Improving the Quality of Care in Workers' Compensation through a Communitywide Intervention: Did the IOM Get It Right?

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Institute of Medicine (IOM) Report on Quality

Quality problems are everywhere, affecting many patients. Between the health care we have and the care we could have lies not just a gap, but a chasm….What is perhaps most disturbing is the absence of real progress toward restructuring health care systems to address both quality and cost concerns.….If we want safer, higher-quality care, we will need to have redesigned systems of care.

(Crossing the Quality Chasm, IOM, 2001)

IOM Recommendations

- Design of more effective organizational support for care processes
- Create an infrastructure to support evidence-based practice
- Use information technology more effectively
- Align payment incentives to support quality
- Improve workforce training

Key Problems in Workers' Compensation Health Care

- High costs
- Poor quality
- High dissatisfaction
  - patients
  - employers
  - providers

Disability Prevention: Bad News--Good News

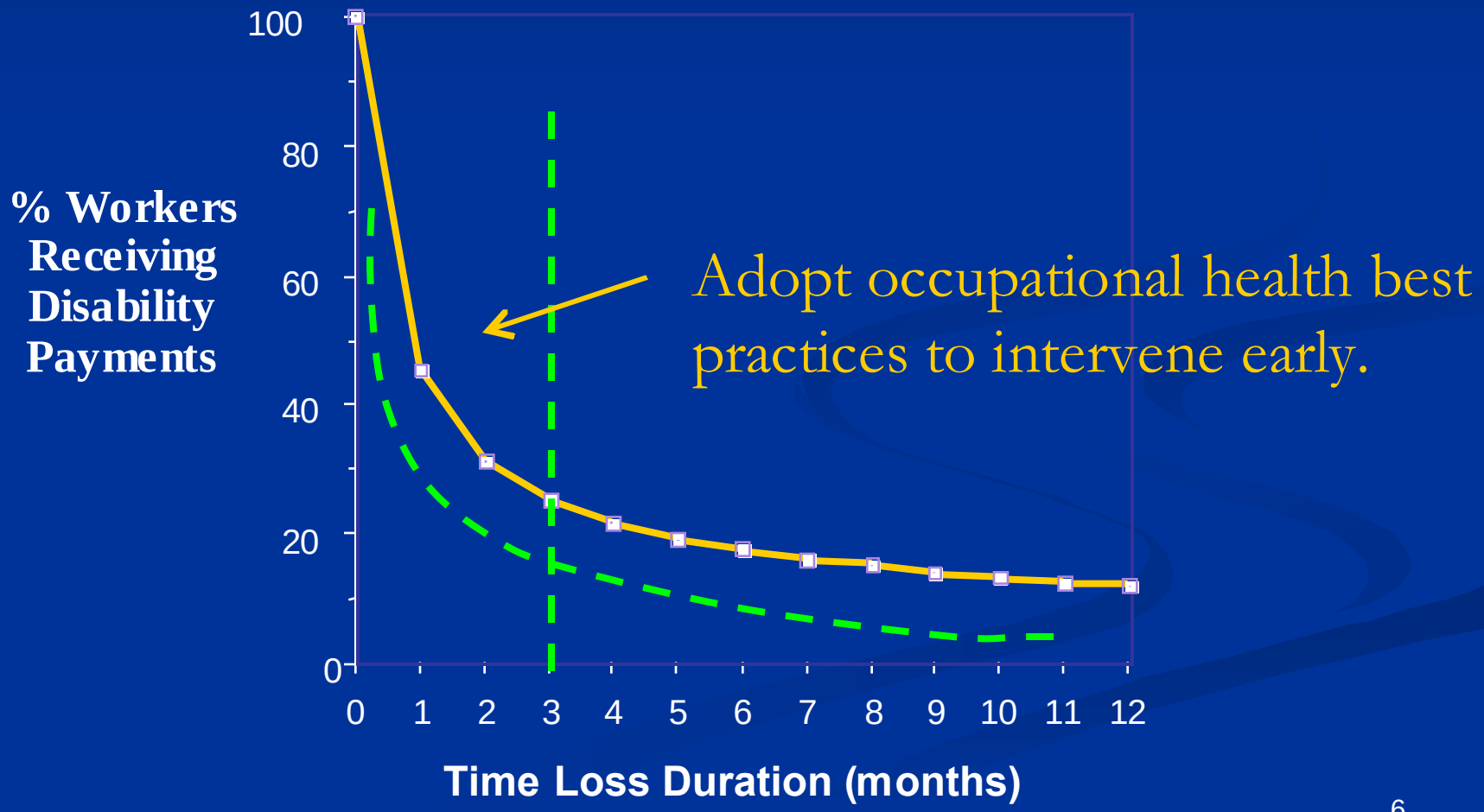
Bad News

- Workers who remain on disability for longer than 2-3 months have greatly reduced chance of returning to work

Good News

- Effective occupational health care can reduce the likelihood of long-term disability

