Producing Consistent Outcomes in Patient Care: Collecting and Analyzing Data

Combined Sections Meeting 2014

Speaker(s): Dianne Jewell, PT, DPT, PhD, CCS
           Brian Stewart, Doctorate
           Mary Stilphen, PT, DPT

Session Type: Educational Sessions
Session Level: Intermediate

This information is the property of the author(s) and should not be copied or otherwise used without the express written permission of the author(s).

February 3-6, 2014
Las Vegas, Nevada

www.aptahpa.org
Section on Health Policy & Administration
of the American Physical Therapy Association
Producing Consistent Outcomes in Patient Care: Collecting and Analyzing Data

Dianne V. Jewell, PT, DPT, PhD
The Rehab Intel Network

Objectives

• At the end of this presentation you will be able to:
  – Describe the physical therapy value proposition and its relevance to your practice
  – Discuss the contribution of standardized outcomes to your bottom line
  – Discuss considerations related to selection of outcomes tools
  – Describe data collection, analysis and presentation strategies
“Value” in health care

- Function of:
  - Quality
  - Cost

- Influenced by stakeholder:
  - Priorities
    - Needs
    - Wants
    - Preferences among options
How do we (they?) measure value?!

- **Cost-effectiveness** – comparison of costs in dollar terms to outcomes in non-dollar terms (i.e., pain reduction)

- **Cost-benefit** – comparison of costs in dollar terms and benefits in dollar terms (i.e., increase in productivity due to return to work)

- **Cost-utility** – comparison of costs in dollar terms with outcomes measured as a unit of “utility” (i.e., quality adjusted life years)

What is a “value proposition”?

- “A business or marketing statement that summarizes why a consumer should buy a product or use a service. This statement should convince a potential consumer that one particular product or service will add more value or better solve a problem than other similar offerings.” (Investopedia)
PT Value Proposition Framework

Silence of Healing
- Clinical theory, evidence (cogntive and technical component of physical therapist practice)

Art of Caring
- Therapeutic reasoning (effective component of physical therapist practice)

Physical Therapy Value Proposition
- Restoration/optimization of movement, function, and participation in a cost-effective manner

Cost
- Resources consumed during service delivery
- Savings from successful episodes of care

Figure 3: Framework for defining physical therapy’s value proposition.
Physical Therapy is the answer....

Evidence

Too academic

Not nearly enough of it
Practice-based Evidence

Identify Best Practices
- Practice
  - Use validated performance and self-report outcomes measures
  - Contribute clinical data to registries
  - Participate in practice guideline development and updating
- Research
  - Participate in registry development and analysis
  - Create and regularly update best practice guidelines

Adopt Best Practices
- Practice
  - Implement best practice guidelines and integrate evidence
  - Document clinical judgment related to the services delivered
- Research
  - Generate translational evidence

Measure Provider Performance
- Practice
  - Participate in quality improvement
  - Adopt health information technology
- Research
  - Generate evidence about outcomes measures and their ability to distinguish quality among providers or organizations

Evaluate Cost-Effectiveness
- Practice
  - Analyze the relationship between outcomes and cost in individual practices
- Research
  - Generate cost-effectiveness evidence

Figure 5
Tactics needed to demonstrate physical therapy’s value proposition.

Standardized Outcomes

- “Gait speed has been shown to be associated with function in community ambulation and with the risk for a variety of adverse events... However, only 5.5% of the respondents in this study indicated that they measured gait speed in a standardized fashion in more than 90% of their patients...” (Jette and Jewell, 2012)

- In 2009, 5,825 physical therapists and occupational therapists participated in the PQRS, and only 34% of them earned incentives. (CMS, 2010)

- “Fifty-two percent of participants indicated they did not use standardized outcome measures in practice, and 49% of them indicated that they did not plan to implement their use in future.” (Jette et al, 2009)
Why Outcomes Matter to Your Bottom Line

- Functional reporting
- Pay for performance
- PTA differential payment
- ACOs, Medical Homes
- Therapy cap, MPPR
Outcomes Evaluation

- Outcome = “The end result of patient/client management…” (Guide to PT Practice, page 43)

- Why standardized???
  - Consistency of measurement within an episode of care
  - Ability to compare across patients with similar diagnoses
  - Ability to compare across providers who manage patients with similar diagnoses

Standardized Outcomes Tools: Options

**Performance-based**

<table>
<thead>
<tr>
<th>Examples...</th>
</tr>
</thead>
</table>
| - Aerobic capacity (6 minute walk, shuttle walk, submaximal treadmill/cycle tests...)
| - Balance (TUG, FRT, Berg, Tinnetti...)
| - Functional performance (FCE)
| - Gait (10 meter walk, DGI, Functional Ambulation Category...)

