Reducing Worker Disability and Improving Quality in Washington State Workers' Compensation: Evaluation Findings and Lessons

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Thomas Wickizer, PHD, MPH

Department of Health Services

University of Washington

Topics & "Take Home" Points

- Topics
  - Quality problem
  - Washington State setting, intervention & evaluation
  - Evaluation findings and lessons
- Take Home Points:
  - Financial incentives alone will not improve workers' compensation (WC) health care quality
  - Need interventions that:
    - Provide organizational support for quality improvement (QI)
    - Improve delivery system infrastructure

2001 IOM Report

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)

Washington State Workers' Compensation (WC) and QI

- WC organized as state fund (single payer) system
  - Insures 2/3 of workforce
  - Administered by Dep't of Labor & Industries (DLI)
- DLI has initiated QI projects to improve quality:
  - Managed Care Pilot (1995 – 1998: positive effect)
  - Long-Term Disability Pilot (1994 – 1997: no effect)
  - Occupational Health Services Project (ongoing: ★ positive effect)

Background on WA State Workers' Compensation and Early Quality Improvement Efforts

Disability Prevention: Bad News--Good News

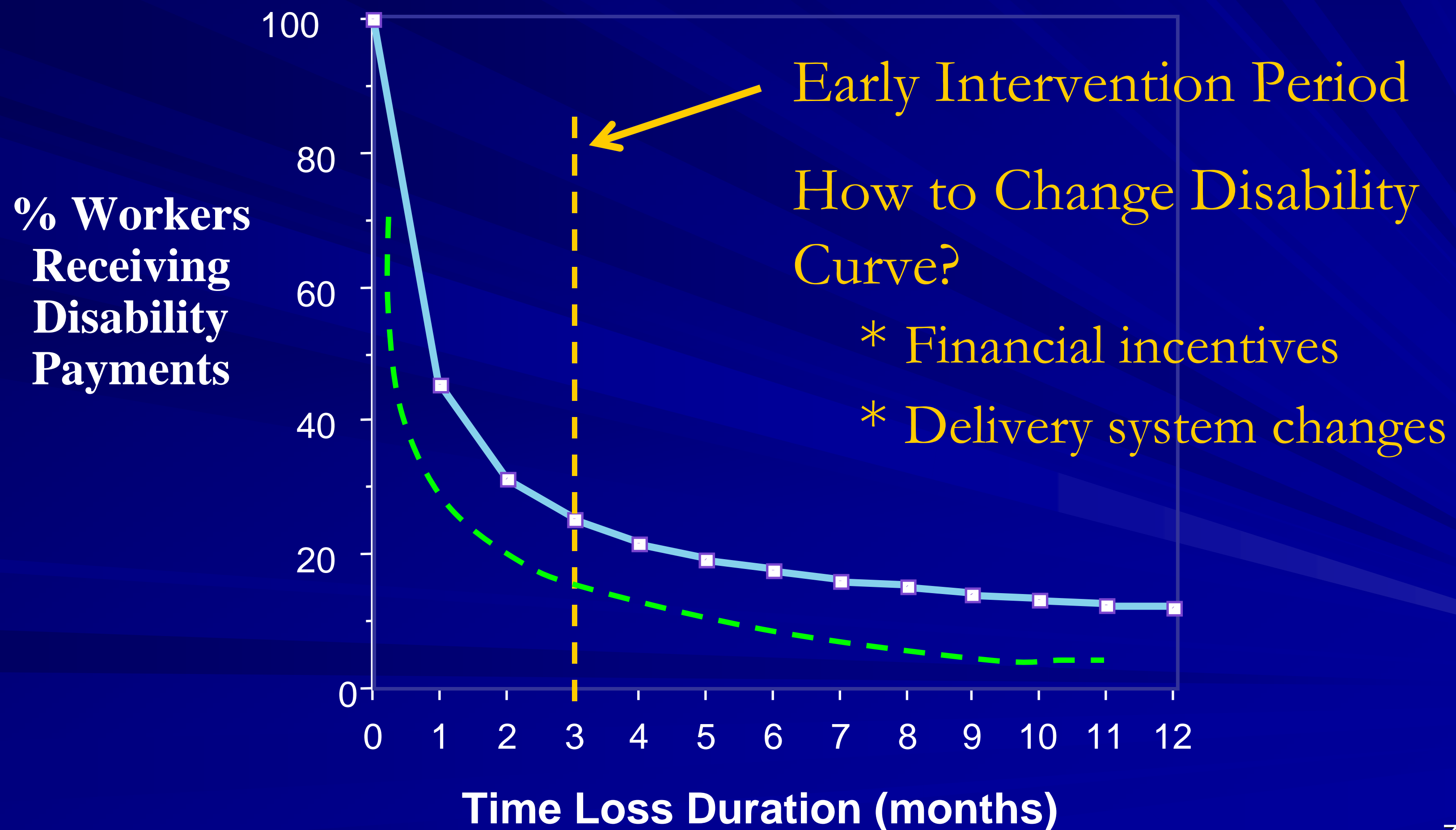
Bad News

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

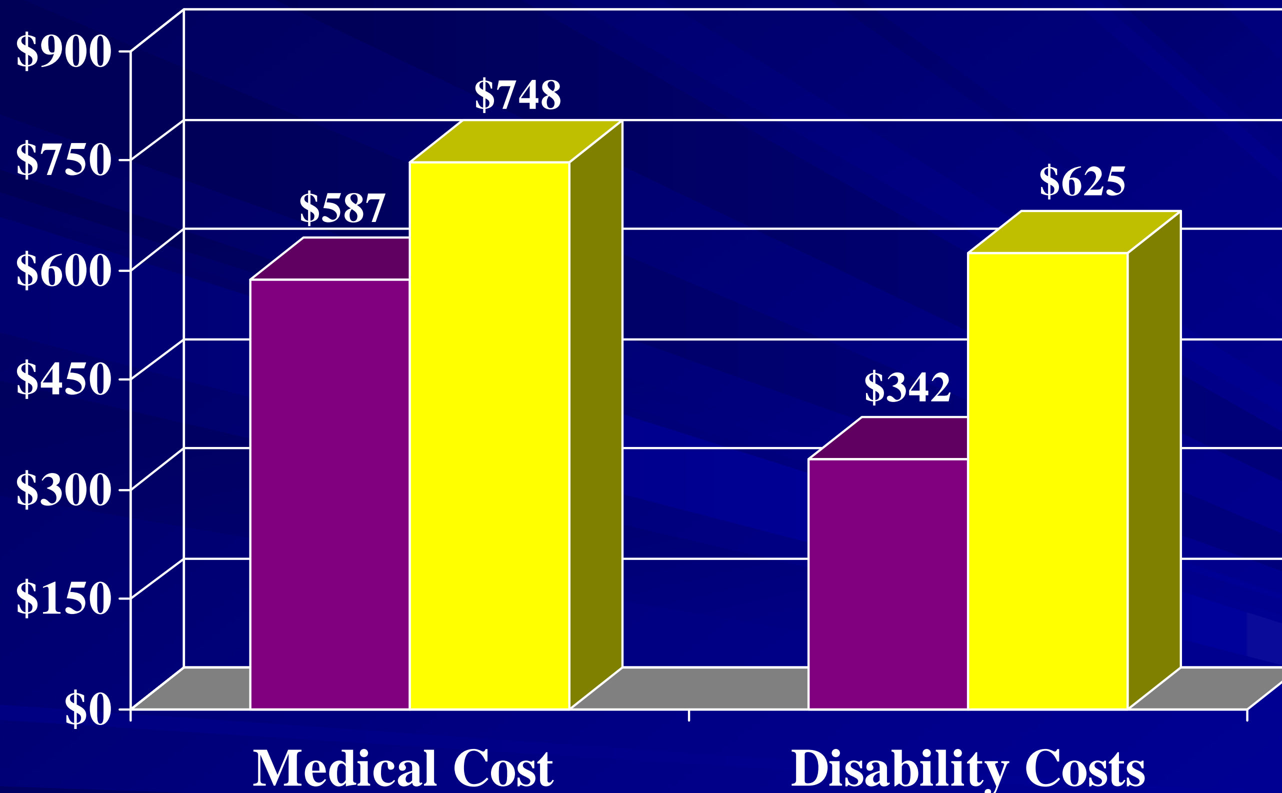
Good News

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

Changes in Disability Status among Injured Workers in WA State



WA State MCP: Differences in Medical and Disability Costs (n=2,217)



Disability costs were paid in usual way and were not under capitated payment.

Fewer workers went on disability (19% vs 14%) and cost per disabled worker was less.

Data based on 9-month follow up.

Cheadle, Wickizer, Franklin et al. Medical Care 1994.

Current Quality Improvement Initiative: Occupational Health Services (OHS) Project

Policy Study Creating (OHS) Project

- WA State is worker choice state
- Can’t place restrictions on worker choice
- University of Washington (UW) conducted policy study to generate recommendations to initiate QI project, based upon lessons from MCP