Changes in Disability Status among Injured Workers in WA State



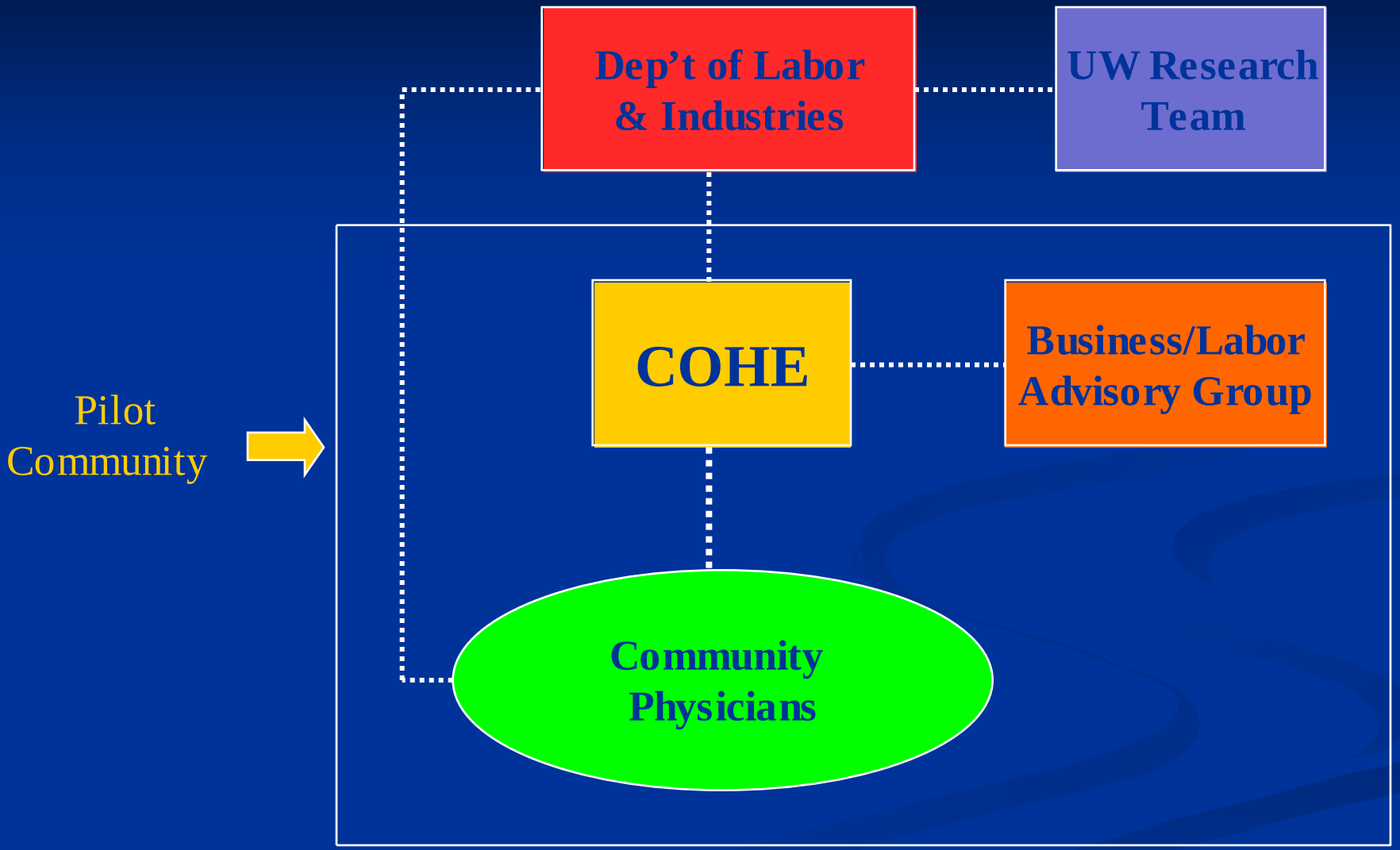
Occupational Health Services (OHS) Project

- WA State OHS Project initiated in 1998 by Dep't of Labor & Industries (DLI):
  - To improve quality and outcomes in workers' compensation system
- OHS is not managed care; no restrictions on provider choice
- Injured workers have first-dollar coverage for occupational injuries/illnesses and choice of any provider
- Centers of Occupational Health Education (COHE) established to provide organizational support for quality improvement (QI)

System Redesign through OHS

- Develop quality indicators
- Develop financial incentives (P4P)
- Establish community-based pilot centers of occupational health and education (COHEs):
  - Support and direct quality improvement activities
    - mentoring and CME for community MDs
    - disseminate treatment guidelines and best practice information
  - Identify and provide care for high-risk cases

OHS-COHE Organization



OHS Pilot Sites

- Renton, Washington
  - Valley General Hospital
  - Pilot implementation started July 2002
  - > 130 MDs recruited for pilot in target area
- Spokane, Washington
  - St. Luke's Rehabilitation Institute
  - Pilot implementation started July 2003
  - > 200 MDs recruited for pilot in target area

Data & Measures

- Administrative claims data provided by DLI supplemented by patient and provider surveys
- Process & outcome measures:
  - Adoption of occupational health best practices (process)
  - Incidence of (time loss) disability (> 3 days lost work time)
  - On time loss at 365 days post claim receipt
  - Disability costs, medical costs & total costs

Timeframe for OHS Evaluations

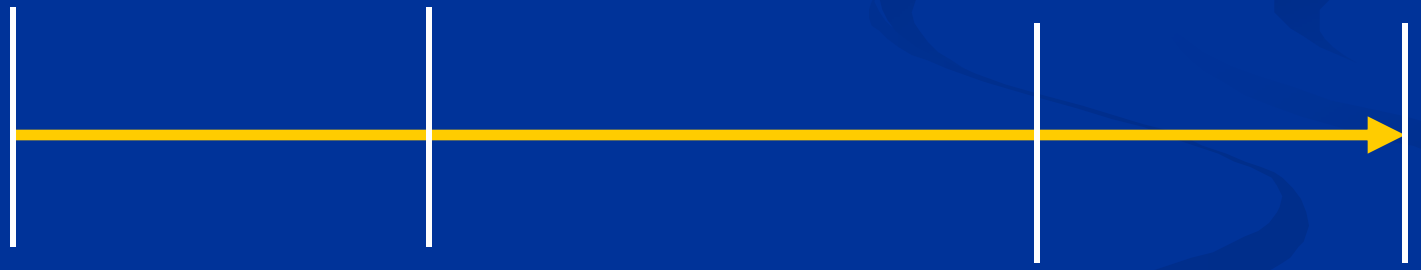
Renton:

Baseline Year
July 2001 – June 2002

Implementation Year
July 2002 – June 2003

Outcome Year
July 2003 – June 2004

Spokane:



