Using Process of Care & Clinical Outcomes Data to Improve Decision Making, Quality & Value

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University of Pittsburgh
Scientific Director
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Financial Relationships Include:
- Royalties and Stock Options: None
- Consulting Income: Scientific Director, APTA Physical Therapy Outcomes Registry
- Research Support: R01AR064047-01 (Knee CAT Study); R01AR069503-01A1 (POETT Study); DoD W81XWH-15-1-0655 (STAR Trial for MLKI), AOSSM (Review & Update of IKDC-SKF)
- Other Support: None

Overview of Presentation
- Definition of value
- Summary of Orthopaedic Section initiative to develop National Orthopaedic Physical Therapy Outcomes Database
- Use of Patient-Centered Outcomes (PCOs) at individual level
- Use of PCOs for quality initiatives
- Overview of PT Outcomes Registry
Payment Reform

Shifting Paradigm:

Volume-Based Payment ➔ Value-Based Payment

What is Value?

\[
\text{Value} = \frac{\text{Health Outcomes Achieved}}{\text{Costs}}
\]

Porter ME: NEJM 363:26, 2010

Measuring Value Inherently Requires Measuring Health Outcomes
Patient-Centered Outcomes

“Outcomes of Medical Care that are Important to Patients”

What Outcomes Are Most Important to Patients???

Patient-Reported Outcomes

Commonly Measure:

- Patient’s perception of:
  - Symptoms
  - Activity
  - Participation

“Physical therapist must become equipped with skills necessary to function within effective health care system to identify what works, for what conditions, under what circumstances and at what costs”

Jette AM
McMillan Lecture 2012
What Skills are Needed by Physical Therapists in Today’s Health Care Environment to Practice and Thrive???

Face Into the Storm
43rd Mary McMillan Lecture
2012 Annual Conference of the APTA

- Knowledge & application of the principles of evidence-based practice
- Interest in and use of data
- Ability to recognize & develop solutions uncovered by data

PT Score Card
Delitto – 2001 Maley Lecture
Interest In & Analysis of Data & Ability to Recognize & Develop Solutions Uncovered by Data

What Data Are Needed?
Consider:
  • Personal characteristics of patients
  • Diagnosis/classification of patient
  • Clinical outcome measures that are important to patient
  • Process of care data

Physical Therapy Outcomes Registry
Population-Specific Modules:
A specific set of data elements to describe & risk adjust process of care & clinical outcomes for a defined population of patients
Population-Specific Modules

• Tier 1 Variables:
  – Patient classification/diagnosis
  – Population-specific outcome measures
  – Other variables necessary for risk adjustment

• Tier 2 Variables:
  – Specific interventions provided

• Tier 3 Variables
  – Symptoms & physical examination findings

Linked to Clinical Practice Guidelines

2015 - 2020 Orthopaedic Section Strategic Plan

Goal 1 – Standards of Practice:
Objective B – Develop National Orthopaedic Physical Therapy Outcomes Database with modules for neck, shoulder, knee and low back. From database, provide mechanism for measuring & validating value in orthopaedic practice.

Population-Specific Modules

Orthopaedic Section Modules:
• Neck Pain – developed, tested & ready to implement
• Shoulder Pain – developed, tested, analysis complete, pending finalization & implementation
• Knee Pain – developed & pilot testing underway
• Low Back Pain – preliminary draft developed
Orthopaedic Section Shoulder Pain Module Development Group

- Philip McClure PT PhD FAPTA (Chair)
- James Irrgang PT PhD ATC FAPTA
- Brian Leggin PT DPT OCS
- Lori Michener PT PhD ATC SCS FAPTA
- Amee Seitz PT PhD
- Charles Thigpen PT PhD ATC
- Timothy Uhl PT PhD ATC
- Gerard Brennan PT PhD
- Stephen Kareha PT DPT OCS ATC CSCS

Shoulder Pain Pilot Project

Module Data Elements:
- Classification (Pathoanatomic) – Post-surgery, Subacromial Pain Syndrome, Passive Motion Deficits, Instability
- Classification (Irritability) – High, Moderate Low
- Outcomes – Penn Shoulder Score, Numeric Pain Rating Scale
- Risk Adjustment Variables – Mechanism of onset, recurrent problem, injection, surgery, litigation etc.
- Interventions – Shoulder mobilization (passive/mobilization/manipulation, ROM/stretching, neuromuscular exercises, dry needling etc.), thoracic mobilization/manipulation, scapular dyskinesis, accessory joint motion etc.
- Symptoms – Pain intensity, location & behavior, activity limitations etc.
- Examination Findings – active & passive motion, scapular dyskinesis, instability signs, rotator cuff, labral, BRN etc.