**Self-report**

<table>
<thead>
<tr>
<th>Examples...</th>
</tr>
</thead>
</table>
| - Oswestry
| - DASH
| - LEFS
| - NDI
| - SF-12
| - FOTO
| - AMPAC
| - OPTIMAL
What you need to know...

- **Is the tool reliable?**
  - Inter-tester, intra-tester, test-retest, parallel forms, split-half, internal consistency

- **Is the tool valid?**
  - Face, content, construct (convergent/discriminant), criterion (concurrent/predictive)

- *Is the tool sensitive to change?*

- *Has meaningful change been determined?*

Where do I start?
Pick one population to measure

- Considerations
  - Volume
  - Staff interest
  - Referral source interest
  - Payer interest

- Operational definition
  + Signs
  + Symptoms
  + Functional behavior
  + Exclusions

----------------------
ICD 9 code (+/- other characteristics)

Patient A
Non-specific acute low back pain; otherwise healthy

Patient B
Non-specific acute low back pain + diabetes and 2 recent episodes of dizziness
“Apples-to-Apples” comparisons

- Stratification
  - Age
  - Gender
  - Race/ethnicity
  - Severity (risk group)

- Risk adjustment
  - Age
  - Gender
  - Race/ethnicity
  - Severity
  - Co-morbidities

Pick a standardized outcome tool

- Administrative demands
  - Equipment and facilities, staff training, time, scoring complexity

www.socialresearchmethods.net/kb/relandval.php
Define an episode of care

- Prospectively - enter a discharge date!!!!
- Retrospectively -
  - "An episode of care was defined as time from the date of the initial evaluation to the last visit. If no visits occurred for more than 45 days, we presumed the continuity of the care would likely be disrupted, and the episode of care was considered complete." (Fritz et al, PTJ, 2011 – Outpatient Medicare Beneficiaries)
  - "If no physical therapy claim occurred during the 30 days preceding the first physical therapy service, this date marked the beginning of an episode of care... If no physical therapy claims were recorded during this 45-day period, then the last physical therapy service marked the end of the last episode." (Mitchell et al, PT, 1997 – Maryland Direct Access)
Create a database

• Essential elements
  – Diagnoses (codes, operationally defined descriptors)
  – Interventions delivered (codes, operationally defined descriptors)
  – Outcomes scores (pre-, post-, change)

Create a database

• Essential elements
  – Demographics (age, gender, race/ethnicity, prior functional level, others of interest...)
  – Cost indicators (visits, minutes of service provided, LOS...)
  – Personnel used (PT, assistive personnel...)
Describe your practice

- Frequencies
  - ICD 9 volume
  - Interventions volume
  - Minutes of service
  - Costs
  - Visit volume
  - Patient characteristics
  - Provider characteristics

- Calculations
  - Averages
    - Episode length
    - Cost/episode
    - Outcome/episode
    - Patient characteristics

Determine your benchmarks

- Evidence
- Clinical judgment
- Patient input
- Market measures
- Administrative considerations
Measure and Report

- **Internal uses**
  - Performance improvement
  - Guideline refinement
  - Quality reporting

- **External uses**
  - Referral sources
  - Payers
  - Consumers

Data Formats
Effective Messaging

• Know your audience and their value priorities

• Ingredients of an effective message
  – Direct
  – Concise
  – Easy to remember

Effective Messaging

• Physical therapist services can prevent occupational injuries of the musculoskeletal system.

