



How to develop a Pay-for-performance Program: BTE's Spine Care Link

July 31st 2007



Agenda & Faculty

Introduction to incentives and rewards programs:

- Francois de Brantes, National Coordinator, Bridges To Excellence

The Back Pain problem for employers:

- Shelly Wolff, Group and Health Care North American Leader, Health and Productivity, Watson Wyatt Worldwide

The Back Pain problem for health care providers:

- Dr. James Weinstein, Chairman, Department of Orthopedic Surgery, Dartmouth Hitchcock Medical Center

The Back Pain problem for measurement experts and actuaries:

- Dr. John Williams, Principal, The WDE Group

Putting it all together: The Spine Care Link

- Francois de Brantes



What is being paid for today? Volume!

Payment structures send powerful signals about type of care purchasers want delivered

- Physicians are professionals—but they also respond to incentives

Current signals

- Want more units of care
- “High-tech” care is most highly valued
- Want less primary care
- Coordination is not valued
 - Each physician should do their own thing
 - Redundant services not a problem
- Quality not important
 - Payment same for low quality care
 - Mistakes yield more payment



P4P programs are designed to shift some of the focus from volume to results

- P4P is an attempt to fight against the natural incentive of volume-based medicine, and focus effort on quality of care – but the dollars at stake are often small
- Consumer-directed health plans are an attempt to increase consumer sensitivity to price, and it's working – but consumers still don't have good pricing information to make valid decisions
- Tiered networks are an attempt to minimize the purchasers from bearing all the financial risk of poor quality care – but the measures used are often imprecise



We've learned some important lessons in P4P

- Incentives work and can lead to practice reengineering, and practices need help to reengineer
- Better quality can cost less, and you need to focus on the right measures
- Self-assessment of performance leads to focused quality improvement, and it's resource-intensive to pull charts
- Employers banding together can create enough critical mass to impact physician behavior, but you need the plans to really make it work (or CMS)



Back Pain is one of the Leading Causes of Healthcare and Disability Claims

Temporary Disability

- Annually affects 3-4% of population

Permanent Disability

- Affects 1% of working-age population

Employer Costs for medical care, lost wages, disability and retraining costs range between \$20-50 Billion/year

- Estimated \$75-100 Billion/year – total economic impact
- In 2003, the average medical claim associated with LBP was more than \$43,000 according to MostChoice.com
- Annual productivity cost estimated \$28 Billion/year



Magnitude of the Problem

Population Prevalence

- Approximately 80% of Americans experience LBP during their lifetime
- Growth of LBP has grown 14 times the rate of population growth
- LBP is second only to the common cold as a cause of lost work time for adults under 46-years of age
- 5th most common cause for hospitalization
- 3rd most common reason to undergo a surgical procedure
 - U.S. rate of surgery is 40% higher than other countries



Low Back Pain in the Workplace

LBP accounts for 15-25% of all Workers' Compensation claims/year and 30-40% of costs

- During lifetime 1-2% of all workers will file a claim

Duration and cost of disability

- Small percent of claims (4.6 – 8.82%) account for large percent of disability days (78-90%) and costs (65-85%)

Rate of recurrent LBP episodes within one year

- 33% require additional care
- 30-50% of recurrent cases will be disabled from work
- Rate of recurrence – male to female is 4:1



Outcomes and Costs of Acute Low Back Pain

Primary providers/chiropractic/orthopedic

- Functional recovery and return to work similar among providers
- Cost of cure highest for chiropractor and orthopedic surgeon
- Cost of cure lowest for primary providers and HMO practitioners