Patient Characteristics (n=253)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (yrs)</td>
<td>50.9±19.0 (13:92)</td>
</tr>
<tr>
<td>BMI</td>
<td>28.4±7.2 (15:65.2)</td>
</tr>
<tr>
<td>Female (%)</td>
<td>115 (45.5%)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>218 (86.2%)</td>
</tr>
<tr>
<td>Black/African American</td>
<td>16 (6.3%)</td>
</tr>
<tr>
<td>Asian</td>
<td>6 (2.4%)</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>10 (4.0%)</td>
</tr>
</tbody>
</table>
I think the group that should be acknowledged is the Shoulder Pain Module Development Group - we should also consider having inviting them to participate in the webinar.

Irrgang, James J, 3/16/2017
Shoulder Pain Pilot Project

Patient Characteristics (n=253)

<table>
<thead>
<tr>
<th>Comorbidities</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>34</td>
<td>13.4%</td>
</tr>
<tr>
<td>Thyroid Disease</td>
<td>15</td>
<td>5.9%</td>
</tr>
<tr>
<td>Cardiac Disease</td>
<td>42</td>
<td>16.6%</td>
</tr>
<tr>
<td>Current Smoker</td>
<td>20</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

Total Number of Comorbidities

<table>
<thead>
<tr>
<th>Number of Comorbidities</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>106</td>
<td>49.8%</td>
</tr>
<tr>
<td>1 to 3</td>
<td>86</td>
<td>34.0%</td>
</tr>
<tr>
<td>&gt; 3</td>
<td>35</td>
<td>13.8%</td>
</tr>
</tbody>
</table>

Narcotic Use

<table>
<thead>
<tr>
<th>Number of Subjects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>20.2%</td>
</tr>
</tbody>
</table>

Injection

<table>
<thead>
<tr>
<th>Number of Subjects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>52.3%</td>
</tr>
</tbody>
</table>

Onset

<table>
<thead>
<tr>
<th>Onset Type</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gradual/chronic</td>
<td>109</td>
<td>43.1%</td>
</tr>
<tr>
<td>Sudden – Atraumatic</td>
<td>39</td>
<td>15.4%</td>
</tr>
<tr>
<td>Traumatic</td>
<td>39</td>
<td>15.4%</td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
<td>15.8%</td>
</tr>
</tbody>
</table>

Recurrent Problem

<table>
<thead>
<tr>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>62</td>
<td>24.5%</td>
</tr>
</tbody>
</table>

Surgery

<table>
<thead>
<tr>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>79</td>
<td>31.2%</td>
</tr>
</tbody>
</table>

Insurance

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>139</td>
<td>54.0%</td>
</tr>
<tr>
<td>Medicare</td>
<td>52</td>
<td>20.6%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>13</td>
<td>5.1%</td>
</tr>
<tr>
<td>Self-Pay</td>
<td>1</td>
<td>0.4%</td>
</tr>
<tr>
<td>Automobile</td>
<td>4</td>
<td>1.6%</td>
</tr>
<tr>
<td>Workers'</td>
<td>25</td>
<td>9.9%</td>
</tr>
<tr>
<td>Compensation</td>
<td>21</td>
<td>8.3%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Shoulder Pain Pilot Project

Process Outcomes (n=253)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Average</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of Care (Days)</td>
<td>46.3 ± 36.9</td>
<td>1</td>
<td>173</td>
</tr>
<tr>
<td>Number Visits</td>
<td>8.8 ± 7.4</td>
<td>1</td>
<td>46</td>
</tr>
</tbody>
</table>
Process Outcomes - Interventions (n=253)