• My clinic’s physical therapist services can reduce the frequency of low back injuries in your workplace.
Use of Functional Outcome Tools to Demonstrate the Value of Physical Therapy throughout the Healthcare Continuum

Mary Stilphen PT, DPT
Senior Director
Cleveland Clinic Rehab and Sports Therapy
Cleveland Clinic Rehab and Sports Therapy

Therapy Locations
• Cleveland Clinic Main Campus and 8 regional hospitals
• 100 IRF beds
• 85 SNF beds
• 3,277 Acute care beds
• 47 Outpatient locations
• Lou Ruvo Center of Brain Health, Las Vegas Nevada
• Cleveland Clinic Florida
• Abu Dhabi - 2015

Rehab Team
• 350 Physical Therapists
• 100 PTA’s
• 135 OT’s
• 25 COTA’s
• 35 SLP
• 5 Audiologists
• 50 ATC’s

Strategy for Value Transformation

Goal – Improve value for patients
• Improve outcomes without raising costs
• Lowering costs without compromising outcomes.

What does that mean for physical therapist
• Patient level
• System level
Measure outcome and cost for every patient

**Outcome**
- “The only true measures of quality are those that matter to the patient”
- Systematic utilization of PRO’s for every patient in every setting.

**Cost**
- Resources consumed during service delivery
- Savings from successful episodes of care

---

**Strategy for Value Transformation – Michael Porter**

- Move to Bundled Payments
- Expand Geographic Reach
- Integrate Care Delivery Systems
- Build and Enabling IT Platform
- Integrate into Integrated Practice Units (IPU’s)

---

**The only true measures of quality are those that matter to the patient**
- Systematic utilization of PRO’s for every patient in every setting.
Move to Bundled Payments

Move patient to the lowest cost level of care while generating the best outcome

How do we use outcome data to drive decisions on

• when to move patients
• determine what level of care is best for the patients

Our Journey at the Cleveland Clinic

Uniform data Collection

Use information from large uniform data sets to make decisions.
Measuring patient reported functional outcomes longitudinally across an episode of care

Outcome Tools

**Acute Hospital**
- 6 Clicks Basic Mobility
- 6 Clicks Daily Activity
- Mini Cog

**SNF’s / Connected Care Units**
- AM-PAC Basic Mobility Adapted
- AM-PAC Basic Mobility Adapted with w/c
- AM-PAC Daily Activity
### Outcome Tools built into the KP

**Outpatient**
- AM-PAC Short Forms both Basic and Adapted versions
- Diagnoses specific Tools
  - LEFS
  - QuickDash
  - Oswestry
  - NDI
  - FactB +4

### How do we use data to drive decisions?

**Acute Hospital**
- Discharge disposition
- Resource Utilization

**SNF – CC Units**
- Compare LOS,
- # visits,
- Patient’s functional change between facilities

**Outpatient**
- # visits
- Change in score
Measuring patient reported functional outcomes longitudinally across an episode of care

What is Cleveland Clinic’s 6 Clicks?

- Short form of the AM-PAC (Activity Measure for Post Acute Care)
- Patient Reported Outcome Tool
- 25 years in development
- Validated across all levels of care
- 269 items – 3 domains
- Computer Adapted Test
- Can be shortened, and answered by surrogates
AM-PAC Cleveland Clinic Short Form
‘Six Clicks’

**PT**
1. Turning over in bed
2. Supine to sit
3. Bed to chair
4. Sit to stand
5. Walk in room
6. 3-5 steps with a rail

**OT**
1. Feeding
2. O/F hygiene
3. Dressing Uppers
4. Dressing Lowers
5. Toilet (toilet, urinal, bedpan)
6. Bathing (wash, rinse, dry)

Scale: 1= Unable (Total Assist)  2= A Lot (Mod/Max Assist)  3= A Little (Min Assist/CGA/Supervision)  4= None (Ind./Modified Independent)
PLAN
Treatment Frequency, Duration and Interventions: Branch
Development of Plan of Care: Branch

Therapist pager/extension: Branch

AM-PAC Outcomes
Basic Mobility Domain
Turning over in bed: 3
Lying on his/her back to sitting: 3
Bed to a chair: 3
Sitting down and standing up: 3
Walk: 2
Climbing steps: 1
Total Score: 15