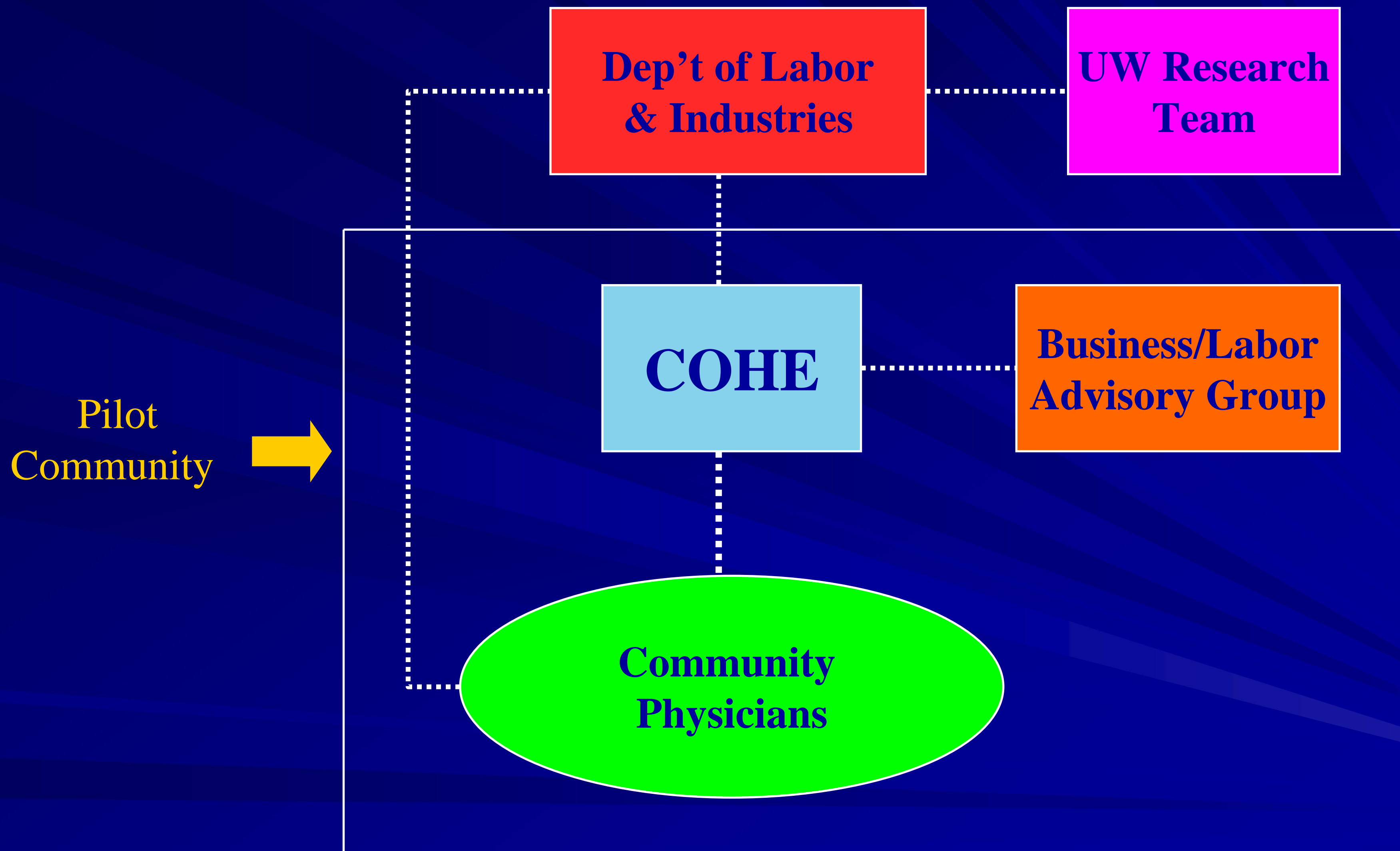
OHS Project

- WA State OHS Project initiated in 1998:
  - To improve quality and outcomes of occupational health care
  - To enhance patient and employer satisfaction
- OHS is not “managed care”
- No restrictions placed on provider choice

System Redesign through OHS

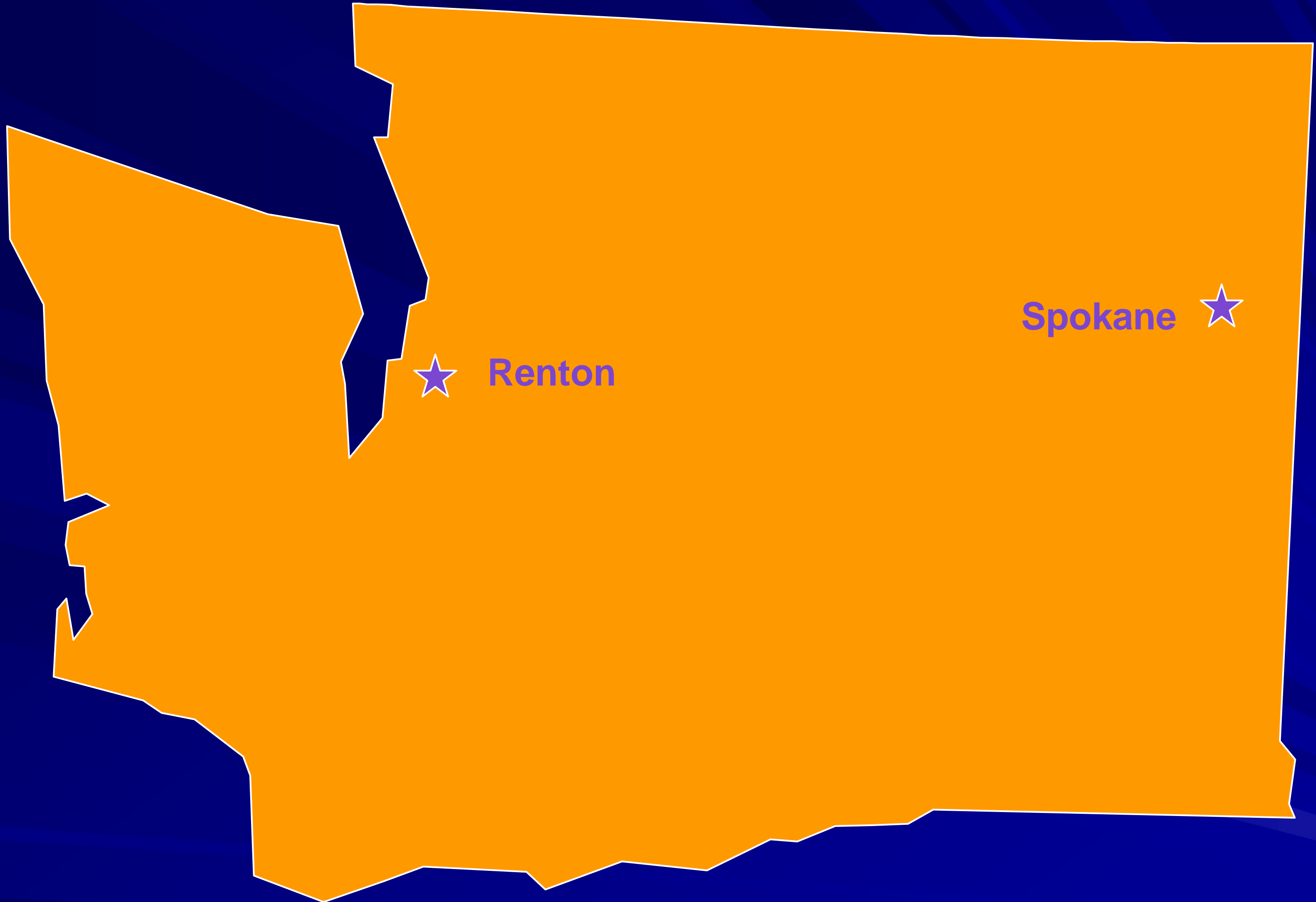
- Developed quality indicators
- Developed financial and non-financial incentives
- Established pilot centers for occupational health and education (COHEs) to:
  - – Support and direct quality improvement activities:
    - mentoring and CME for community MDs
    - disseminate treatment guidelines and best practices information
    - Enhance care coordination
  - – Identify and provide care for high-risk cases

