environmental Health and Safety
 - Carl Gerholdt
 - Melanie Byer
 - Tammy Jimison
 - David Kirby
 - Danny Anglin
 - Melissa Kennedy
- Opportunity Development Center
 - Sara Ezell
- Physical Therapy
 - Scott Reynolds
 - Jim Lassiter
 - Cheryl Hughes
- Dayani Health Promotion Center
 - Jay Groves
 - Barbara Forbes
- Graduate Medical Education
 - Fred Kirchner, MD
 - Jane Shoun



www.vanderbilt.edu/HRS/wellness/wellness.htm

Visit us at the
Vanderbilt Health and Wellness
Website