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>Scale Score</th>
<th>Scale Score Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>23.25</td>
<td>4.37</td>
</tr>
<tr>
<td>7</td>
<td>26.42</td>
<td>4.33</td>
</tr>
<tr>
<td>8</td>
<td>28.58</td>
<td>4.55</td>
</tr>
<tr>
<td>9</td>
<td>29.25</td>
<td>3.99</td>
</tr>
<tr>
<td>10</td>
<td>32.29</td>
<td>3.42</td>
</tr>
<tr>
<td>11</td>
<td>33.96</td>
<td>3.14</td>
</tr>
<tr>
<td>12</td>
<td>35.52</td>
<td>3.08</td>
</tr>
<tr>
<td>13</td>
<td>36.74</td>
<td>2.99</td>
</tr>
<tr>
<td>14</td>
<td>38.10</td>
<td>3.05</td>
</tr>
<tr>
<td>15</td>
<td>39.45</td>
<td>2.93</td>
</tr>
<tr>
<td>16</td>
<td>40.78</td>
<td>2.65</td>
</tr>
<tr>
<td>17</td>
<td>42.13</td>
<td>2.03</td>
</tr>
<tr>
<td>18</td>
<td>43.53</td>
<td>2.00</td>
</tr>
<tr>
<td>19</td>
<td>45.44</td>
<td>3.55</td>
</tr>
<tr>
<td>20</td>
<td>47.07</td>
<td>3.06</td>
</tr>
<tr>
<td>21</td>
<td>49.02</td>
<td>3.02</td>
</tr>
<tr>
<td>22</td>
<td>50.25</td>
<td>3.06</td>
</tr>
<tr>
<td>23</td>
<td>52.28</td>
<td>3.64</td>
</tr>
<tr>
<td>24</td>
<td>54.59</td>
<td>3.22</td>
</tr>
</tbody>
</table>

Cleveland Clinic
## PT 6 Clicks Data Volume – CCHS Hospitals

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evaluation</strong></td>
<td>27,876</td>
<td>43,132</td>
<td>54,876</td>
<td>125,884</td>
</tr>
<tr>
<td><strong>Follow up</strong></td>
<td>0</td>
<td>67,219</td>
<td>86,290</td>
<td>153,509</td>
</tr>
<tr>
<td><strong>Total Visits</strong></td>
<td>27,876</td>
<td>110,351</td>
<td>141,166</td>
<td>279,393</td>
</tr>
</tbody>
</table>

## Use of 6 clicks Data

- Guide discharge recommendation
- Improve patient mobility
- Guide therapist resource utilization
6 Clicks Distribution – PT / Mobility

Source: Medilinks, all Acute Care PT Evaluations for all Cleveland Clinic Hospitals 2013 n = 54,532

Resource Utilization

2012
• 5419 (12.5%) of patients evaluated by PT had a score of 24
• 80% went home with no skilled needs

2013
• 4,842 (8.8%) of patients evaluated by PT had a score of 24
• 89% went home with no skilled needs

Use data to educate physicians and nurses on appropriate PT referrals
Allowed us to change order process for therapy
2013 - 4842 patients (8.8%) had a 6 clicks score of 24

Using 6 Clicks to guide discharge recommendations

Data over the past three years has been consistent

- Home with no services – 19.48
- Home with home care – 17.81
- SNF/IRF – 13.95 – 14.0
- LTAC – 11.25
All Locations. 2013 data. Includes patients without ECIN/EPSI discharge information. “Other” includes ECF, Hospice, Assisted Living. “NULL” consists of patients predominantly discharged to home (according to PT Discharge recommendation) but without actual discharge disposition data in our dataset.
Measuring patient reported functional outcomes longitudinally across an episode of care

Outcome Tools

SNF’s / Connected Care Units
- AM-PAC Basic Mobility Adapted
- AM-PAC Basic Mobility Adapted with w/c
- AM-PAC Daily Activity
- Completed on all patients at admission and discharge from therapy
AM-PAC in SNF and Connected Care

Measuring patient reported functional outcomes longitudinally across an episode of care

Acute Hospital  Skilled Nursing  IRF  Outpatient

- Hospital Based SNF's
- Connected Care Units

Discharge Dates between 11/01/13 and 11/30/13

<table>
<thead>
<tr>
<th>Facility</th>
<th># of Patients</th>
<th>Avg. SNF LOS</th>
<th>Completion Rate</th>
<th>Therapy Efficiency</th>
<th>Avg Therapy Days</th>
<th>Avg Initial Scale Score</th>
<th>Avg Final Scale Score</th>
<th>Avg Change in Scale Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>26.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Outpatient Outcome Tools