OHS-COHE Organization



OHS Pilot Sites

- Renton, Washington
  - Urban area part of Seattle metropolitan area
  - Valley General Hospital
  - Pilot implementation started July 2002
  - > 175 MDs recruited for pilot in target area
- Spokane, Washington
  - Urban/rural area serving more agricultural base
  - St. Luke's Rehabilitation Institute
  - Pilot implementation started July 2003
  - > 650 MDs recruited for pilot in target area


Spokane
Renton

OHS Quality Indicators

- Quality indicators developed to guide QI process:
  - Submission of accident report
  - Provider-employer communication
  - Assessment of impediments to return to work
  - Completion of activity prescription forms
  - Treatment for specific conditions
- Financial incentives for meeting QI targets:
  - 50% increase in payment for submission of accident report within 2 business days

Selected OHS Quality Indicators

- Performance Indicators
  - *Timeliness of submission of accident report*
    - "% of claims for which AR is received within 2 business days of first visit"
  - *Two-way communication with employer*
    - "% of claims for which two-way communication between provider and employer about return to work is accomplished at first visit when worker is expected to be off work"

QI Component	QI Objective
Structural Change Components	
•Physician Continuing Medical Education (CME)	•Enhance physician knowledge and training in treating occupational injuries and diseases
•Physician mentoring by senior clinicians	•Provide consultation for complex cases
•Use of Health Services Coordinators	•Improve coordination of care •Improve communication with employers to foster return to work •Reduce administrative burden for physicians
•Development of information technology	•Improve patient tracking
Financial Incentive Component	
•Enhanced payment for activities related to quality indicators	•Promote occupational health best practices