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Non-End Range</th>
<th>End Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder Mobilization</td>
<td>112 (44.3%)</td>
<td>141 (55.7%)</td>
</tr>
<tr>
<td>Spinal Mobilization</td>
<td>30 (12.0%)</td>
<td>31 (12.5%)</td>
</tr>
<tr>
<td>Soft Tissue Mobilization</td>
<td>130 (51.8%)</td>
<td>3 (1.2%)</td>
</tr>
<tr>
<td>ROM Exercises</td>
<td>143 (56.5%)</td>
<td>108 (42.7%)</td>
</tr>
<tr>
<td>Resistive Strength Training</td>
<td>209 (80.6%)</td>
<td></td>
</tr>
<tr>
<td>Tapping/Strapping</td>
<td>45 (18.0%)</td>
<td></td>
</tr>
<tr>
<td>Patient Education/Activity Modification</td>
<td>209 (80.6%)</td>
<td></td>
</tr>
<tr>
<td>Ultrasound</td>
<td>9 (3.6%)</td>
<td></td>
</tr>
<tr>
<td>Electrical Agents</td>
<td>41 (16.2%)</td>
<td></td>
</tr>
</tbody>
</table>

Clinical Outcomes

<table>
<thead>
<tr>
<th>Clinical Outcomes</th>
<th>Baseline</th>
<th>Final</th>
<th>Change</th>
<th>Chg/Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penn Shoulder Score (PSS)</td>
<td>44.2±4.4 (n=104)</td>
<td>72.4±21.6 (n=101)</td>
<td>28.0±28.8 (n=101)</td>
<td>3.8±5.5 (-3.8;10.5)</td>
</tr>
<tr>
<td>Numerical Pain Rating (NPR)</td>
<td>5.0±2.8 (n=104)</td>
<td>1.9±2.4 (n=101)</td>
<td>3.1±2.8 (n=101)</td>
<td>3.1±2.8 (-0.3;6.3)</td>
</tr>
</tbody>
</table>

Clinical Outcomes - Change > MCID

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Change (%)</th>
<th>MCID (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSS Change &gt; 11.4</td>
<td>154 (60.9)</td>
<td></td>
</tr>
<tr>
<td>NPR Change &gt; 2.2</td>
<td>126 (48.8)</td>
<td></td>
</tr>
</tbody>
</table>

Can Patient-Centered Outcomes Be Utilized to Detect Differences Between Physical Therapists?
Positive Deviants

- Individuals or groups who are able to find better solutions to problems than their peers
- Need to identify “positive deviants” & discover their successful behaviors & strategies
- Develop a plan of action to promote their adoption by all


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PT Score Card

<table>
<thead>
<tr>
<th></th>
<th>PT 1</th>
<th>PT 2</th>
<th>PT 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Patients</td>
<td>6</td>
<td>34</td>
<td>5</td>
</tr>
<tr>
<td>Average PSS – SOC</td>
<td>59.0</td>
<td>49.9</td>
<td>48.3</td>
</tr>
<tr>
<td>Average PSS – DC</td>
<td>69.0</td>
<td>73.4</td>
<td>80.0</td>
</tr>
<tr>
<td>Average PSS – Change</td>
<td>8.4</td>
<td>32.6</td>
<td>28.8</td>
</tr>
<tr>
<td>Average Visits</td>
<td>6</td>
<td>7</td>
<td>3.8</td>
</tr>
<tr>
<td>Change/Visit</td>
<td>0.9 / Visit</td>
<td>5.6 / Visit</td>
<td>13.1 / Visit</td>
</tr>
</tbody>
</table>

Data from Shoulder Pain Pilot Project for 3 PTs

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Why Were There Differences Between Physical Therapists?
Differences Between PTs

Possible Explanations:

- Differences in patient characteristics???
- Differences in severity of involvement???
- Differences in treatment approaches???

Requires Risk Adjustment Procedures to Answer these Questions

<table>
<thead>
<tr>
<th></th>
<th>PT 1</th>
<th>PT 2</th>
<th>PT 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder Mobilization</td>
<td>Non-End Range</td>
<td>End Range</td>
<td>Non-End Range</td>
</tr>
<tr>
<td>Spinal Mobilization</td>
<td>Non-Thrust</td>
<td>Thrust</td>
<td>Non-Thrust</td>
</tr>
<tr>
<td>Dry Needling</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>ROM Exercises</td>
<td>Non-End Range</td>
<td>End Range</td>
<td>Non-End Range</td>
</tr>
<tr>
<td>Overpressure</td>
<td>Overpressure</td>
<td>Overpressure</td>
<td>Overpressure</td>
</tr>
<tr>
<td>Neuromuscular Control Exercises</td>
<td>Non-Thrust</td>
<td>Overpressure</td>
<td>Non-Thrust</td>
</tr>
<tr>
<td>Resistive Strength Training</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Tapping/Strapping</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Patient Education/Activity Modification</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Electrical Agents</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Neck Pain with Mobility Deficits:

Another Example – Neck Pain Pilot Project

<table>
<thead>
<tr>
<th></th>
<th>Individual PT</th>
<th>All PTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROM (deg)</td>
<td>50 ± 15</td>
<td>45 ± 15</td>
</tr>
<tr>
<td>Resistive</td>
<td>50 ± 15</td>
<td>45 ± 15</td>
</tr>
<tr>
<td>Overpressure</td>
<td>50 ± 15</td>
<td>45 ± 15</td>
</tr>
<tr>
<td>Neuromuscular Control Exercises</td>
<td>Non-Thrust</td>
<td>Overpressure</td>
</tr>
<tr>
<td>Resistive Strength Training</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Tapping/Strapping</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Patient Education/Activity Modification</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Electrical Agents</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Clinically Meaningful Outcome:

| Table 1: Clinical outcomes - Number of patients achieving a clinically meaningful change |
|------------------------------------------|------------------|
| Individual (n=56)                       | Peers            |
| SDI Change > 9% (%)                     | 11 (88.8)        | 13 (50.0)       |
| SF-36 Change > 5 lbs (%)                | 13 (100.0)       | 13 (46.4)       |

Is This PT a Positive Deviant???

Differences in Treatment:

Table 2 - Treatment Provided During the First Week of Care for Patients with Neck Pain with Mobility Deficit for an Anonymous Physical Therapist and All Physical Therapists That Participated in the Project

<table>
<thead>
<tr>
<th>Treatment Provided</th>
<th>Individual PT</th>
<th>All PT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neck Pain Mobility</td>
<td>7/47.5</td>
<td>5/47.5</td>
</tr>
<tr>
<td></td>
<td>7/47.5</td>
<td>5/47.5</td>
</tr>
<tr>
<td>- Thoracic mobility</td>
<td>3/30.0</td>
<td>2/30.0</td>
</tr>
<tr>
<td></td>
<td>3/30.0</td>
<td>2/30.0</td>
</tr>
<tr>
<td>- Shoulder mobility</td>
<td>7/47.5</td>
<td>5/47.5</td>
</tr>
<tr>
<td>- Upper Ext. Stretch</td>
<td>3/30.0</td>
<td>2/30.0</td>
</tr>
<tr>
<td>- Pelvic Extension</td>
<td>7/47.5</td>
<td>5/47.5</td>
</tr>
<tr>
<td>- Physical Activity</td>
<td>3/30.0</td>
<td>2/30.0</td>
</tr>
</tbody>
</table>
Is this PT a “Positive Deviant???

What Can Be Learned from this Individual???
Meaningful Outcome

Definition Based On:

- Change greater than measurement error (i.e. minimal detectable change [MDC])
- Important change (i.e. minimum clinically important difference [MCID])
- Achieving an acceptable symptom state (i.e. PASS)
- Comparison to population norms

Clinically Meaningful Outcome

Case Example:

- 33 year old male that is 12 years status post ACL reconstruction that has 2 cm grade 3 chondral lesion on medial femoral condyle
- Complains of persistent pain and swelling over last 12 months – baseline IKDC Subjective Knee Form Score is 55
- Underwent microfracture procedure Feb 2010
- At 1 year post-op visit, IKDC Subjective Knee Form score has improved by to 82 representing a change of 27 from baseline score

Clinical Meaningful Outcome

Case Example:

- MDC at 12 months for patients undergoing articular cartilage procedure is 13.7 – therefore improvement is beyond measurement error
- MCID at 12 months for patients after articular cartilage procedure is 16.7 – therefore improvement is important to patient
- PASS threshold for patients 1 to 5 years after ACL reconstruction is 75.9 – therefore current status likely to be satisfactory to patient
- Population average for males 25 to 34 yrs. of age is 94 ± 9 – therefore patient is still ~ 1.3 SDs below normal for population

Greco et al 2010
Mueller et al. 2016
Anderson et al 2006
Use of Patient-Centered Outcomes

- Discuss & interpret meaning of PCO scores with patient
- Use to enhance patient-PT communication & shared decision making:
  - Set goals
  - Determine optimal approach to care for patient
  - Compare improvement to expected trajectory of recovery
- Identify patients that are failing to progress:
  - Modify treatment
  - Consultation
  - Referral