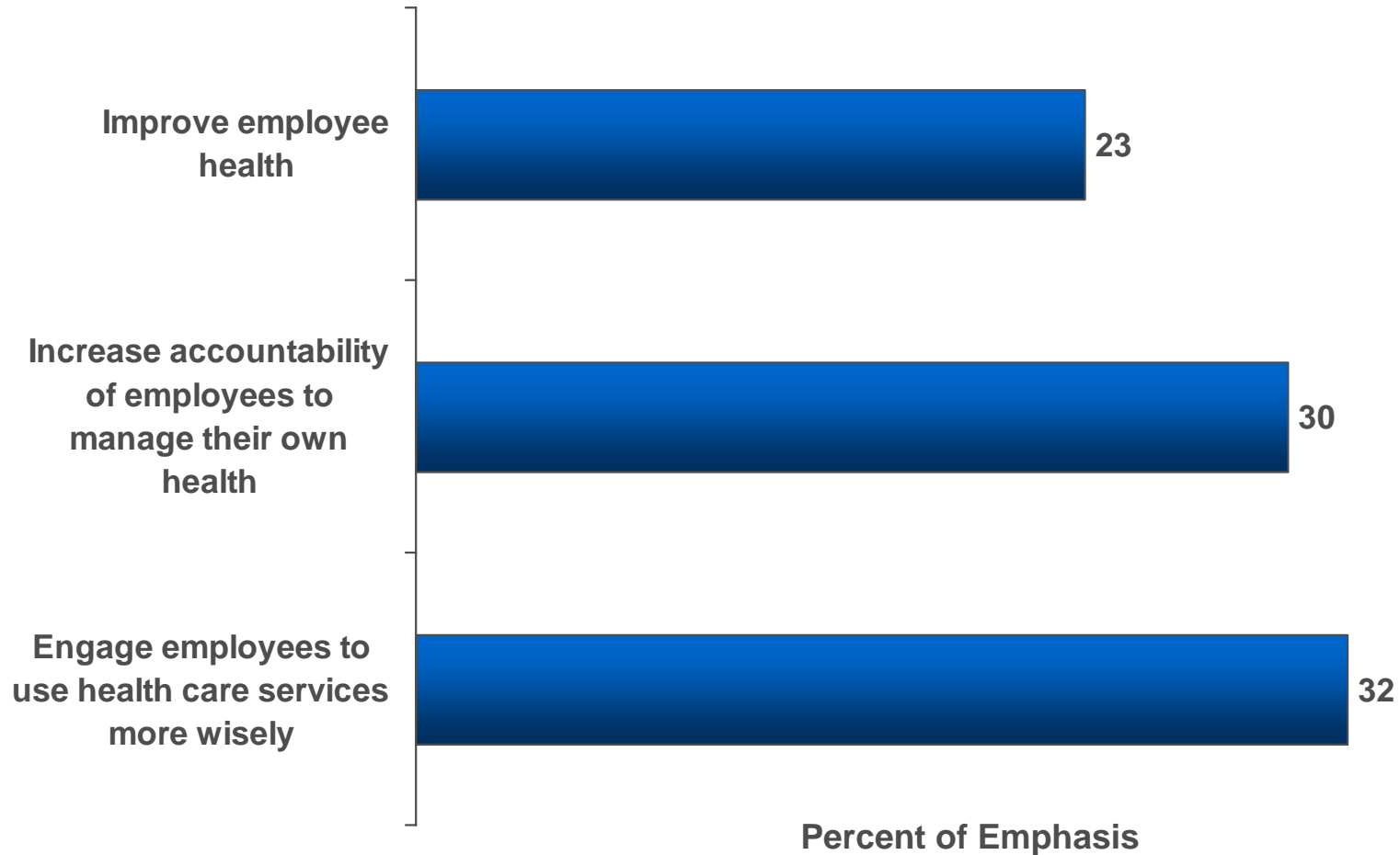
Degree of satisfaction of care

- Highest rating by chiropractors

Patients with back pain are 4x more likely to suffer from depression than the general population



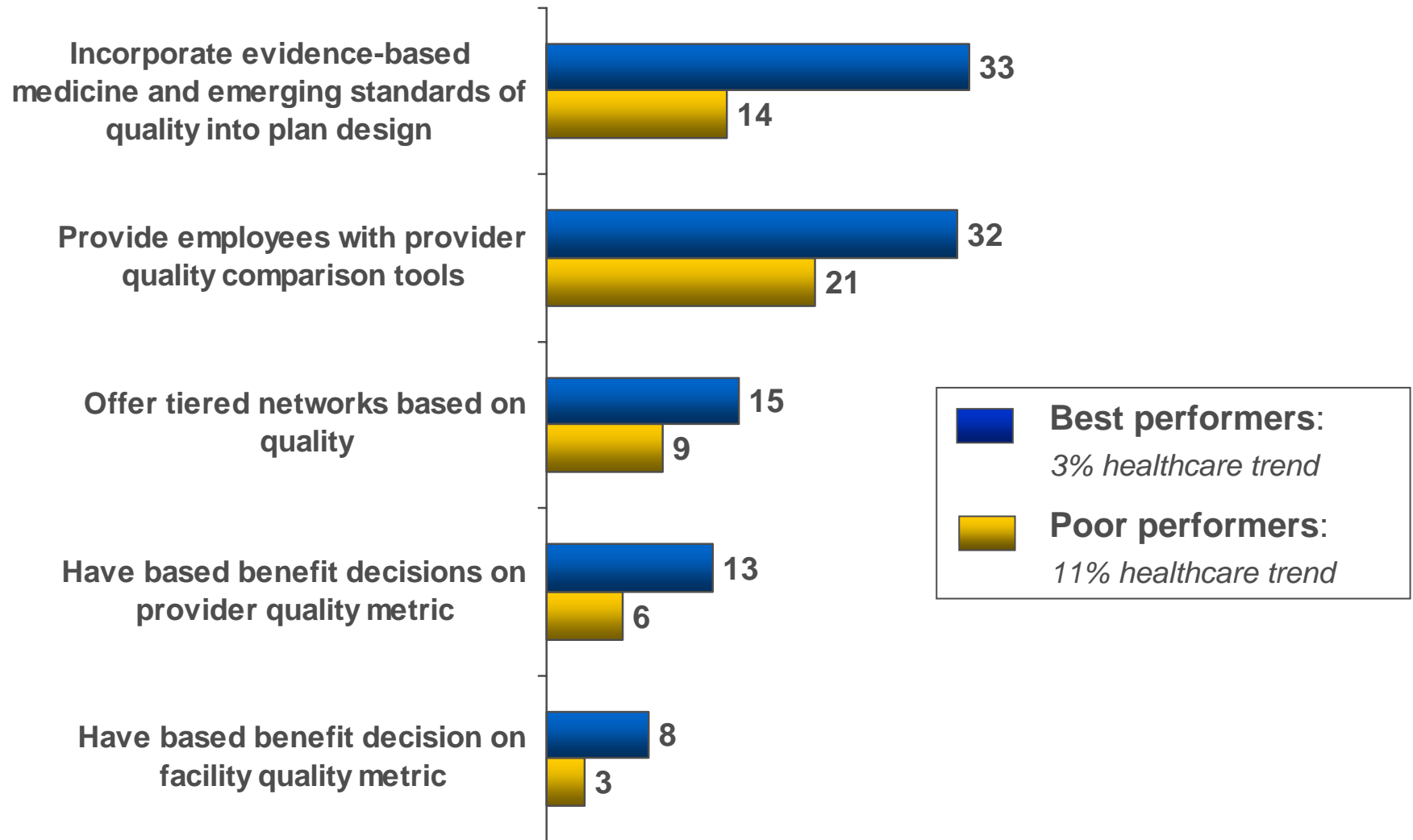
Employers Primary Emphases of Health Care Strategy For the Next 2 Years



Source: Twelfth Annual National Business Group on Health/Watson Wyatt 2007



Time is Right to Focus on Quality



Source: Twelfth Annual National Business Group on Health/Watson Wyatt 2007



Employer Approaches

Prevention

- Partnership with worksite safety to promote prevention at home and work
- Address other causes for back pain; obesity, physical activity, stress, psycho-social factors

Plan design aligned to appropriate use of back surgery through:

- Medical decision support tools
- Participation in best practice treatment
- Choice of best providers

Active outreach

- Nurse advocate services
- Health coaching
- Behavioral therapy
- Online resources