OHS Evaluation

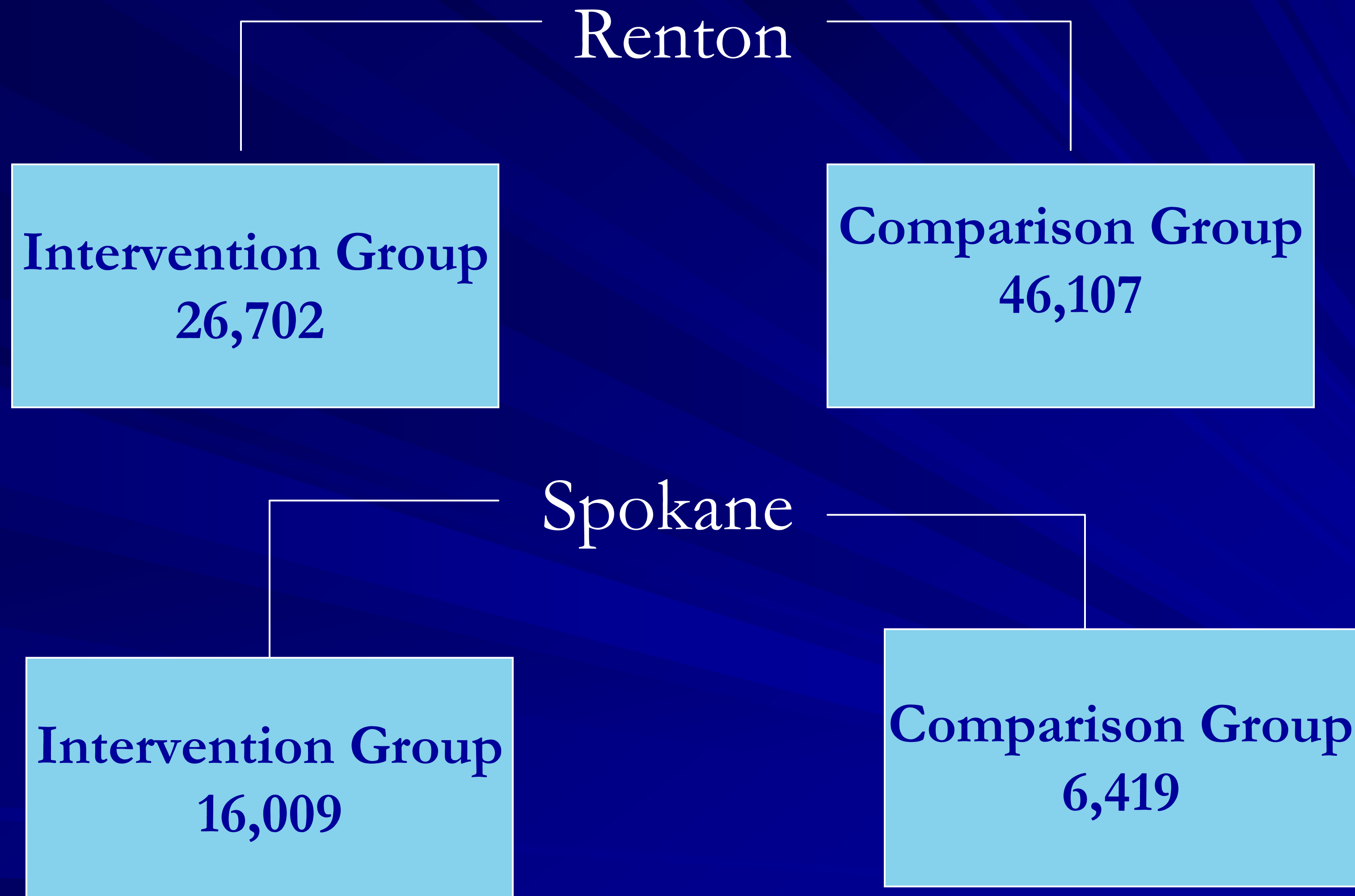
Evaluation Questions

- Was the OHS intervention associated with reduced disability?
- Was the OHS intervention associated with reduced disability payments and medical costs?
- Did physicians who adopted occupational health best practices perform better?

Evaluation Data

- L&I administrative data
- Short- and long-term injured worker surveys
- Physician surveys
- Qualitative information gathered through focus groups

Intervention & Comparison Group Claims



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

Distribution of Injuries

Injury/Condition	OHS Group	Comp. Group
Back sprain	13.1%	16.6%
CTS	0.8%	2.5%
Lacerations and contusions	40.8%	27.8%
Fractures	4.1%	3.1%
Other sprains	22.6%	22.9%
Other/Ill Defined Injuries	18.7%	27.3%

Outcome Measures

- Primary Outcome Measures
  - Disability days per claim
  - Disability (time loss) costs
  - Medical costs
- Secondary Outcome Measures
  - Rejected claims
  - Claims reopened
  - Hiring an attorney