Using Patient-Centered Outcomes for Quality Initiatives

Payment Reform

- Created two quality-based payment plans:
  - Merit-Based Incentive Payment Plan (MIPS)
  - Advanced Alternative Payment Models (APMs)
- Passed by overwhelming majority (i.e. not going away)
Merit-Based Incentive Payment Plan (MIPS)

- Replaces Physician Quality Reporting System (PQRS)
- Payment based on combination of:
  - Quality measures
  - Improvement activities
  - Advancing care information (replaces meaningful use)
  - Costs (replaces value-based modifier)
- Takes effect in 2017, but PT not included until 2019

Quality Measures - Past

- Structure – characteristics of environment, work force, resources that are linked to outcome
- Process – aspects of care process that are linked to outcome

NQF: PROs in Performance Measurement, 2013

Existing Quality Measures for PQRS Reporting for PT

- Preventive care & BMI screening
- Documentation of current medications
- Assessment & follow-up
- Falls risk assessment
- Falls plan of care
- Functional outcome assessment

All are Process Measures that Represent Good Clinical Practice But Not Direct Measures of the Outcome of Care
Quality Measures - Future

• Outcome (end result) of care as the ultimate measure of quality

To demonstrate quality & value of care provided by a clinician or institution, PRO data need to be aggregated into a PRO-Based Performance Measure (PRO-PM)

(NQF: PROs in Performance Measurement, 2013)

PRO-Based Performance Measure

<table>
<thead>
<tr>
<th>Concept</th>
<th>Individual with Acute ACL Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient-Reported Outcome (PRO)</td>
<td>Symptoms, Function &amp; Sports Activity</td>
</tr>
<tr>
<td>PRO Measure (PROM)</td>
<td>IKDC Subjective Knee Form</td>
</tr>
<tr>
<td>PRO-Based Performance Measure (PRO-PM)</td>
<td>Percent of patients that achieved an IKDC-SF score at 2 years post-op that is within 1 standard deviation of the age &amp; sex-matched population normal IKDC-SKF value</td>
</tr>
</tbody>
</table>

\[
PRO - PM = \frac{\text{Number of Patients that Achieved Target Score}}{\text{Total Number of Eligible Patients}}
\]
PRO-Based Performance Measures

Requires:

- Use of reliable, valid & responsive PRO measures that are important to the patient
- Systematic collection of PROs AND necessary risk adjustment variables integrated into clinical practice
- Mechanism for collecting longitudinal follow-up
- Use of technology to streamline administration & minimize burden of data collection

Risk Adjustment Procedures Need to be Developed & Validated to Permit Fair Comparisons Across Providers & Organizations

Risk Adjustment Variables Will Need to Be Collected within Standard Care Processes

The Future Is Now

Use of Patient-Reported Outcome Measures for Value-Based Purchasing

Comprehensive Care for Joint Replacement Model for Bundled Payment
APTA Quality Strategy

**Supports:**
- Use of NQF endorsed quality reporting measures that are approved for use by physical Therapists
- Use of PROMIS Physical Function, AM-PAC & CARE (for subacute settings) as global measures of physical function/mobility
- Use of PROMIS Global 10 or VR-12 as global measures of health-related quality of life
- Development of process quality measure based on percent of eligible patients with intake & end of care outcome measure

**PRO-Based Performance Measures Need to be Developed and Tested**

**Current Initiatives of Other Societies**

- **AAOS**
  - **Performance Measures Work Group**
    - Management of Anterior Cruciate Ligament Injuries
Example of Performance Measure

**Process Measure:**

- Proportion of patients undergoing primary ACL reconstruction with PRO measures collected pre-operatively & 1 year after surgery
- PROs might include:
  - IKDC-SKF (for function)
  - Marx Activity Scale (for activity)
  - SANE (for patient satisfaction)

**Number of Patients with Pre - Op & 1 Year Measure**

[Total Number of Eligible Patients]

Use of Outcome Measures for Quality and Value-Based Care Initiatives

**Summary:**

- Outcomes measures are the ultimate quality measures
- Outcome measures should be Patient-Centered – measure what is important to patient
- Collection of PRO measures needs to be integrated into clinical practice
- To demonstrate quality & value of care, PRO data must be aggregated to a PRO-Based Performance Measure
- Valid interpretation requires RISK ADJUSTMENT

Many Logistical Issues for Collecting, Aggregating & Using Process of Care & Clinical Outcome Data within Current Standard Practice

**An Efficient Systems-Based Solution is Needed**
**Physical Therapy Outcomes Registry**

Collection & aggregation of clinical & process of care data from the electronic health record (EHR) to help PTs make well-informed clinical decisions and to track & benchmark clinical outcomes against nationwide data.