Employer Approaches *(continued)*

Vendors do more

- Identify and promote best practice providers, treatment and cross referrals

Integrated care

- Promote quality across all benefits and government mandated programs

Early intervention

- Triage to multidisciplinary resources based on individual needs

Decision support tools

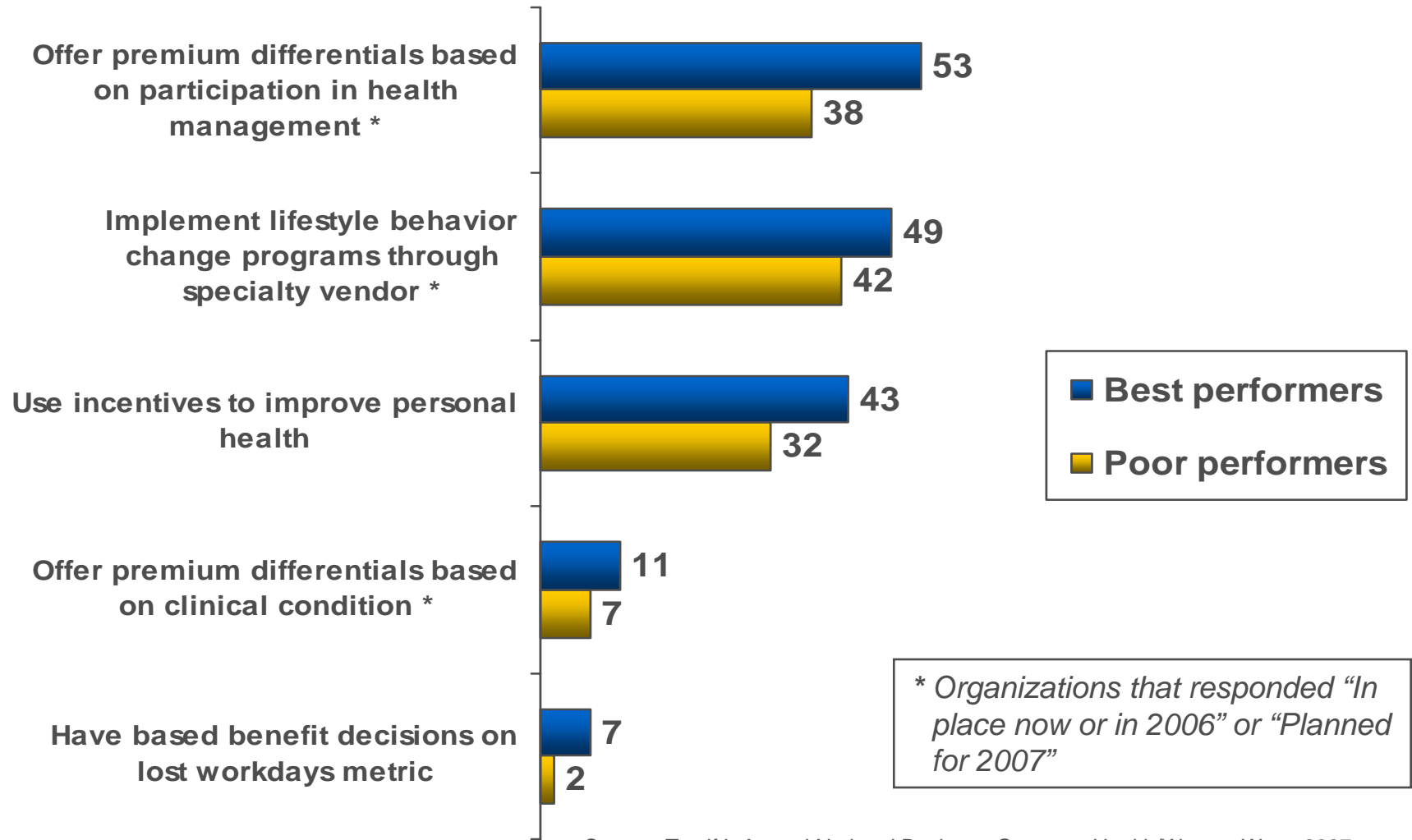
- Patients/employees/members; access to experts and information

Educational programs

- For clinicians to use widely accepted guidelines and understanding of employer support for education and early return to work



Best Performers Focus More on Health Improvement and Productivity



Source: Twelfth Annual National Business Group on Health/Watson Wyatt 2007



Health Plans/Boutiques/e-Health Approaches

Aetna IntelliHealth subscribes to the HONcode principles

CIGNA Well Aware for Better Health program

CareAllies Disease Management Low Back Pain program

Web based, telephonic coaching and self-help training through health management organizations

- Health Dialogue
- Matria
- WebMD
- EMMI Solutions
- SpinalDesigns
- Others

Participation rates increase proportionately with an increase in an engaged consumer



Back Pain- a model for the healthcare dilemma

Every system is designed to get the results it gets

- Who's in charge-multiple providers
- Incentives are not consistent with best practice
- Information sources vary
- Diagnostic Testing
 - MRI / CT / X-RAY /others
- Potpourri of providers and treatments
 - Medications /Injections /Surgeries /Other



Back Pain

Every system is designed to get the results it gets

No Data

No Accountability ?– *not unique*

A continuous call for change without deliverables?

Guidelines/clinical pathways

Solutions:

Best Evidence

Episodes of Care

Shared Decision Making (Decision Support)