  - PD pensions
  - Worker and employer appeals

Statistical Analysis

- Statistical analyses (difference-in-difference regression) to assess outcomes controlling for:
  - Age and sex
  - Type of injury
  - Type of provider
  - Industry
  - Firm size (FTE workers)
- Outcomes analyzed 3 & 4 years after implementation

Did the OHS Intervention Reduce Disability and Constrain Resource Consumption?

Descriptive Data on Outcomes, Years 3 &4

Measure	OHS Group (N = 27,117)	Comparison Group (N = 33,242)	Difference
Time loss days per claim	20.6	33.9	13.3
Time loss costs per claim	$1,127	$2,022	$895
Medical costs per claim	$2,467	$3,238	$771

Primary Evaluation Findings

Measure	Adjusted Differences in Outcomes *	95% Confidence Interval	P-Value
Time loss days per claim	**- 4.1**	-6.9 to -1.3	.004
Time loss costs per claim	**- $347**	-$543 to -$160	< .001
Medical costs per claim	**- $245**	-$426 to -$61	< .001

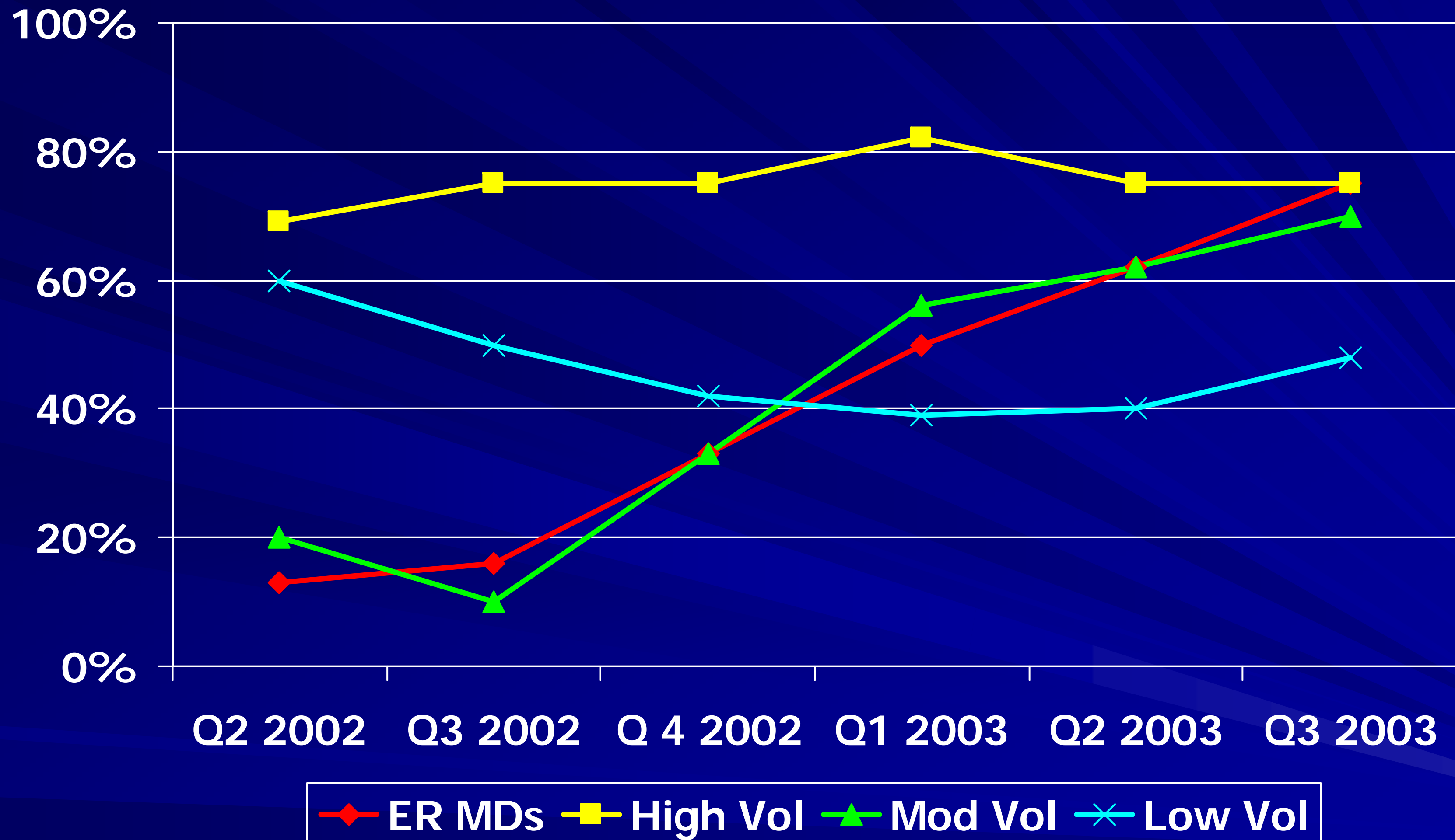
* Data adjusted for clustering within physician.