Baseline Year
July 2002 – June 2003

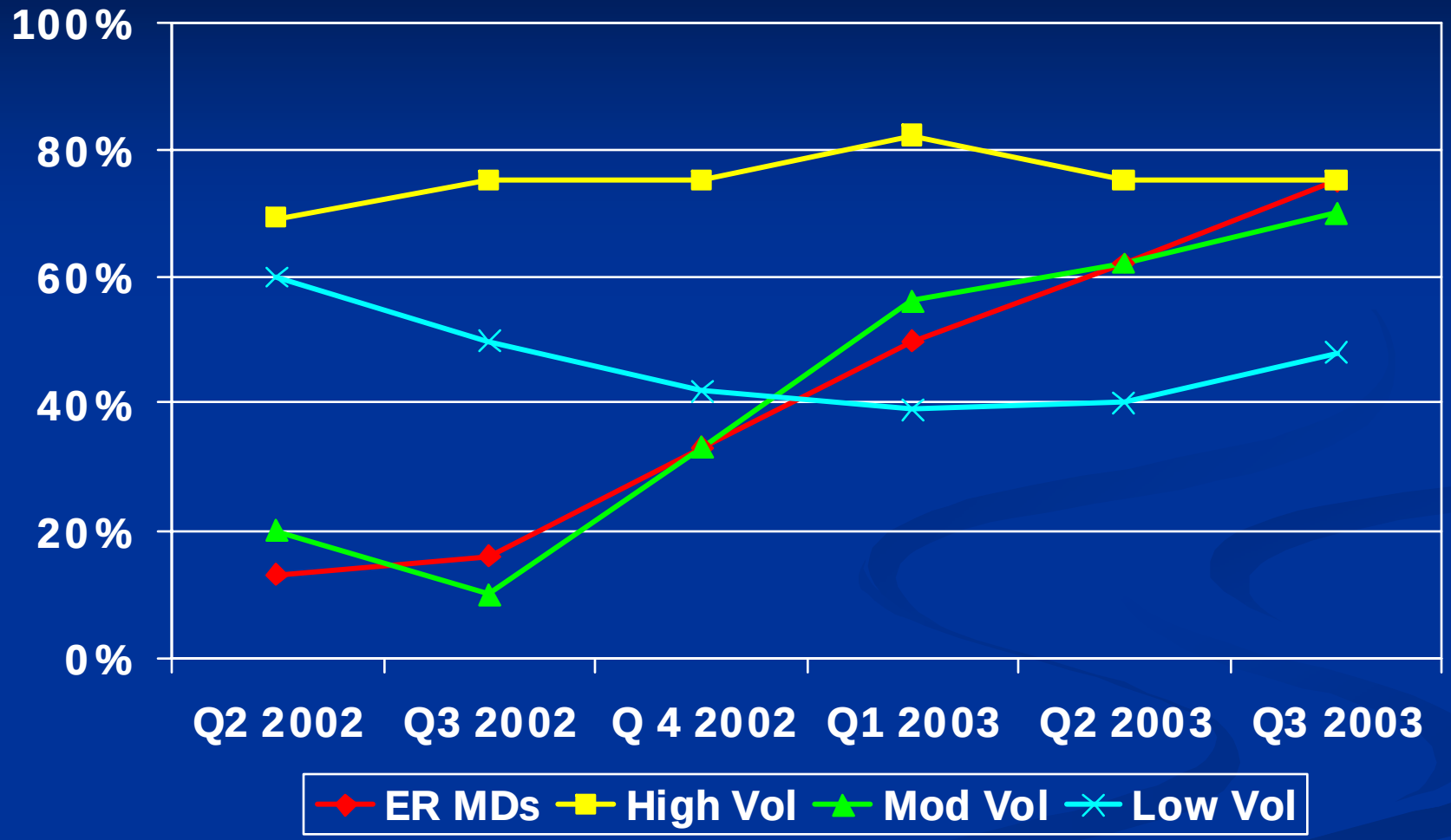
Implementation Year
July 2003 – June 2004

Outcome Year
July 2004 – June 2005

P4P and Occupational Health Best Practices

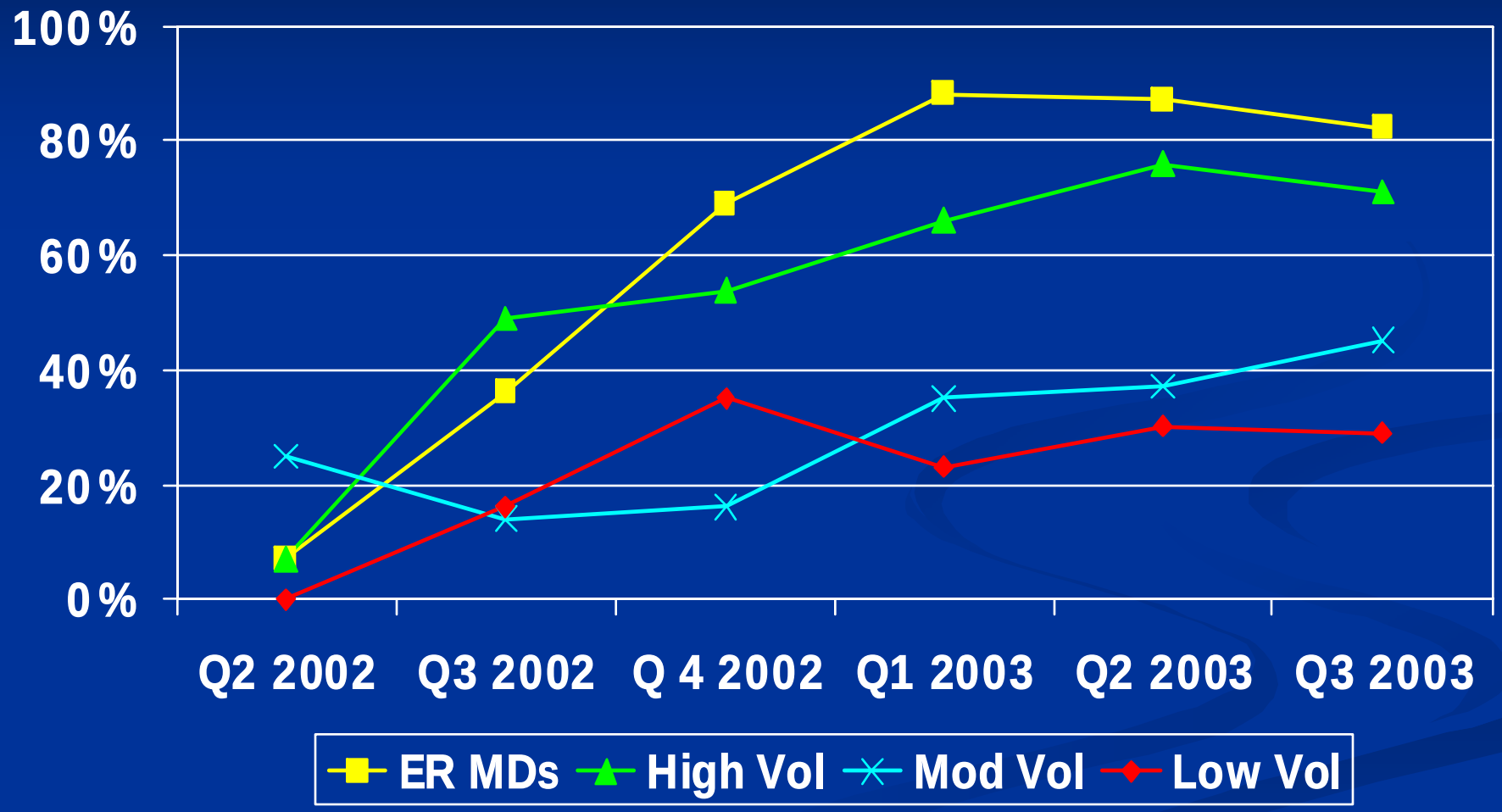
- 4 quality indicators, representing best practices, were developed by panels of clinician experts in 1999
  - Submission of report of accident in 2 days
  - Provider-employer phone communication
  - Use of special activity prescription form to formalize treatment and rehab plan and work
  - Assessment to identify impediments to return to work
- New fees were established for the above 4 services