Health Status Measures

Imagine

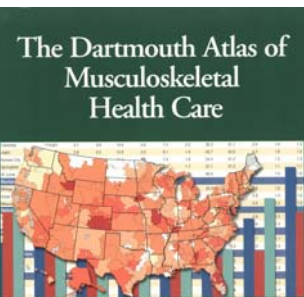
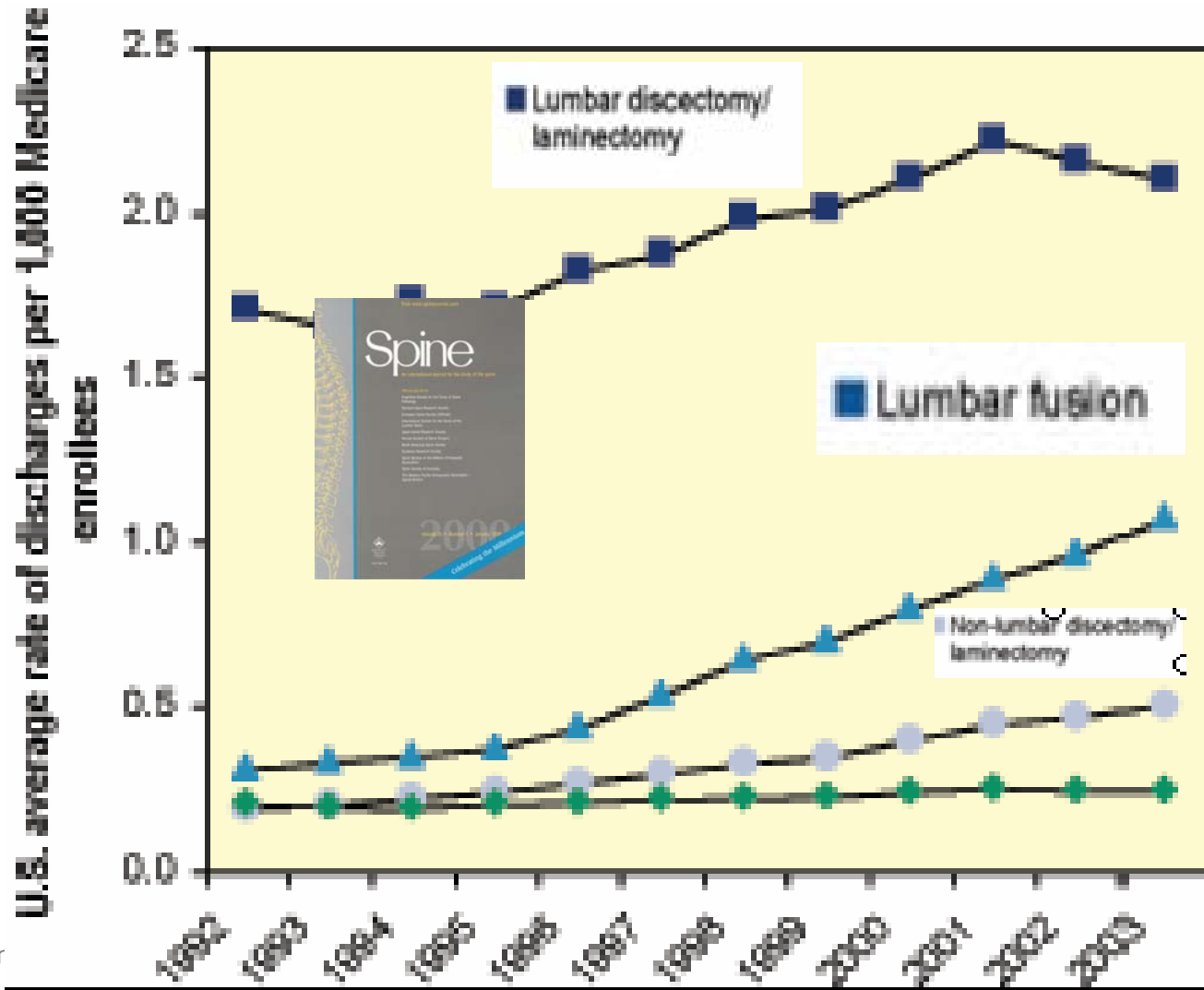
“an internet strategy that links you to the best care in the world”



United States Trends and Regional Variations in Lumbar Spine Surgery: 1992-2003

SPINE Nov. 1, 2006

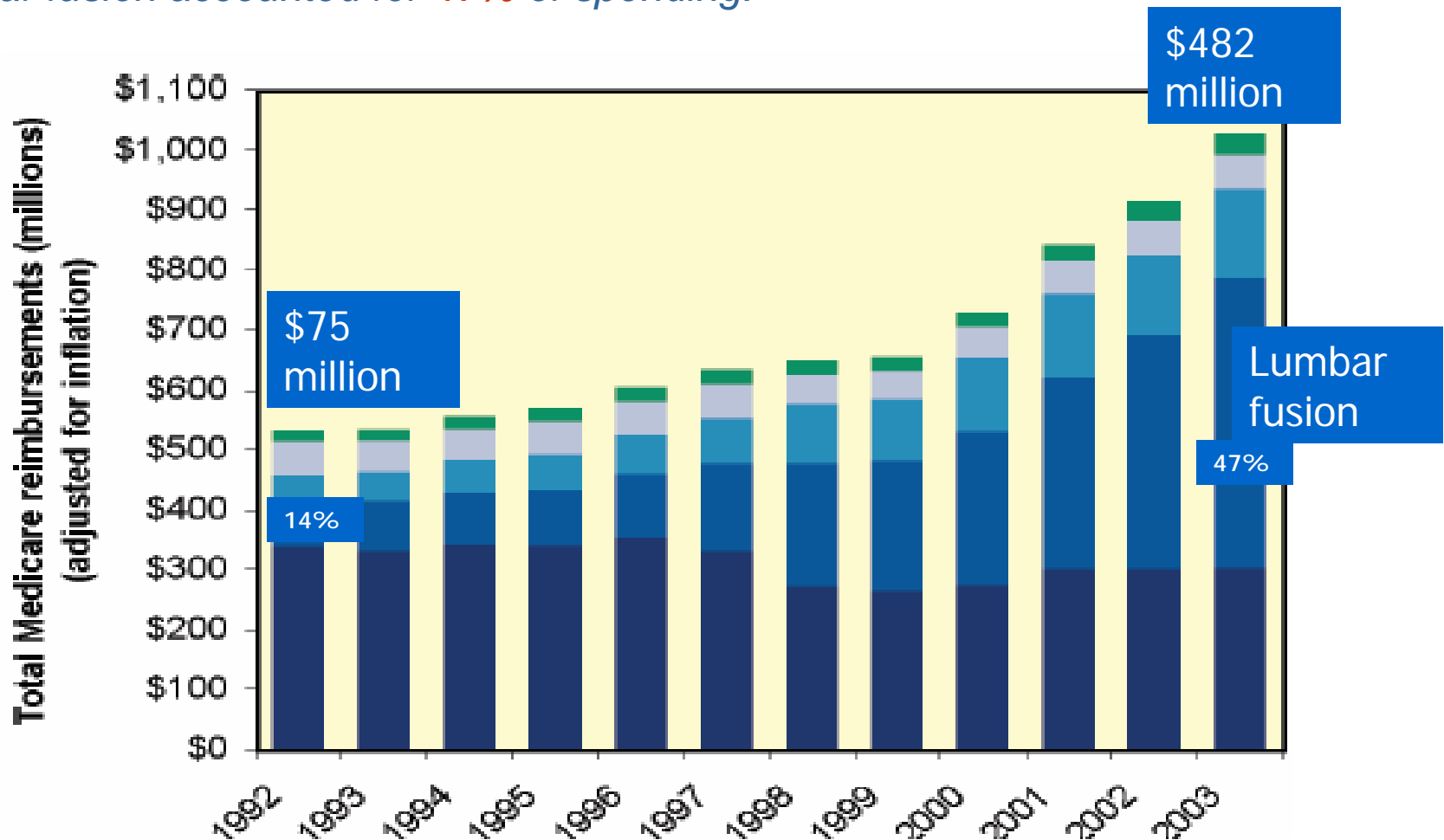
James N. Weinstein, Jon D. Lurie, Patrick Olson, Kristy Bronner, Elliott Fisher