Did the QI Intervention Constrain WC Resources ?

- Costs of OHS pilot
  - Administrative support: $65 per claim
  - Increased physician payments: $55 per claim
- Net cost saving (medical & disability costs):
  - $480 per claim

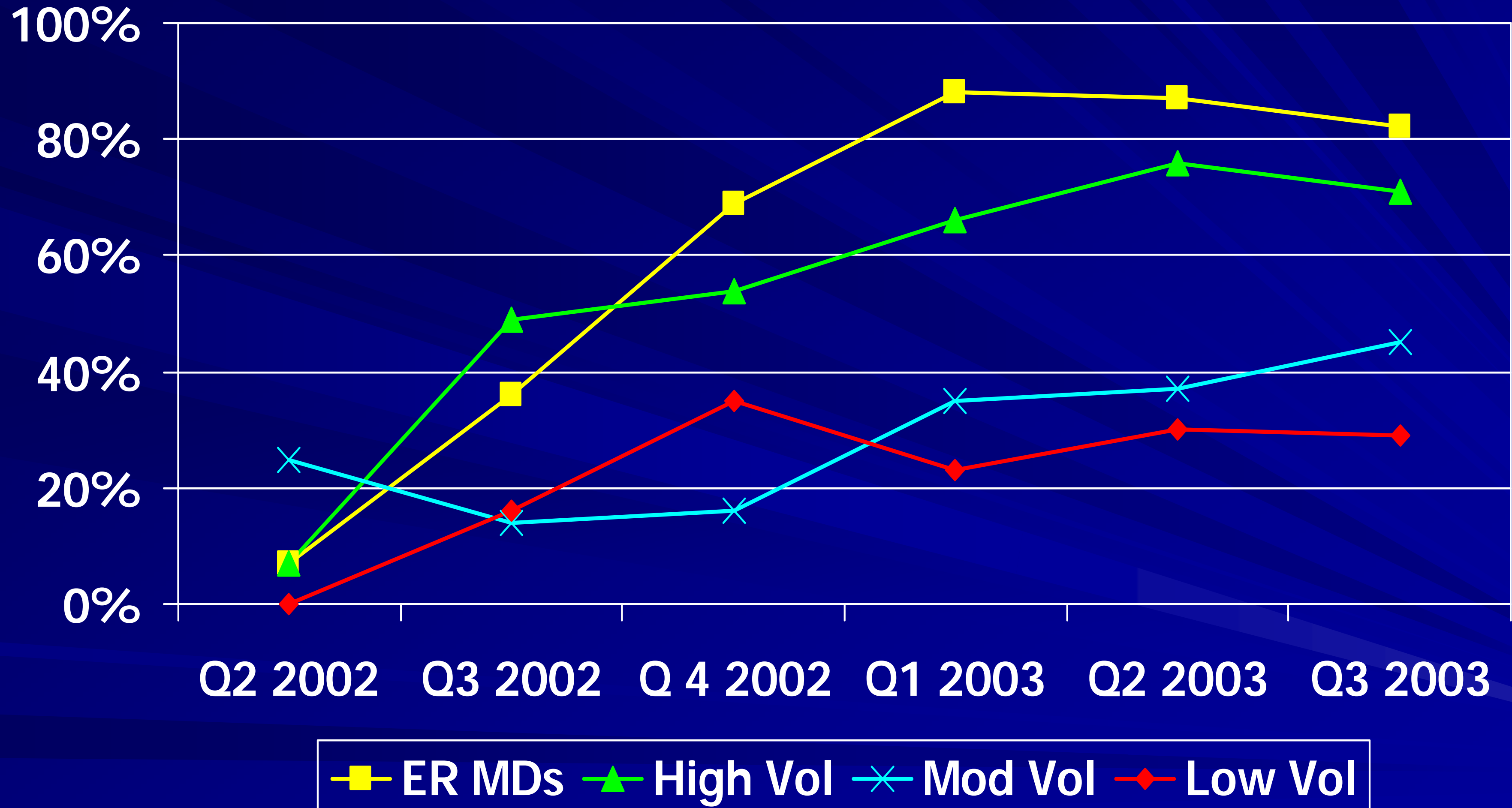
Did OHS Pilot Physicians Adopt Occupational Health Best Practices and Did This Affect Performance?