Submission of ROA within 2 Days

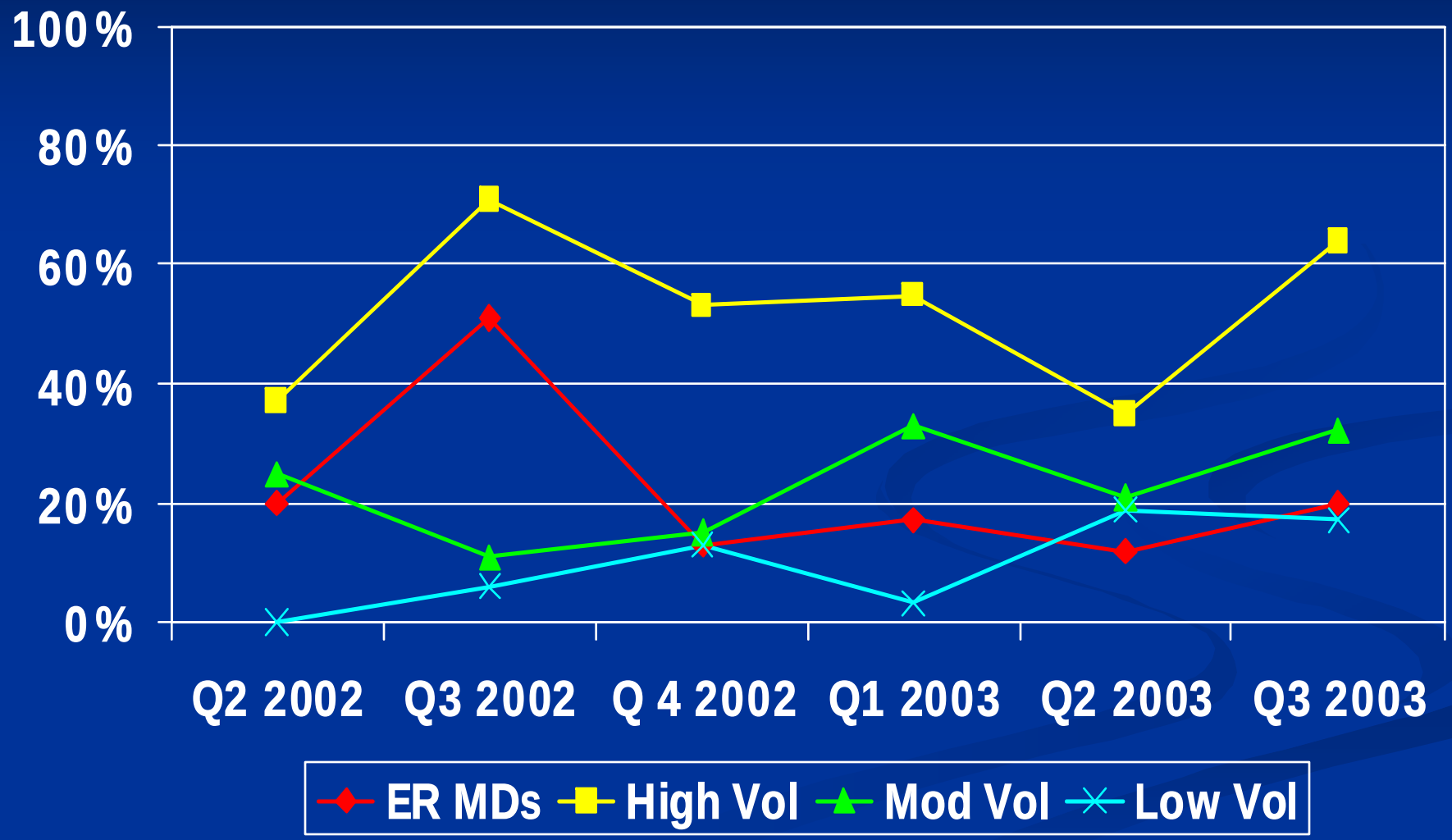


Pre-OHS baseline values: ER MDs 2%; other providers 8%

Use of Activity Prescription Forms



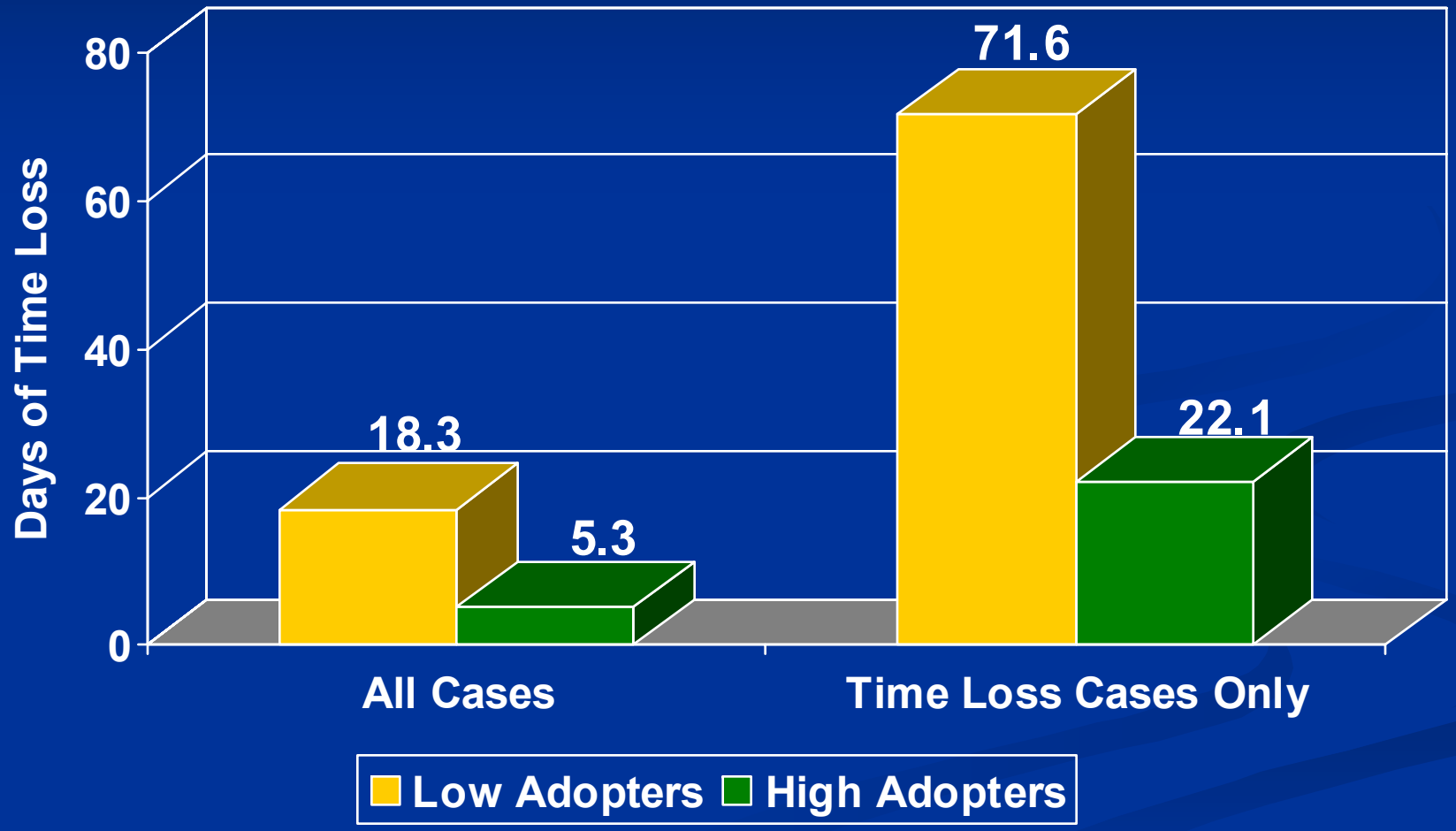
Employer Phone Calls



Effect of Adopting Occupational Health Best Practices on Disability

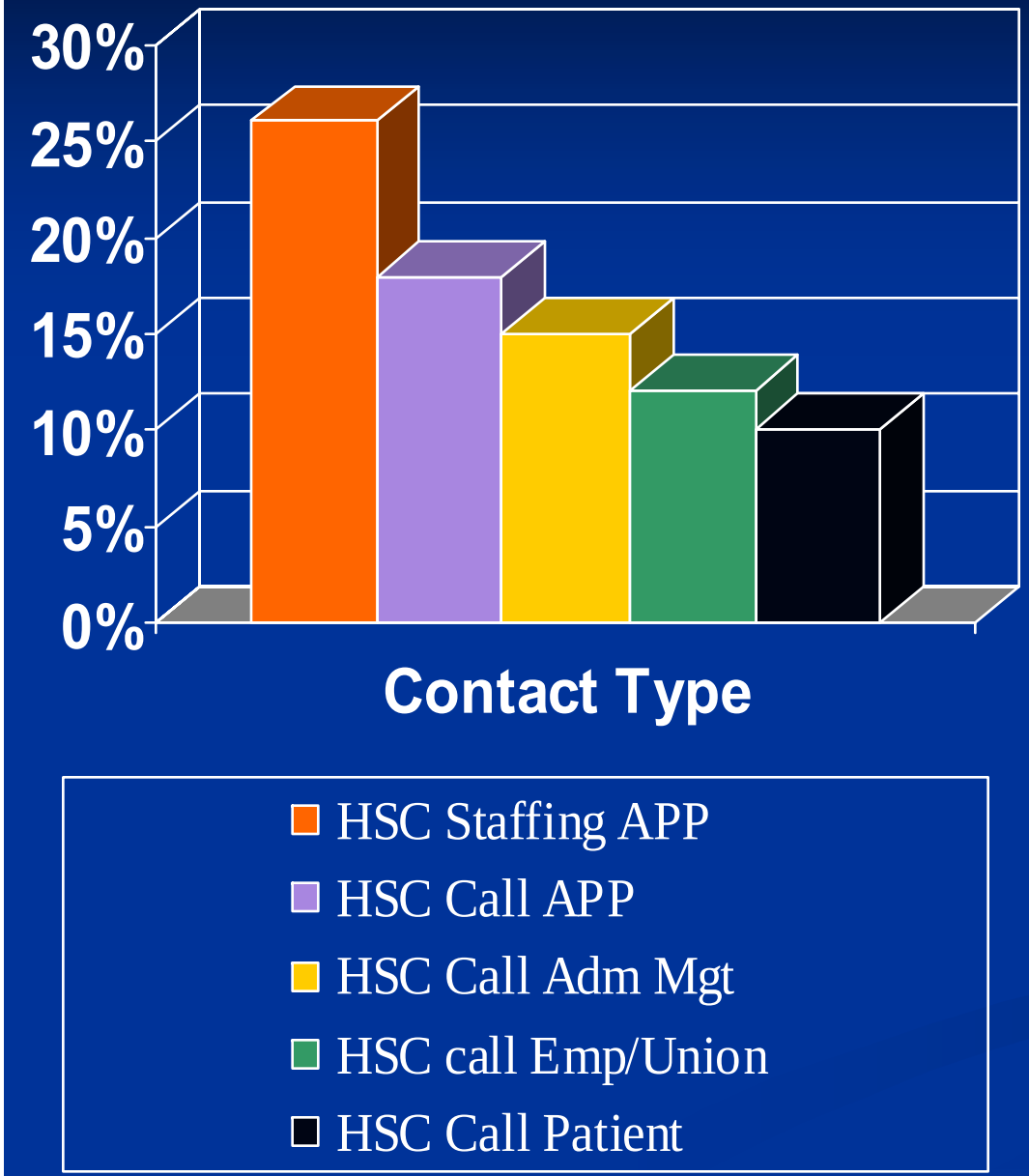
- COHE promoted 3 occ health best practices
  - Sending ROA within 2 business days
  - Completing activity prescription form
  - Contacting employer through phone communication
- An index for these 3 best practices was created to identify "high adopters" and "low adopters":
  - High adopters were at or above 50th percentile of use for 2 out of 3 best practices
  - Low adopters were below 50th percentile of use for all 3 best practices