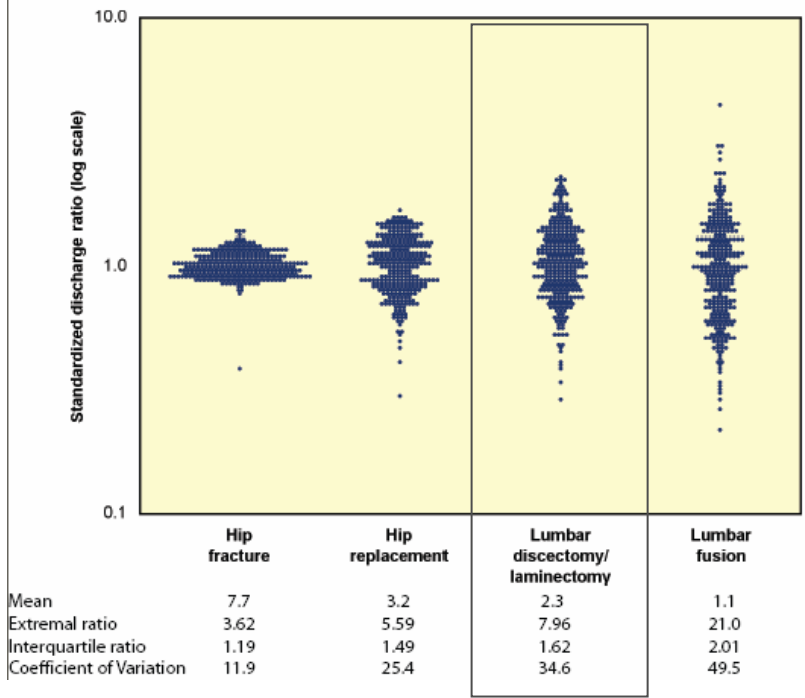
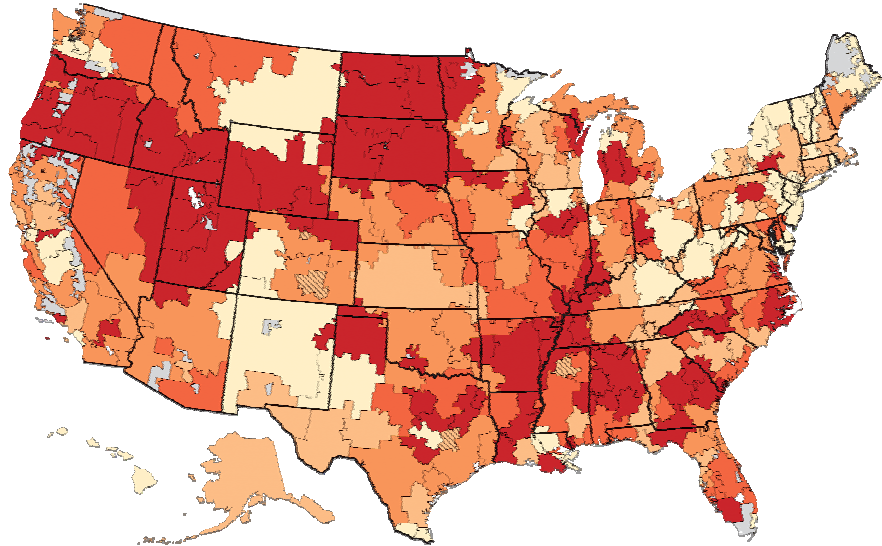
1992-2003 Spending for lumbar fusion increased more than 500%
--- from \$75 million to \$482 million.

In 1992, lumbar fusion represented 14% of total spending for back surgery; by 2003, lumbar fusion accounted for 47% of spending.





Large regional variation in rates of lumbar discectomy -10 fold



The efficacy of lumbar discectomy remains controversial

SPORT Objective:

To assess the efficacy of surgical versus non-operative treatment for lumbar intervertebral disc herniation





SPORT SITES...

11states / 13 sites



William Beaumont Hospital
Royal Oak, MI

Dartmouth-Hitchcock Medical Center
Lebanon, NH

Maine Spine & Rehab

Washington University
St. Louis, MO

HJD
NY NY

University of California
San Francisco, CA

HSS
NY NY

Rothman Institute
Philadelphia, PA

Nebraska Foundation for Spinal Research

Rush-Presbyterian-St. Luke's
Chicago, IL

Kaiser Permanente
Oakland, CA

Case-Western
Cleveland, OH

Emory Spine Center
Atlanta, GA



JAMA[®]

The Journal of the American Medical Association

ORIGINAL CONTRIBUTION



Nov 26 2006

Original Contributions

- Surgical vs Nonoperative Treatment for Lumbar Disk Herniation: The Spine Patient Outcomes Research Trial (SPORT): A Randomized Trial**

James N. Weinstein; Tor D. Tosteson; Jon D. Lurie; Anna N. A. Tosteson; Bret A. Abdu; Alan S. Hilibrand; Scott D. Boden; Richard A. Deyo
JAMA. 2006;296:2441-2450.

[ABSTRACT](#) | [FULL TEXT](#) | [PDF](#)

- Surgical vs Nonoperative Treatment for Lumbar Disk Herniation: The Spine (SPORT) Observational Cohort**

James N. Weinstein; Jon D. Lurie; Tor D. Tosteson; Jonathan S. Skinner; Brett Herkowitz; Jeffrey Fischgrund; Frank P. Cammisia; Todd Albert; Richard A. Deyo
JAMA. 2006;296:2451-2459.

