

# National Orthopaedic Physical Therapy Outcomes Database

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## Orthopaedic Section Knee Pain Pilot Project

Introductory Webinar  
May 17, 2016

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Chair, NOPTOD Task Force

G. Kelley Fitzgerald, PT, PhD, FAPTA  
Chair, Knee Outcomes Work Group

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Member, Knee Outcomes Work Group



# **Orthopaedic Section Strategic Plan**

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## **Strategic Outcome 1 – Standards of Practice:**

### **Objective B – Develop National Orthopaedic Physical Therapy Outcomes Database**



# NOPTOD Task Force

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- **James Irrgang PT PhD ATC FAPTA (Chair)**
- **Gerard Brennan PT PhD**
- **William Boissonault PT DHSc DPT FAAOMPT FAPTA**
- **Chad Cook PT PhD MBA FAAOMPT**
- **Anthony Delitto PT PhD FAPTA**
- **Joe Godges PT DPT MA OCS**
- **Lori Michener PT PhD ATC SCS**
- **Michael Reed DPT MSc OCS MTC**
- **Joshua Cleland PT PhD OCS FAAOMPT**
- **Marc Goldstein EdD**



# National Orthopaedic Physical Therapy Outcomes Database

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## Purposes:

- Provide clinicians with a tool they can use to assess their clinical performance
- Describe orthopaedic physical therapy practice
- Provide evidence of the value of orthopaedic physical therapy



# National Orthopaedic Physical Therapy Outcomes Database

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## Quality Improvement Projects:

- Assess clinician and organizational performance
- Permitted use of protected health information
- Does not require IRB approval



# National Orthopaedic Physical Therapy Outcomes Database

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The NOPTOD is  
**NOT**  
a Research Project



# National Orthopaedic Physical Therapy Outcomes Database

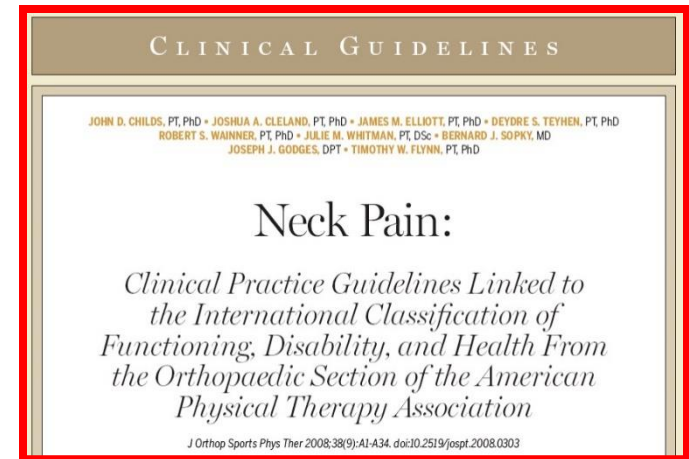
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## Neck Pain Pilot Project:

- Successfully completed
  - N = 250 patients
  - N = 40 therapists

## Shoulder Pain Pilot Project:

- Currently In Process



MARTIN J. KELLEY, DPT • MICHAEL A. SHAFFER, MSPT • JOHN E. KUHN, MD • LORI A. MICHENER, PT, PhD  
AMEE L. SEITZ, PT, PhD • TIMOTHY L. UHL, PT, PhD • JOSEPH J. GODGES, DPT, MA • PHILIP W. MCCLURE, PT, PhD

## Shoulder Pain and Mobility Deficits: Adhesive Capsulitis

*Clinical Practice Guidelines Linked to the International Classification of Functioning, Disability, and Health From the Orthopaedic Section of the American Physical Therapy Association*

J Orthop Sports Phys Ther 2013;43(5):A1-A31. doi:10.2519/jospt.2013.0302



# National Orthopaedic Physical Therapy Outcomes Database

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## Purposes of Knee Pilot Project:

- Demonstrate feasibility of collecting and analyzing outcomes data
- Determine usefulness of information to enhance clinician performance & establish value of orthopaedic physical therapy
- Use results to plan for an electronic data capture & analysis system for the NOPTOD





# NOPTOD Knee Pain Pilot Project

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## Overview:

Participation in Pilot Project is  
Voluntary & Open to All PT Members of  
Orthopaedic Section



# NOPTOD Knee Pain Pilot Project

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## Overview: Registration Process

- **Contact Ortho Section office for Registration**

E-mail: Ivogt@orthoPT.org  
Postal mail: Orthopaedic Section, APTA, Inc.  
2920 East Avenue South, Suite 200  
La Crosse, WI 54601  
Telephone: (800) 444-3982 ext. 2090  
Fax: (608) 788-3965

- **Complete Registration Form:**

- Name
- E-mail address
- Practice setting
- Organization
- Facility
- Entry level degree
- Years of practice
- Advanced degrees (including DPT if entry level degree was not DPT)
- Residencies/Fellowships
- ABPTS certifications



**Also See:  
MOP page 6**

# NOPTOD Knee Pain Pilot Project

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## Overview: Registration Process

- Completed registration form submitted to Section Office
- Section Office will assign organization/facility & PT ID numbers
- Individualized Case Report Forms, including the organization/facility & PT ID numbers will be provided by Section Office
- Only use Case Report Forms that contain your personal ID information to submit information to the NOPTOD
- Data Use Agreement between clinical site and section
  - Complete and return prior to submission of any data



**Also See:  
MOP page 6**

# NOPTOD Knee Pain Pilot Project

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## Overview:

- **Data collection:** paper-based forms
- **Data to be collected includes:**
  - Patient characteristics
  - Symptoms & physical examination findings
  - Treatment classification(s)
  - Interventions
  - Clinical outcomes
  - Information summarizing episode of care