Submission of Report of Accident within 2 Days

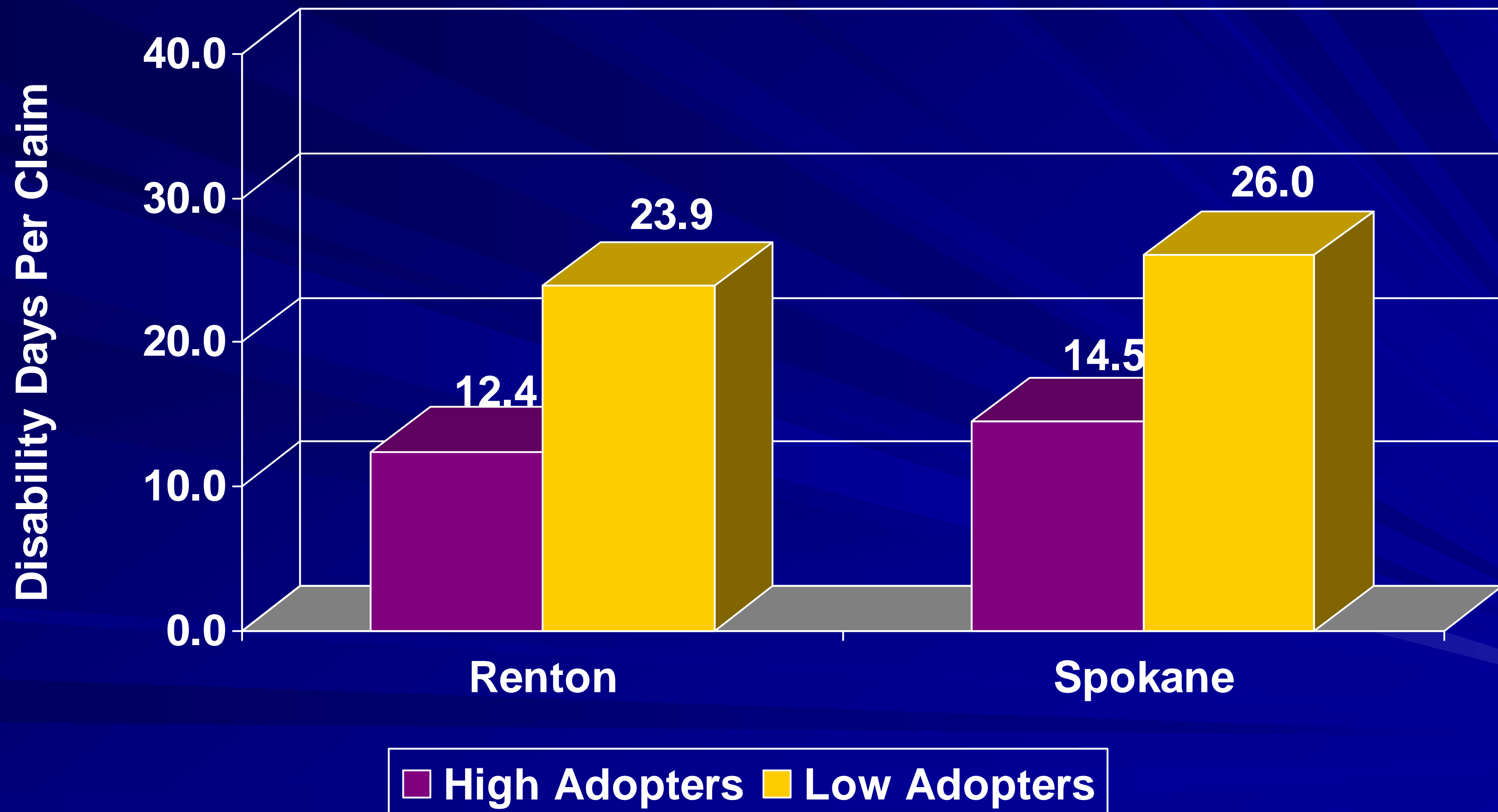


Pre-OHS baseline values: ER MDs 2%; other providers 8%

Use of Activity Prescription Forms



Reduction in Disability Days for Back Claims Associated with Adoption of Occupational Health Best Practices



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

Other Outcomes: Preliminary Analysis

Outcomes	Renton		Spokane	
	OHS Group (n=10,725)	Comp. .Group (n = 11,816)	OHS Group (n=7,359)	Comp. Group (n=3,865)
Rejected claim	8.3%**	12.4%	5.3%*	8.2%
Protest	4.7%**	6.5%	4.1%**	6.3%
Claim reopening	0.9%*	1.2%	0.7%*	1.2%
Use of attorney	1.2%**	2.4%	3.1%**	4.8%
Pensions per 10,000 claims	9.7	18.9	8.1	15.5