<table>
<thead>
<tr>
<th>AM-PAC Short Forms both Basic and Adapted versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnoses specific Tools</td>
</tr>
<tr>
<td>LEFS</td>
</tr>
<tr>
<td>QuickDash</td>
</tr>
<tr>
<td>Oswestry</td>
</tr>
<tr>
<td>NDI</td>
</tr>
<tr>
<td>FactB +4</td>
</tr>
</tbody>
</table>

---

**Outpatient**

- **AM-PAC short forms**
  - G Codes convinced us to take a leap of faith!
  - Collect high volume of outcome data using one tool – Uniformity in data collection
  - 1st month had 800 patients with 2 data points
  - Gives us the ability to have a single measure that looks at function longitudinally across an episode of care

- **Diagnosis specific tools**

- Is a generic tool as good at showing improvement as a diagnosis specific tool?
Completed AMPACs for the period July – Dec 2013

<table>
<thead>
<tr>
<th></th>
<th>Initial Eval AMPACs</th>
<th>Follow-up visit AMPACs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic- Mobility</td>
<td>10442</td>
<td>8593</td>
<td>19035</td>
</tr>
<tr>
<td>Basic Mobility Adapted with w/c</td>
<td>264</td>
<td>395</td>
<td>659</td>
</tr>
<tr>
<td>Basic Mobility- Adapted</td>
<td>5617</td>
<td>7756</td>
<td>13373</td>
</tr>
<tr>
<td>Daily Activity</td>
<td>3608</td>
<td>3039</td>
<td>6647</td>
</tr>
<tr>
<td>Daily - Adapted</td>
<td>1361</td>
<td>1761</td>
<td>3122</td>
</tr>
<tr>
<td>Total completed AMPACs</td>
<td>21292</td>
<td>21544</td>
<td>42836</td>
</tr>
</tbody>
</table>

AMPAC Basic Mobility scores increased at first follow-up AMPAC visit (35.3 – 36.3 days from initial AMPAC visit)
The change in AMPAC T-scores increased with the number of completed PT visits for patients with Spine and Ortho-Muscular conditions.

Patient Specific Functional data Across the Continuum

<table>
<thead>
<tr>
<th>Day 1 Hospital Initial Evaluation</th>
<th>Day 3 Hospital Discharge 6 Clicks – 35.33</th>
<th>Day 4 SNF Initial Evaluation AM-PAC 40.76</th>
<th>Day 9 – SNF Discharge AM-PAC 56.93</th>
<th>Day 37 Outpatient Initial Evaluation AM-PAC 62.46</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Clicks – 33.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Benefits of Using a Single Outcome Tool

- Ability to Develop Large Data Sets
- Measure function on the same scale across multiple settings
- Begin to have a consistent measurement of “function”
- Using a single tool to measure VALUE

Shortcomings

- Does not measure functional improvement for specific diagnoses or high functioning patients
- Difficult to match data between multiple databases
Lessons Learned

- The ability to collect, aggregate and display data is powerful in driving organizational change
- Success with collection of data in one setting allowed progress in other areas
- Keep an open mind
- Start collection then analyze the data and follow it

"Better is possible. It does not take genius. It takes diligence. It takes moral clarity. It takes ingenuity. And above all, it takes a willingness to try."

Atul Gawande
Questions?

Thank You

Mary Stilphen PT, DPT
stilphm@ccf.org
References

Do You Know Your Data Footprint? .....Your Payers Do!!!

Using Metrics to Manage and Grow Your Practice

Combined Sections Meeting 2014
Las Vegas, Nevada - February 3 – 6, 2014

Brian Stewart, DPT

Learning Objectives

Understand the importance of collecting data in our profession

Understand how to use the data to define our value proposition

Gain a better understanding of how our payer sources define our value and what we can do to influence this
“Value Proposition”

“It is no longer sufficient to rely upon theoretical arguments that physical therapy’s contributions are beneficial to society. Consistent practice behaviors and a body of credible evidence are required if patients, employers, payers and policy makers are going to consider PT services among their value priorities”

- PT January of 2013
Issue Facing the World of PT

Lack of validity through objective measurements
Lack of recognition for our services
Commoditization of the Product
Decreasing reimbursement

Issue Facing the World of PT

Negative Competition for services- POPs, ASC's, ACO's, Medical Homes
Vertical integration of referral sources
Poor economy- reflected in an inability of patients to afford deductibles or co-insurances
Poor consumer choice- cheapest insurance usually pays the providers less- Negative loop
Proliferation of Networks intended to “control” medical costs
ARC’s Mission:

To be a *catalyst of change* in the marketplace by *redefining “Excellence”* in healthcare
May, 2003: “That is a cute idea”

September, 2003: First Patient
Keys to our Model

- Payer Mix: 80% Workers' Compensation
- Employer directed states
- Fee Scheduled: KS; Non-fee scheduled: Mo
- No “POP’s” in MO; “POP-like” entities in KS
The framework that we’ll operate in today is that of:

- Educate
- Demonstrate
- Differentiate

**Agenda**

**Sustainability**

Questions to Ask Yourself:

- Is your business sustainable?
- Does it create value for your customers?
- Are we transparent?
- Are we accountable?
- Do we flourish with competition or hide from it?
- Is the profession sustainable?
Breaking Down Old Ways of Thinking

- See everything/Sign every contract
- Be subservient to the physician
- Laud our great customers service, close proximity, ability to see every patient
- Take less and bid against each other to ensure 'market share'- High volume= Low reimbursement- High utilization= Poor outcomes

Educate
Who’s Your Audience/Customer???

Traditional Model:

Physicians  Patients

***Maybe the Insurance Company
The “Old” Message:

“We’re Conveniently located”

“Highly Trained Therapists”

“We Create a Great Customer Experience”

“We Have Great Coffee”

The “New” Message:

“We are the Best Provider and we have Outcomes to Prove It”
Our Audience:

- Employers
- Insurance Companies
- TPA/Adjuster
- Case Managers
- Physicians
- Patience

Their “Needs”:

**Employers**

- Largest Payer Source
- Control the Referral Process - Based on State Laws and Insurance Status
- Want: Efficiency, Cost-Containment, Value, Outcomes
- How We Help: Prove we are necessary by Defining our Value
Their “Needs”:

Insurance Companies or Brokers

- Help Companies achieve cost-containment
- Increasing Premium Costs help drive their business
- Want: Proof that PT is necessary; Evidence that it is cost efficient
- How we Help: “Validate” their selection of providers
- Provide offerings that increase their value (i.e. wellness, POET)

Their “Needs”:

TPA/Adjusters

- “Checkbook” – Provide Fiscal Oversight and “Manage” Claims
- Often Limited Medical Background
- Wants: Cost-effective, efficient RTW; Validation of Provider Selection
- How We Help: Educate about “What we do”; Prove cost-effectiveness and necessity in RTW
Their “Needs”:

Case managers

- Often appointed by Payers to Guide RTW
- Extensive Medical Knowledge-Subjectivity in Decision-Making
- Wants: Communication, Efficiency, Affirmation of Provider Choice
- How We Help: Validate Selection, Support Decision-Making, Prove our Value

Physicians

- Ultimate Decision-Maker in RTW
- Causation in WC; Establish POC
- Wants: Happy, Improved Patients - Increased Market Share
- Causation in WC; Establish POC
- How We Help: Validate Provider Selection; Validate them being Selected; Provide Their Data-Marketing
Their “Needs”:

- May Select their Course of Treatment in WC (State Law)
- Poorly Educated- What we do and cost
- Wants: Effective, Cost-efficient Solutions
- How We Help: Influence Decision-making; Validate their Choice; Measure and Share Success (Outcomes)

Demonstrate
The Workers’ Compensation System

- Injury occurs
- Occ. Med. Physician
- Specialist
- Physical Therapy

Can track everything that happens in prior steps

The Next Step

- Tracking Information
- Sharing Information
- Justification of Service
- Better Healthcare Decision-Making

Physical Therapy
Company X’s Outcomes Data 2012

Types of Data We Report

**Controllables**
- Visits
- Duration in Treatment
- Cost

**Non-Controllables**
- Co-Morbidities
- Behavioral Factors
- Secondary Factors
Why Outcome Data?

- Allows you to quantify results - compare “apples-to-apples”
- Allows you to make educated decisions that you can defend to your clients and executive team
- Allows you to construct and manage provider partnerships

ARC Outcomes Data

ODG “Best Practice” Guidelines

ODG has identified pathways for each condition including:
- Visit guidelines
- Diagnostic testing guidelines
- Data on avg days to return to work

“Best practice”