[ABSTRACT](#) | [FULL TEXT](#) | [PDF](#)



The NEW ENGLAND JOURNAL of MEDICINE

May 31 2007

THE NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Surgical versus Nonsurgical Treatment for Lumbar Degenerative Spondylolisthesis

James N. Weinstein, D.O., Jon D. Lurie, M.D., Tor D. Tosteson, Sc.D., Brett Hanscom, M.S., Anna N.A. Tosteson, Sc.D., Emily A. Blood, M.S., Nancy J.O. Birkmeyer, Ph.D., Alan S. Hilibrand, M.D., Harry Herkowitz, M.D., Frank P. Cammisia, M.D., Todd J. Albert, M.D., Sanford E. Emery, M.D., M.B.A., Lawrence G. Lenke, M.D., William A. Abdu, M.D., Michael Longley, M.D., Thomas J. Errico, M.D., and Serena S. Hu, M.D.*



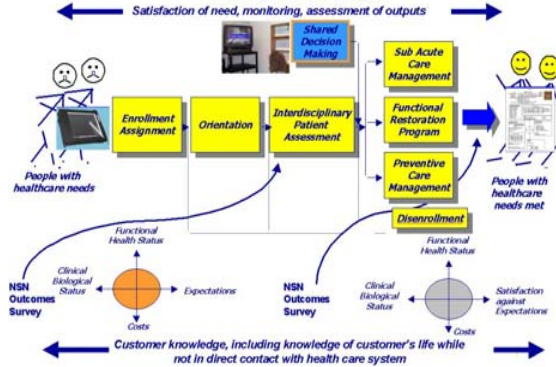
Conclusions

- **Radiculopathy from lumbar disc herniation has an excellent prognosis**
- **Evidence for most specific non-operative treatments is lacking but overall patients treated with a variety of modalities aimed at symptomatic relief do extremely well**
- **On average surgery patients improve faster and do somewhat better out to 2 years**

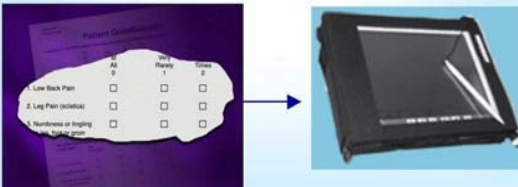


Systems and Processes

Making Shared Decision-Making (Informed Choice) Part of the Process



Moving from paper to virtual data collection in a clinical setting



Print Patient Summary Report



Touchpad Data Collection

A patient completes the survey on the touch pad seated in the waiting area, prior to her appointment.



Patient Summary Report is delivered to exam-room door.



Touch Pad Technology

Patient May Complete the Survey Standing up...
... Or Seated in the Waiting Area.



... then returns it to the Receptionist

Share Summary Information With Patient



Dartmouth reporting system
"Value Compass"
'Real-Time' Patient Summary Reports

Initial Visit Summary

FUNCTIONAL SCORES

| Category | Score |
|---------------------|-------|
| Low Back Pain | 4 |
| Leg Pain (radiates) | 4 |
| Neck Pain | 2 |
| Hand Pain | 2 |
| Arm Pain | 2 |
| Wrist Pain | 2 |
| Shoulder Pain | 2 |
| Elbow Pain | 2 |
| Hand/Wrist | 2 |
| Other | 2 |

CLINICAL STATUS

EXPECTATIONS

COGNITIVE

The Spine Center 6 Month Summary Report for July through December 2001 Strategic Success Metrics

| Service | Meaningful Presence | Patient Case Mix Initial Visit Demographics | Outcomes | Patient Satisfaction | Access | Open Appointment Slots | Functional Restoration Program | Clinic Charges |
|---------|--|---|--|--|--|--|--|--|
| 13% | Increase visit/months 5881 visits Average 947 visits/month | Average age: 50.5 % Male: 60% % Other race or prod: 28% % 2 or more problems: 63% % prior spine surgery: 1.6% | 499 patients from 789 to 801 had both an initial patient satisfaction survey (PAC_36Q) and a six month follow-up survey. SF-36 Norm-based scores (mean 50, SD 10): Improved = % of patients who had a difference between follow-up and initial scores: 3 points Stable = 46% Worse = 54% | Selection with set for appointment: 22% 26% Conversion of the time of the visit: 22% 26% Change and resolution of time part: 22% 26% % of calls of no-show your appointment: 6% 6% | 1,369 Number new patients | 21% Increase in new and re-appointments 78% Hours filled | 10% Increase in an enrollment in FY 20, and year N= 20 | 12% Increase charges Average/month \$40,400 |
| 22% | Average new patients/month Stable average | % of patients with: % no medications: 23% % no surgery: 12% % no surgery and no medications: 12% | % of patients with: % no surgery: 12% % no surgery and no medications: 12% | At the Appointment: 1-155 (90%) Selection with set in the waiting room: 12% 26% Selection with set in the exam room: 15% 26% % of patients of open that use program: 4% 26% | 22% Average new patients/month Stable average | 47% Patients who are distressed psychologically are referred Increase in new and FA patient appointments Average: 20 per month | 12% Increase in an enrollment in FY 20, and year N= 20 | 9% Increase RVU Average/month \$10 |
| 17% | Increase return visit/months 588 Average return visit/months | % of patients with: % no surgery: 12% % no surgery and no medications: 12% | % of patients with: % no surgery: 12% % no surgery and no medications: 12% | Overall Satisfaction: 1-155 (90%) Health status with review, time, and effort (yes/no): 26% 26% Change of time of visit: 22% 26% % of patients who are referred for a 2nd or 3rd visit: 26% 26% | 57% Patients returned for a follow-up visit | 8% Patients who are distressed psychologically are referred Increase in new and FA patient appointments Average: 20 per month | 12% Increase in an enrollment in FY 20, and year N= 20 | 9% Increase RVU Average/month \$10 |
| 13% | Patients combined visits PT and Physician Decrease of 2.5% | % of patients with: % no surgery: 12% % no surgery and no medications: 12% | % of patients with: % no surgery: 12% % no surgery and no medications: 12% | Open Appointment Slots Physicians: 21% Open Some reduce a 4 or 8 hour clinic: 78% | 6% No Show for Physicians 6% 24 hour cancellations Scheduled patients to 74% | 8% Patients who are distressed psychologically are referred Increase in new and FA patient appointments Average: 20 per month | 12% Increase in an enrollment in FY 20, and year N= 20 | 9% Increase RVU Average/month \$10 |