Time Loss Days for Providers Using Occupational Health Best Practices, Back Sprain Claims, Renton



Differences are statistically significant ($p < .05$).

Health Services Coordination Activity, Renton

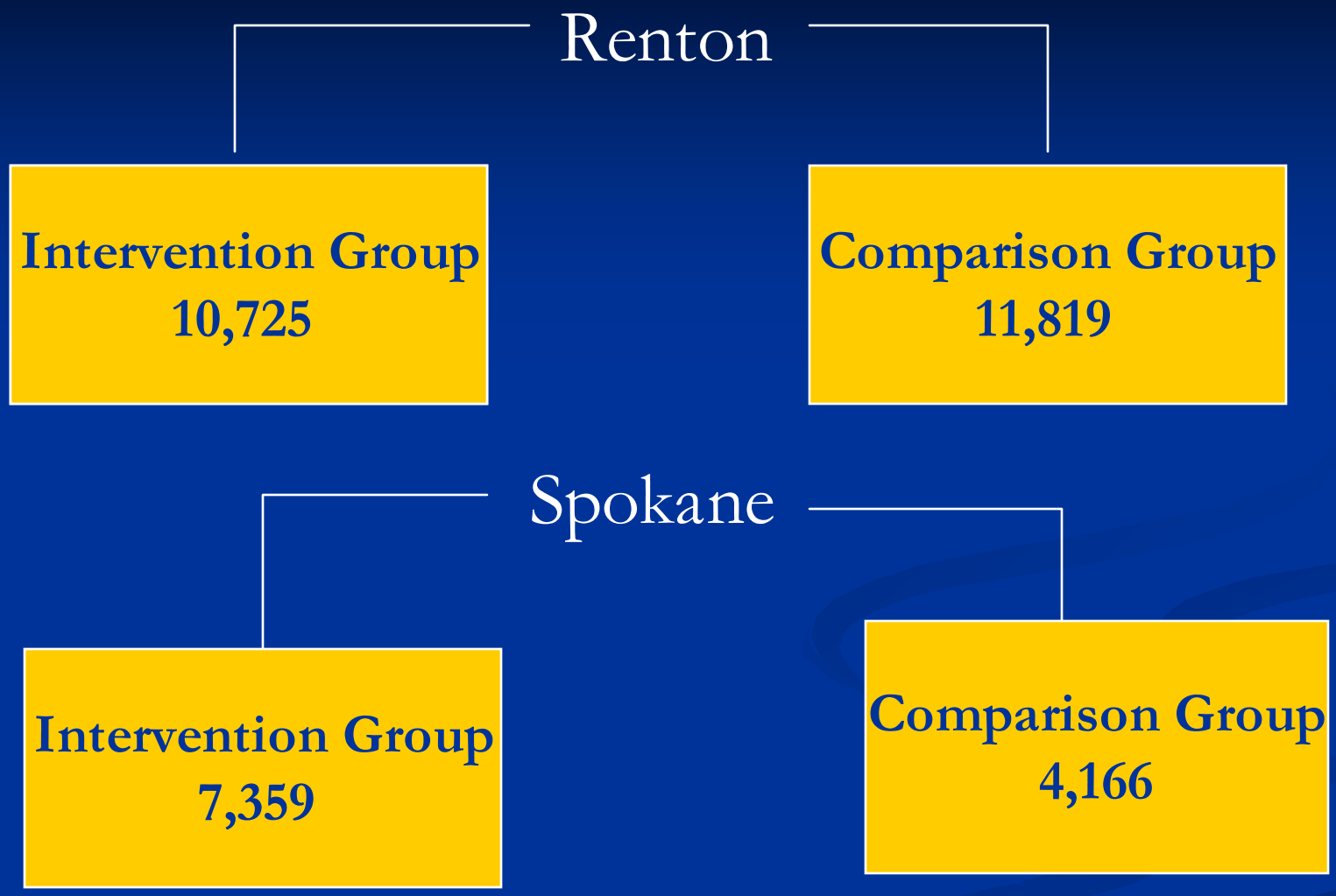


- During evaluation year, 2,027 recorded contacts made by HSCs
- Number of contacts per claim ranged from 1 to 34; median = 5 contacts

Statistical Techniques

- Evaluation tested series of regression models
  - Logistic regression models
  - Multiple linear regression models
  - Linear probability models
- Covariates included:
  - Age and sex
  - Type of injury
  - Type of provider
  - Baseline provider costs (disability and medical)
  - Industry
  - Firm size (FTE workers)