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**Physical Therapy Outcomes Registry**

Practice | Quality
---------|---------
Research | Payment

- Inform payment contract negotiations
- Guide payment policy
- Fulfill quality reporting requirements
- Support quality improvement initiatives
- Track performance of care delivery and documentation patterns
- Assess adherence to CPGs
- Drive health services research initiatives
- Demonstrate value of physical therapist services

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**What Data are in PT Outcomes Registry?**

**Core Data Set** (All Participants)

- Patient data
- Provider data
- Facility data

**Quality Data**

- FLR
- PQRS
- MIPS Quality Measures
- Quality Improvement
- Condition-Specific
- Interquartile Data

**Modules (CPGs)**

- Classification/Diagnosis
- CPGs
- Interventions
Physical Therapy Outcomes Registry

Core Data Elements:
- Patient demographic characteristics
- Episode of care
  - Onset data & start of care
  - Referral source
  - Primary & secondary diagnosis
  - Insurance
- Visit information
  - Provider/facility
  - CPT codes
  - Pain
  - Global & specific physical function score
- Provider/facility information
  - Graduation date
  - Residency/fellowship training
  - Specialization

Core Outcome Instruments – Constructs:
- Pain
- Physical function/mobility
  - Common metric that measures wide range of function appropriate for full spectrum of patients seen by PTs
- Multidimensional quality of life

Global Measures of Physical Function/Mobility:
- PROMIS PF
- AM-PAC
- Care Connections
Physical Therapy Outcomes Registry
Specific Measures of Physical Function/Mobility

- DASH
- KOOS
- LEFS
- NDI
- LBP Disability Questionnaire

Physical Therapy Outcomes Registry
Criteria for Review & Approval of Outcomes Instruments
- Identifying information
- Instrument specifications
- Scientific applicability
- Feasibility
- Adoption

Physical Therapy Outcomes Registry
Population-Specific Modules:
A specific set of data elements to describe & risk adjust process of care & clinical outcomes for a defined population of patients
Population-Specific Modules

• Tier 1 Variables:
  – Patient classification/diagnosis
  – Population-specific outcome measures
  – Other variables necessary for risk adjustment

• Tier 2 Variables:
  – Specific interventions provided

• Tier 3 Variables:
  – Symptoms & physical examination findings

Linked to Clinical Practice Guidelines

Physical Therapy Outcomes Registry

Tier 1 Data Useful to Answer:
• What are risk adjusted outcomes for specific diagnoses/classifications?

Tier 2 Data Useful to Answer:
• Were interventions consistent with CPGs?
• Were interventions matched to treatment classification?
• Did matched treatment result in better outcomes than unmatched treatment?

Tier 3 Data Useful to Answer:
• How do the patient’s symptoms and examination findings influence outcome of treatment?
• Does a personalized approach to treatment lead to better outcomes?

Strategies for Successful Launch of the Physical Therapy Outcomes Registry

• Reduce burden for submitting data to Registry
• Robust dashboard capabilities
• Designation as Qualified Data Registry
Collaboration with FIGmd

- Experienced registry vendor – provide IT infrastructure for more than 20 professional association registries
- Utilize technology that facilitates seamless electronic transfer of data from electronic health record with minimal impact on practice
- Have robust registry dashboard and report functions to track & benchmark performance of care delivery, adherence to CPGs and support quality improvement initiatives (i.e. the VALUE of the PT Outcomes Registry)
**Physical Therapy Outcomes Registry**

Qualified Clinical Data Registry (QCDR):

- Application for CMS-approved QCRD to be submitted in 2017
- Will enable reporting of MIPS quality metrics to CMS and other payers on behalf of providers that participate in Registry

  Added VALUE for Participation in Registry when Quality Reporting Becomes Required for PTs in 2019

**PT Outcomes Registry**

can help you visually show the status of your practice.

For more information:
Visit the PT Outcomes Registry display in the APTA Pavilion (Booth #1235) in the Exhibit Hall
or contact
registry@apta.org
www.ptoutcomes.com
Thank You

Department of Physical Therapy