Home | Contact us | Site index | Search: **GO!**

DARTMOUTH-HITCKOCK MEDICAL CENTER

Find a Doctor | Department & Services | Health Information | Quality Reports | Jobs | Classes and Events | News

Quality Reports:

- Overall DHMC
- Bone Marrow Transplant
- Breast Cancer
- Cystic Fibrosis
- Diabetes
- General Pediatrics
- Heart Attack
- Heart Failure
- Heart Surgery
- Pneumonia
- Pregnancy
- Spine Center
- Stroke
- Surgical Infection Prevention

Cost of Care:

- Charges for Health Care Services

Back to:

- Quality Reports



Quality Reports

Spine Center

[Click here to: "Tell us what you think"](#)

The mission of the Spine Center at Dartmouth-Hitchcock is to provide patient-centered, comprehensive, coordinated, interdisciplinary care that is cost effective, convenient, and timely for patients with complex spine problems. We are committed to the idea of **"Back to Work, Back to Play, Back to Life, One Back at a Time."**

Information About Our Patients

- [Information About All Spine Center Patients](#)
- [Information About Spinal Stenosis Patients](#)
- [Information About Herniated Disc Patients](#)

Safe and Effective Care

- [Spinal Stenosis: Treatment Satisfaction and Outcomes](#)
- [Herniated Disc: Treatment Satisfaction and Outcomes](#)
- [Readmission and Length of Stay](#)
- [Functional Restoration Program](#)

Cost of Care:
Charges for Health Care Services

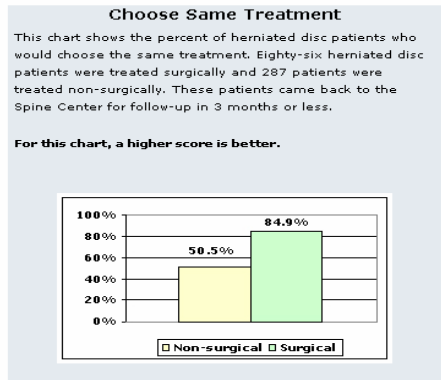
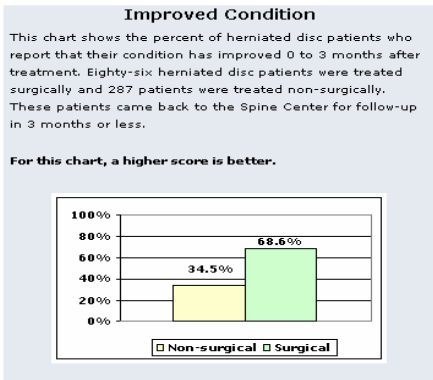
Back to:
Quality Reports
DHMC Home

Send your Feedback:
Email Us

Disclaimer:
Disclaimer

Where to go for more information:
Spine Center at DHMC
Things you can do to make your health care safe

The treatment satisfaction section shows how surgical and non-surgical herniated disc patients felt about the treatments they received. **Eighty-six herniated disc patients met the criteria for surgery and were treated surgically and 287 patients were treated non-surgically.**





There are 16 measures applicable to MDs/DOs¹

Initial Visit

Physical Exam

Mental Health Assessment

Appropriate Imaging in Acute Back Pain

Repeat Imaging Studies

Medical Assistance With Smoking Cessation

Advice for Normal Activities

Advice Against Bed Rest

Recommendation for Exercise

Appropriate Use of Epidural Steroid Injections

Patient Reassessment

Surgical Timing (*surgeons only*)

Shared Decision Making (*surgeons only*)

Postsurgical Outcomes (*surgeons only*)

Patient Education

Evaluation of Patient Experience



The NCQA scoring will translate into a “Basic” BTE certification

| Clinical Measures/Structural Standards | Criteria | Points |
|--|--|-----------------|
| 1. Initial Visit | 50% of patients in sample | 8.0 |
| 2. Physical Exam MUST PASS | 50% of patients in sample | 9.5 |
| 3. Mental Health Assessment | 72% of patients in sample | 5.0 |
| 4. Appropriate Imaging for Acute Back Pain* | 50% of patients in sample | 7.5 |
| 5. Repeat Imaging Studies* | <i>Data collection only—Will not be scored</i> | <i>No score</i> |
| 6. Medical Assessment with Smoking Cessation | 76% of patients in sample | 3.5 |
| 7. Advice for Normal Activities | 48% of patients in sample | 8.5 |
| 8. Advice Against Bed Rest | 48% of patients in sample | 7.5 |
| 9. Recommendation for Exercise | 71% of patients in sample | 5.5 |
| 10. Appropriate Unit of Epidural Steroid Injections* | 10% of patients in sample | 6.5 |
| 11. Surgical Timing** | 5% of patients in sample | 8.5 |
| 12. Patient Reassessment | 25% of patients in sample | 5.0 |
| 13. Shared Decision Making** | 50% of patients in sample | 6.5 |
| Structural Standards | | |
| 1. Patient Education | <i>Structural standard</i> | 6.5 |
| 2. Post-Surgical Outcomes** MUST PASS | <i>Structural standard</i> | 8.5 |
| 3. Evaluation of Patient Experience | <i>Structural standard</i> | 3.5 |
| Total points | | 100.0 |
| Points needed for Recognition | | 40.0 |

*Overuse: Lower is better

**Surgeons only



BTE asked Towers Perrin to perform an actuarial analysis

Measures were split between Appropriate Treatment, Inappropriate Treatment and Outcomes. Inappropriate Treatment are measures of overuse.

The majority of the measures have no rigorous financial savings analyses studies associated to them, but all have clinical studies examining the appropriateness

Actuarial models were developed for a specific subset of measures, focusing on overuse. The other measures have little or no actuarial savings.