Intervention & Comparison Groups

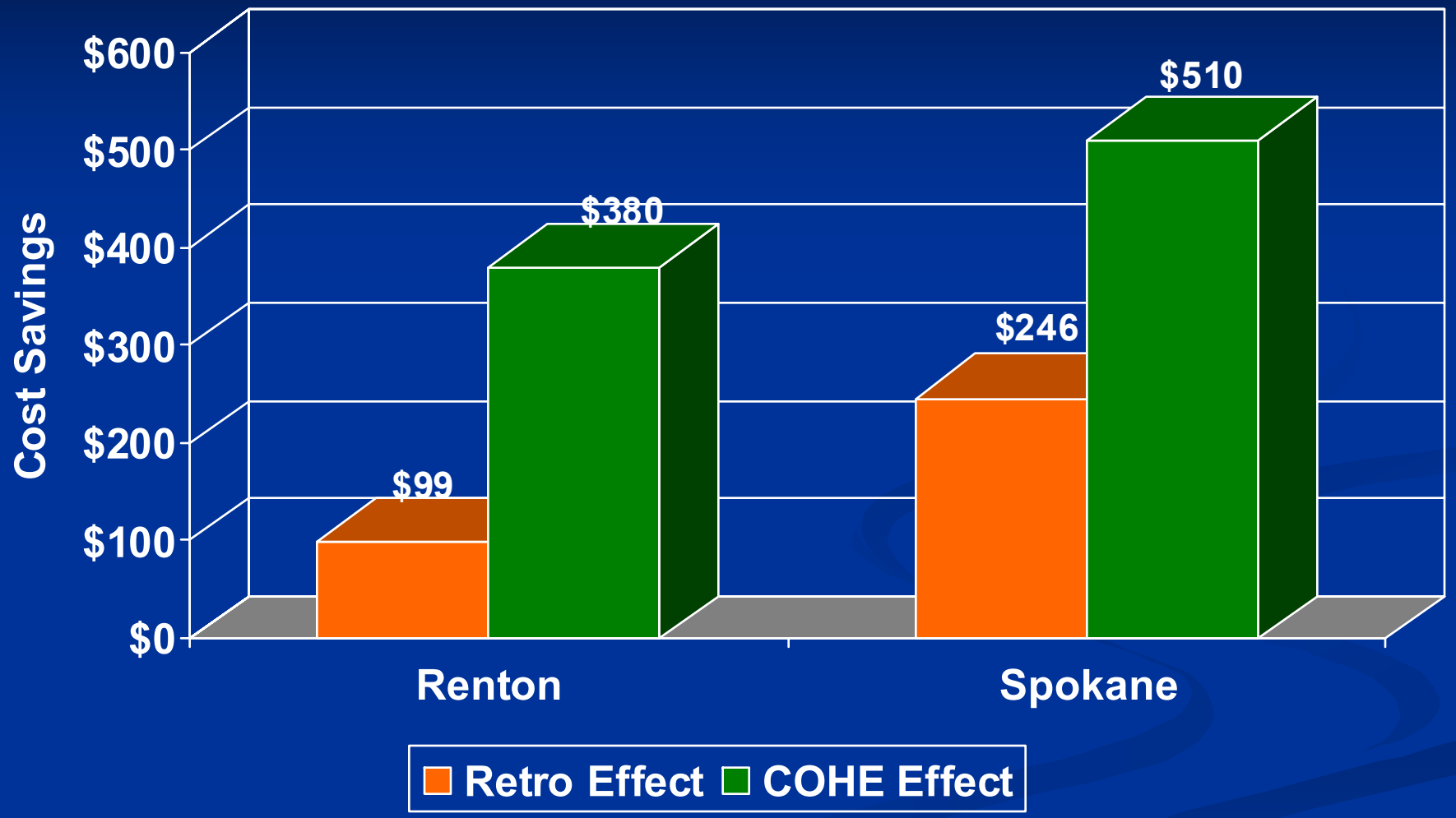


Comparison-group: all cases treated by MDs in COHE target area not participating in pilot

Selected Findings

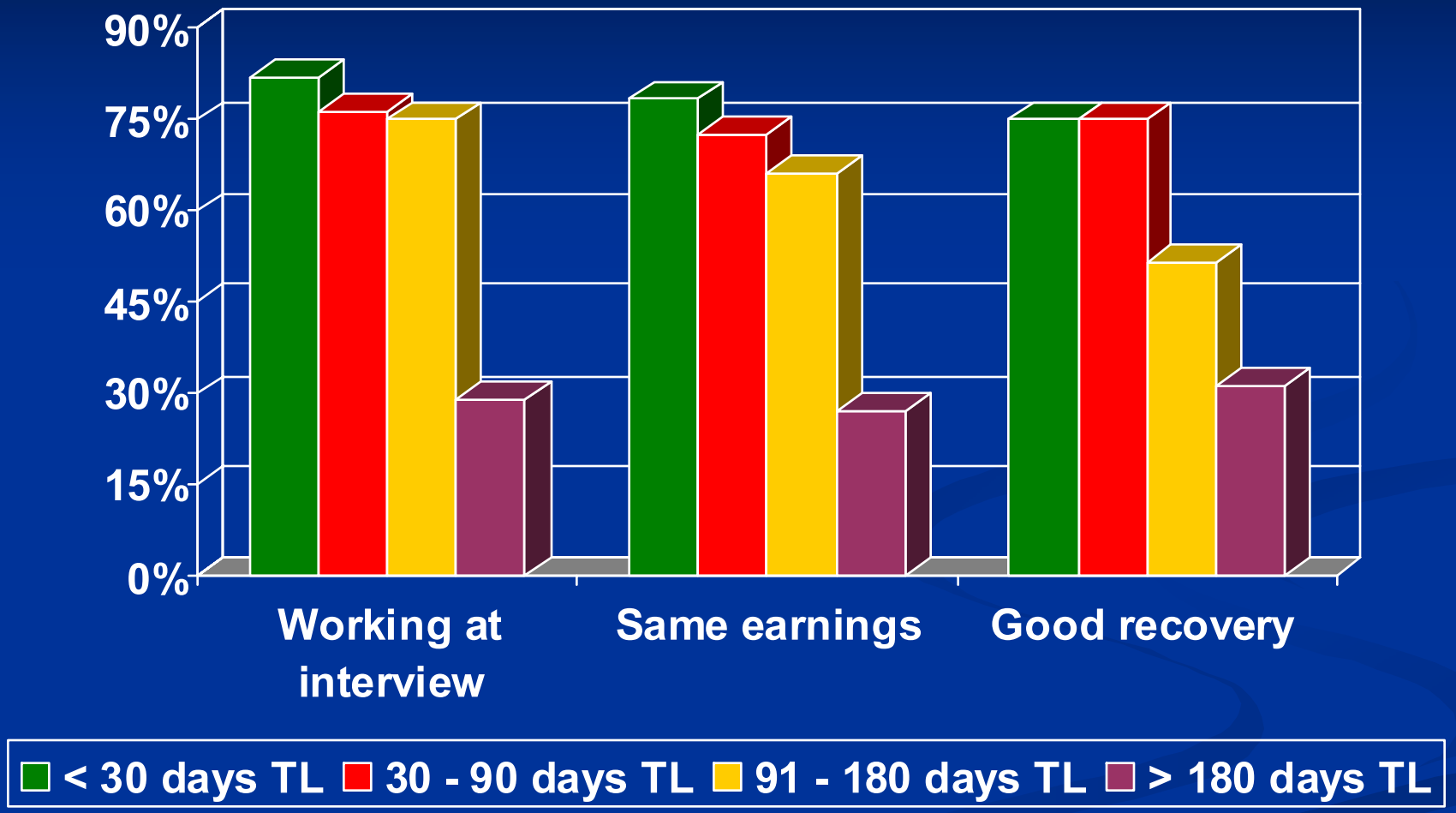
- Pilot disability effects:
  - Time loss incidence: **ORs ≈ .75 - .80; p < .01**
  - Reduced disability days
    - All cases: **4.8 days to 6.0 days, p < .01**
    - Time loss cases only: **15.9 days to 18.0 days, p < .01**
    - Strongest effects: **Back sprains, other sprains, CTS**
- Pilot Cost savings:
  - Renton: **$401 per claim, p < .01**
  - Spokane: **$487 per claim, p < .01**
  - 60% - 70% of cost savings from reduced disability costs