- Requires appropriate job descriptions and availability of altered work
- Is based on “best circumstances”
- Some physicians consider best practices aggressive

The ultimate goal of best practices is to facilitate communication among all parties in the RTW process
Company X’s Outcomes Data

Based upon referrals from 1/1/12 thru 12/31/12

Sorted by ICD-9 Code

Grouped by PT/OT diagnosis

Top 3 diagnoses:

1. Lumbar Strain/Sprain/Pain
2. Shoulder Strain/Sprain/Tendonitis
3. Knee Strain/Sprain/Pain
Company X’s Outcomes Data

**Lumbar Strain/Sprain/Pain**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Patients</td>
<td>15</td>
</tr>
<tr>
<td>ODG “Best Practice” Avg. Visits</td>
<td>10</td>
</tr>
<tr>
<td>ARC Avg. Visits</td>
<td>5.4</td>
</tr>
<tr>
<td>Avg. Days in Treatment (PT/OT)</td>
<td>14.0</td>
</tr>
<tr>
<td>Avg. Time between Injury and Treatment</td>
<td>10.6 days</td>
</tr>
<tr>
<td>Avg. Patient Age</td>
<td>42.6 yrs.</td>
</tr>
</tbody>
</table>

**Shoulder Strain/Tendonitis**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Patients</td>
<td>10</td>
</tr>
<tr>
<td>ODG “Best Practice” Avg. Visits</td>
<td>10</td>
</tr>
<tr>
<td>ARC Avg. Visits</td>
<td>10.3</td>
</tr>
<tr>
<td>Avg. Days in Treatment (PT/OT)</td>
<td>25.2</td>
</tr>
<tr>
<td>Avg. Time between Injury and Treatment</td>
<td>29.0 days</td>
</tr>
<tr>
<td>Avg. Patient Age</td>
<td>44.9 yrs.</td>
</tr>
</tbody>
</table>
Company X’s Outcomes Data

Knee Strain/Sprain/Pain

<table>
<thead>
<tr>
<th>Total Patients</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>ODG “Best Practice” Avg. Visits</td>
<td>12</td>
</tr>
<tr>
<td>ARC Avg. Visits</td>
<td>8.0</td>
</tr>
<tr>
<td>Avg. Days in Treatment (PT/OT)</td>
<td>20.2</td>
</tr>
<tr>
<td>Avg. Time between Injury and Treatment</td>
<td>25.0 days</td>
</tr>
<tr>
<td>Avg. Patient Age</td>
<td>40.2 yrs.</td>
</tr>
</tbody>
</table>

Company X’s Outcomes Data

Special Case - 52 yr. old male

Patient was seen for 2 bouts of treatment (81 visits) between 3/14/12 and 12/31/12 for a R shoulder strain and RTC repair

Co-morbidities: Hypertensive, OA

Other Factors

• BMI: 50+
• Corrections Officer
• Heavy PDC Level
Company X’s Outcomes Data

Special Case - 51 yr. old male

Patient was seen for 49 visits in PT between 1/19/12 and 5/18/12 for a R shoulder subscap./LHB repair

Co-morbidities: OA, Hypertension, Cardiac Hx

Other Factors

- Heavy PDC Levels (Mechanic)
- Obese (BMI 32)
- 2 tendon repair

Summarizing Company X’s Outcomes Data

(1/1/12 – 12/31/12)

Total patients = 75
Avg. Patient Age = 45.2 years old
Avg. PT/OT visits all patients = 11.1 visits
Avg. days in PT/OT = 31.8 days
Avg. time between DOI and Start at ARC = 87.8 days
### Comparing Years

<table>
<thead>
<tr>
<th>Body Parts</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Patients</td>
<td>75</td>
<td>65</td>
<td>75</td>
</tr>
<tr>
<td>Patient Age</td>
<td>43.1</td>
<td>46.4</td>
<td>45.2</td>
</tr>
<tr>
<td>Avg. Visits</td>
<td>11.8</td>
<td>9.7</td>
<td>11.1</td>
</tr>
<tr>
<td>Days in Treatment</td>
<td>31.2</td>
<td>25.3</td>
<td>31.8</td>
</tr>
<tr>
<td>DOI v. Start of Treatment</td>
<td>56.0</td>
<td>48.0</td>
<td>87.8</td>
</tr>
<tr>
<td>% Surgical</td>
<td>19%</td>
<td>11%</td>
<td>17%</td>
</tr>
</tbody>
</table>