Only direct medical costs are included in the analyses – indirect savings such as productivity were purposefully excluded



The model was built to measure savings from a reduction in unneeded services

Models were attempted for the following metrics:

- Appropriate Use of Epidural Steroid Injections
- Appropriate Imaging for Acute Low Back Pain
- Repeat Imaging Studies
- Post-Surgical Outcomes
- Advice against Bed Rest

Towers Perrin was able to construct actuarial models using a large longitudinal claims database for the first four metrics, despite a general absence of literature addressing their economic effect

For the fifth metric, the absence of definitive linkage between advice against bed rest and clinical outcomes—and the fact that “advice” is not generally codable and therefore not amenable to claims data analysis—made construction of an actuarial model impossible

Although the models could not in every case duplicate the exact specification of the NCQA’s back pain care metrics—due to their complexity—most elements of the metrics were replicated



These two measures are the main focus for BTE this year

| Percent of Avoidable Epidural Steriod Injections | | 65.7% | | |
|---|------------------------|-----------------------|---------------------------|-------------------------------------|
| Service Category | Annual Claims per 1000 | 2006 Cost Per Service | 2006 Per Member Per Month | 2006 Per Back Pain Member Per Month |
| Total Epidural Steriod Injections | 16.3 | \$346.55 | \$0.47 | \$5.88 |
| Epidural Steriod Injections Radicular Pain | 5.6 | \$346.55 | \$0.16 | \$2.02 |
| Epidural Steriod Injections Non-Radicular Pain | 10.7 | \$346.55 | \$0.31 | \$3.86 |
| Additional cost to system for a 100,000 member population | | | | \$370,000 |

| Percent Inappropriate Imaging | | 42.0% | | |
|---|------------------------|-----------------------|---------------------------|-------------------------------------|
| Service Category | Annual Claims per 1000 | 2006 Cost Per Service | 2006 Per Member Per Month | 2006 Per Back Pain Member Per Month |
| Total 72XXX Images (after exclusions) | 74.3 | \$197.92 | \$1.23 | \$15.34 |
| Appropriate (> 30 days from initial diagnosis) | 43.1 | \$197.92 | \$0.71 | \$8.90 |
| Inappropriate (< 30 days from initial diagnosis) | 31.2 | \$197.92 | \$0.51 | \$6.44 |
| Additional cost to system for a 100,000 member population | | | | \$617,000 |

Source: Experience data in 2003, 2004 and 2005 for 6.8MM, 11.1MM and 11.4MM members



These additional measures are for future focus

| Percent Inappropriate Reimaging | | 93.6% | | |
|---|------------------------|-----------------------|---------------------------|-------------------------------------|
| Service Category | Annual Claims per 1000 | 2006 Cost Per Service | 2006 Per Member Per Month | 2006 Per Back Pain Member Per Month |
| Repeat 72XXX Images (after exclusions) | 34.9 | \$197.92 | \$0.58 | \$7.20 |
| Appropriate (> year from initial diagnosis) | 2.2 | \$197.92 | \$0.04 | \$0.46 |
| Inappropriate (< year from initial diagnosis) | 32.7 | \$197.92 | \$0.54 | \$6.74 |
| Additional cost to system for a 100,000 member population | | | | \$646,000 |

| Percent of Surgery Patients With Complications | | 1.9% | | |
|---|------------------------|-----------------------|---------------------------|-------------------------------------|
| Service Category | Annual Claims per 1000 | 2006 Cost Per Service | 2006 Per Member Per Month | 2006 Per Back Pain Member Per Month |
| With Complications | 0.003 | \$22,558.01 | \$0.006 | \$0.08 |
| Without Complications | 0.170 | \$15,274.97 | \$0.216 | \$2.71 |
| Excess Complication Cost | 0.003 | \$7,283.04 | \$0.002 | \$0.02 |
| Additional cost to system for a 100,000 member population | | | | \$2,000 |

Source: Experience data in 2003, 2004 and 2005 for 6.8MM, 11.1MM and 11.4MM members



The total potential savings are significant

| Service Category | 2006 Per Member Per Month | 2006 Per Back Pain Member Per Month | 2006 Annual Cost for 100,000 Member Population |
|------------------------------------|---------------------------|-------------------------------------|--|
| Inappropriate Epidural Steroid Use | \$0.31 | \$3.86 | \$370,000 |
| Inappropriate Imaging | \$0.51 | \$6.44 | \$617,000 |
| Inappropriate Reimaging | \$0.54 | \$6.74 | \$646,000 |
| Post Surgical Complications | \$0.00 | \$0.02 | \$2,000 |
| Total | \$1.36 | \$17.06 | \$1,635,000 |

- Assuming total medical and prescription drug per member per month for an active population is \$398¹, reducing the inappropriate epidural use, imaging, repeat imaging, and surgical complications could reduce overall spend by 0.3%
- For a hypothetical physician who only sees patients with back pain, reducing the inappropriate epidural use, imaging, repeat imaging, and surgical complications could reduce the overall healthcare burden \$205 per year per back pain member [\$17.06 multiplied by 12]

Source: Experience data in 2003, 2004 and 2005 for 6.8MM, 11.1MM and 11.4MM members

¹ average PMPM from 2005 Tillinghast HealthMaps increased by Medical CPI



Estimated bonus when Imaging and Epidural use are a “must pass”

| | |
|--|------------|
| Total savings per back pain member per month | \$10.30 |
| Total savings per back pain member per year | \$123.60 |
| Program and other administrative costs | ~ \$20.00 |
| Total estimated savings | ~ \$100.00 |

Recommended bonus: \$50 per back pain member per year



BTE's Spine Care Link program rewards

NCQA's scoring of metrics excludes re-imaging in 2007 (and perhaps 2008)



The base score to achieve recognition is 40, and 29% of physicians in the field test received a passing score

MDs/DOs achieving standard recognition will get "Basic" BTE certification

MDs/DOs that can pass the imaging and epidural measures, and achieve a total score greater than 50, will get "Intermediate" BTE certification



Recommended incentives for the Spine Care Link

| | |
|--|---|
| <p>Basic BTE certification</p>  | <ul style="list-style-type: none">■ Fee schedule increase■ Provider directory “star”■ Inclusion in mid to upper tier of tiered network |
| <p>Intermediate BTE certification</p>  | <ul style="list-style-type: none">■ Yearly per patient bonus of up to \$50■ Fee schedule increase■ Provider directory “stars”■ Inclusion in upper tier of tiered network |



Next Steps for employers

1. Talk to your health plans about implementing rewards for BTE's Spine Care Link
2. Think about potential changes to your disability plan to encourage employees to seek out certified physicians
3. Design and implement a robust internal communications plan with employees about the evidence on back pain treatment
4. Think about other areas where “demand management” (focusing on employee behavior) and “supply management” (focusing on changing provider behavior) go hand in hand