COHE and Retro Adjusted Cost Savings Effects



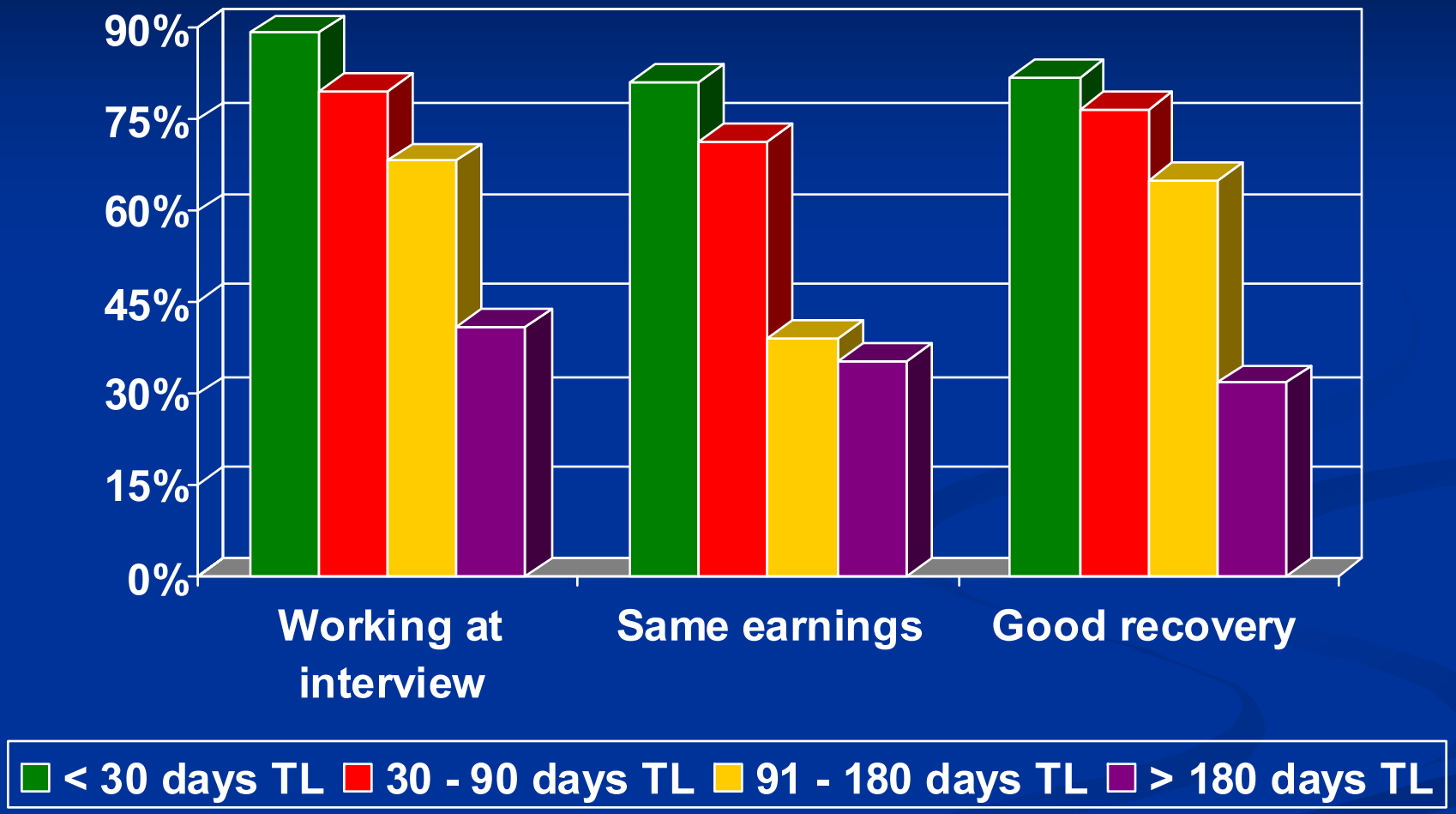
COHE estimates are statistically significant ($p < .01$); retro estimates are not statistically significant.

Survey Outcomes by Length of Time Loss, Renton (all respondents, n = 839)



Number of cases are: < 30 days (590), 30 – 90 days (88), 91 – 180 days (68), over 180 days (93). Differences in survey outcomes are statistically significant, $p < .05$.

Survey Outcomes by Length of Time Loss, Spokane (all respondents, n = 825)



Number of cases are: < 30 days (555), 30 – 90 days (99), 91 – 180 days (60), over 180 days (110). Differences in survey outcomes are statistically significant, $p < .05$.

Summary Points

- Improving processes of care and promoting occupational health best practices may improve outcomes and reduce disability for injured workers
- Key is providing organizational support on a communitywide basis
- OHS project provides a "test" of IOM quality-improvement model—the IOM did get it right!
- Administrative interventions, or P4P, alone are not likely to engender meaningful improvements in the quality of health care