### Summarizing Company X’s Outcomes Data

<table>
<thead>
<tr>
<th>Body Parts</th>
<th>2010*</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Cervical Spine</td>
<td>8</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Elbow</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Hand/Wrist</td>
<td>16</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Knee</td>
<td>12</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Lumbar Spine</td>
<td>13</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Multiple</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Sacroiliac joint</td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Shoulders</td>
<td>13</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>Thoracic Spine</td>
<td>7</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Cost Drivers

Surgeries: (13/75) = 17.3%

DOI vs. Start of Treatment

Co-Morbidities (Health of the Workforce)

Avg. Visits in Treatment (Surgical) = **28.9 visits**
 Avg. Visits in Treatment (Non) = **17.4 visits**

Avg. Days in Treatment (Surgical) = **88.3 days**
 Avg. Days in Treatment (Non) = **20.0 days**
### Charges v. Payments in 2012

<table>
<thead>
<tr>
<th></th>
<th>Charges</th>
<th>Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$336,907.00</td>
<td>$193,271.34</td>
</tr>
<tr>
<td>Surgical</td>
<td>$173,680.00</td>
<td>$99,734.26</td>
</tr>
<tr>
<td>Non-Surg.</td>
<td>$163,227.00</td>
<td>$93,537.08</td>
</tr>
</tbody>
</table>

### DOI vs. Start of Treatment

Shortening the duration between the time patients get injured and the time we see them is critical

Average 87.8 days
Do You Know Your Data Footprint…. 2/5/14

Summarizing Company X's Outcomes Data

Co-Morbidity Summary

- Patients with 1 or more co-morbidity: 85%
- Patients with 2 or more co-morbidities: 75%
- Patients with 3 or more co-morbidities: 59%

Smoker: 11%
Obese: 52%
Osteoarthritis: 27%
Hypertensive: 23%

Summarizing Company X's Outcomes Data

Co-Morbidity Summary

- Prev. Hx. of WC Claims: 39%
- Failed PT Prev. 6 mon.: 20%
- Prev. related surgery: 19%
- English as 2nd Language: 4%

How Co-Morbidities Impact Outcomes

Those patients who were obese average visits were 14.3

This is 3.2 visits greater than your overall average of 11.1 visits which equals approximately $640 in therapy costs

What other costs are impacted?
Differentiate

REAL Outcomes

Indemnity Costs  Medical Costs

40%  60%

Physical Therapy  20% of Medical Costs

Sharing of Claims information:

- Medical Costs
- Indemnity Costs (Ratings/Function)
- Total Claims Cost
- Percentage of Individuals that returned to Duty
- Percentage of claims re-opened or new in the next year
Accountability

Sharing outcomes information amongst our profession

- FOTO (Great Starting Point)
- We can move the needle further in WC

MedMetrics – Using BroadSpire's Claim information to determine who the "best" physicians are by area code

Success in the Future

- Sustainability through a more universal set of standards
  - OUTCOMES as defined by customer and PT
- Educating Employers and their representatives
  - Using Big Data and outcomes to make better healthcare decisions
- Outlawing Re-pricing Networks
  - Let’s Learn from Oregon
“It is no longer sufficient to rely upon theoretical arguments that physical therapy's contributions are beneficial to society. Consistent practice behaviors and a body of credible evidence are required if patients, employers, payers and policy makers are going to consider PT services among their value priorities”

- PT January of 2013

“Your product is only as valuable as what someone is willing to pay for it”

How much value are you creating?
Questions???

References

- Godwin D. *Fighting Back Against PPO Discounts in Workers’ Compensation*. IMPACT, August 2010, p 34.
- Van Doorne E. *Developing Workers’ Compensation Contracts*. IMPACT, October 2009, p 18
- International Association of Industrial Accident Boards and Commissions (IAIABC) and the Workers Compensation Research Institute (WCRI), *Workers Compensation Laws as of January 2012* [www.wcrinet.org](http://www.wcrinet.org)
Thank you

Brian Stewart, DPT
Chief Marketing & Acquisitions Officer
(913) 831-2721
bstewart@arcpt.com
@bstewartarc

ARC Physical Therapy +
www.arcpt.com
www.RedefineWellness.com