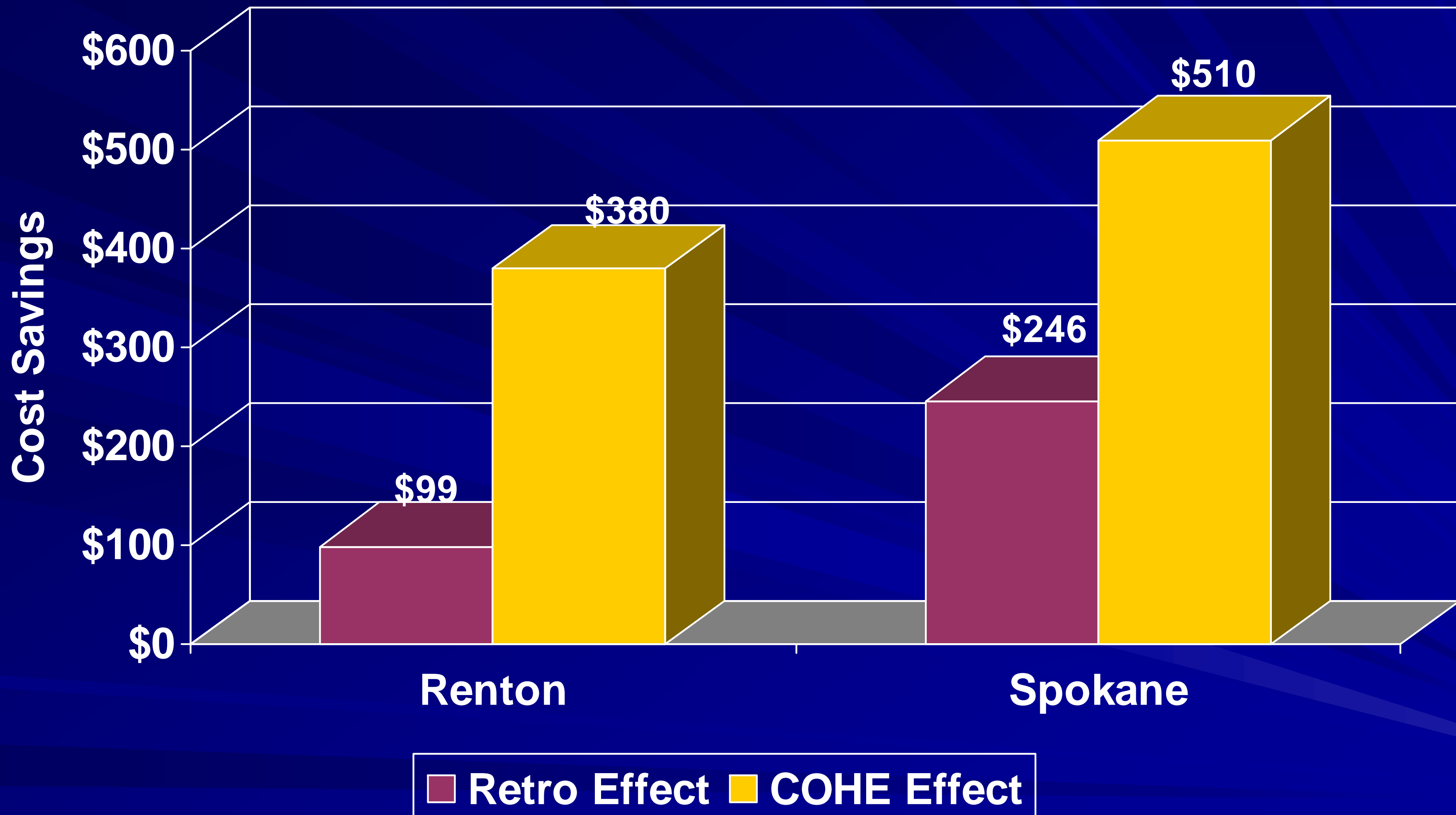
** $p < .01$; * $p < 05$

Can Quality Improvement Be Achieved by Administrative Interventions Alone?

Administrative Interventions Versus Delivery System Interventions

- Can administrative interventions alone reduce WC disability and constrain resource use?
- WA State WC developed 2 administrative interventions:
  - – Long-term disability (LTD) pilot (no effect)
  - – Retro program to improve claims management
    - Retro program: less effect than OHS system intervention

OHS Intervention Versus Retro Cost Savings



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

What Did OHS Intervention Physicians and Employers Say about the Intervention?

Focus Groups

- Gathered qualitative information on OHS operations from 3 groups:
  - OHS providers
  - Provider office staff
  - Employers
- Identify components of OHS that promoted best practices and improved quality

Summary of Provider Focus Groups *

- Financial incentives only moderately helpful in promoting occupational health best practices
- OHS changed "worker time loss expectations"
- Health services coordinators (HSC) were important, acted as "problem solvers"
- Activity Prescription Form (APF) important for promoting improved provider-patient contact

* Office staff had similar comments.

Employer Focus Group

- OHS greatly improved communication and interaction between employers and providers
- Health services coordinators important for success
- Employers now had local resource to help resolve WC issues & problems

Summary: Evaluation Findings

- QI intervention associated with reduced disability and WC resource consumption
- Other outcomes
  - Reduced rejected claims & appeals
  - Reduced reopened claims & use of attorneys
  - Lower PD pension rate
- Adoption of occupational health best practices associated with reduced disability

Summary: Evaluation Lessons

- Enhancing delivery system infrastructure key to improving WC quality
- Need to create better "tool kit" for WC providers
- Need better "evidence-based" policy making in WC

Summary: Evaluation Lessons (con't)

- Effective collaboration between research organizations and WC agencies can enhance policy making
- QI in WC requires time & effort and can't be done "on the cheap"—communication among stakeholders is critical for building trust
- Thank you!