# NOPTOD Knee Pain Pilot Project

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## Overview:

- **Data collected prospectively for 6 months:**
  - June 1, 2016 – November 30, 2016
- Record data ***during*** course of care
  - Retrospective chart review of patients treated prior to data collection period not eligible for inclusion in pilot project



# NOPTOD Knee Pain Pilot Project

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## Overview:

- Completed forms to be sent to Orthopaedic Section Office
  - Scanned & e-mailed
  - Faxed
  - US Postal Service
- Forms should be sent soon after the end of care, but will also accept forms monthly or at end of data collection period



# NOPTOD Knee Pain Pilot Project

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## Overview:

- **Analysis & summary of information:**
  - Completeness of data collection
  - Accuracy of treatment classification
  - Adherence to evidence-based treatment guidelines
  - Summary of clinical outcomes
  - Summary of episode of care (duration, visits)



# NOPTOD Knee Pain Pilot Project

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## Overview:

- Results sent to all section members contributing data
- Summary of personal results
- Summary of overall results to permit comparisons with peers across country
- All results reported anonymously





# NOPTOD Knee Pain Pilot Project

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## Two Key Documents

- **Manual of Operating Procedures (MOP)**
  - Reference document describing project and details of standardized methods for data collection
  - The MOP should be able to answer most of your questions about completing the forms
- **Case Report Form**
  - Data Collection Form
    - Intake Data (pages 1 and 2)
    - Weekly Reporting (pages 3 and 4)



# NOPTOD Knee Pain Pilot Project

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## Manual of Operating Procedures( MOP):

- **Developed by team of researchers and clinicians based on published literature and practice guidelines**
- G. Kelley Fitzgerald, PT, PhD, FAPTA (Chair)
- Allyn Bove, PT, DPT
- Gerard Brennan, PT, PhD
- Terese Chmielewski, PT, PhD, SCS
- James Irrgang, PT, PhD, ATC, FAPTA
- David Logerstedt, PT, PhD, MPT, MA, SCS
- Andrew Lynch, DPT, PhD
- Kate Minick, PT, DPT, OCS
- Brett Neilson, PT, DPT, OCS, FAAOMPT



# **NOPTOD Knee Pain Pilot Project**

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## **Manual of Operating Procedures( MOPs):**

- **Reference document providing detailed description of project:**
  - Overview & purpose of project
  - Instructions for registration to participate in pilot project
  - Instructions for completing & submitting Case Report Forms
- **Standardized methods for:**
  - Assessment of symptoms
  - Examination procedures
  - Classification of patient
  - Reporting intervention strategies
  - Assessment of outcomes



# Case Report Form

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## Identification Information:

- Section Office will provide 10 forms
  - Clinic, PT & Patient ID numbers
- Start with form number 001 and use consecutively numbered form for each new patient
- Do not include any patient identification information (name, SSN, MRN) on form
- Use only forms that have your ID information
- Contact Orthopaedic Section Office if additional forms are needed



# **NOPTOD Knee Pain Pilot Project**

## **Case Report Form Overview:**

- **Intake Reporting (pages 1-2)**
  - Episode of Care Data
  - Patient characteristics
  - Functional Status
  - Examination findings & Classification
- **Weekly Reporting (pages 3-4)**
  - Daily/weekly
  - Interventions
  - Outcomes
  - Changes in Classification

**No Patient Identifiers!!!**

**Also See:  
MOP Appendix D**



Clinic ID \_\_\_\_\_

PT ID \_\_\_\_\_

Patient ID \_\_\_\_\_

**National Orthopaedic Physical Therapy Outcomes Database  
Orthopaedic Section, APTA  
Knee Case Report Form**

**Also See:  
MOP Appendix D**

Episode of Care		
Start of Care Date: __/__/__	End of Care Date: __/__/__	# of Visits: _____
End of care status (select one): <input type="checkbox"/> Discharged by PT <input type="checkbox"/> Patient terminated treatment <input type="checkbox"/> Physician terminated treatment <input type="checkbox"/> Other		

Patient Characteristics				
Demographics	Comorbidities	Knee History	Non-Surgical	Surgical
Age: _____ years	<input type="checkbox"/> Arthritis (OA or RA) <input type="checkbox"/> Osteoporosis <input type="checkbox"/> Asthma <input type="checkbox"/> COPD, ARDS <input type="checkbox"/> Angina <input type="checkbox"/> CHF, CAD <input type="checkbox"/> MI <input type="checkbox"/> Neuro (MS, PD) <input type="checkbox"/> CVA or TIA <input type="checkbox"/> PVD <input type="checkbox"/> DM (I or II) <input type="checkbox"/> Upper GI <input type="checkbox"/> Depression <input type="checkbox"/> Anxiety, panic <input type="checkbox"/> Visual impairment <input type="checkbox"/> Hearing impairment <input type="checkbox"/> DDD, stenosis <input type="checkbox"/> Obesity (BMI ≥ 30)	Current use of: <input type="checkbox"/> NSAIDs <input type="checkbox"/> Rx opioids <input type="checkbox"/> Oral steroids	Onset: __/__/__	Surgery date: __/__/__
Gender: <input type="checkbox"/> M <input type="checkbox"/> F		<input type="checkbox"/> Recent knee injections: <input type="checkbox"/> Corticosteroids <input type="checkbox"/> Viscosupplementation <input type="checkbox"/> # of prior knee surgeries <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> ≥ 2 <input type="checkbox"/> Side(s) being treated: <input type="checkbox"/> Unilateral <input type="checkbox"/> Bilateral <input type="checkbox"/> Is surgery the reason for current episode of care? <input type="checkbox"/> Y (skip next column) <input type="checkbox"/> N (complete next column, skip last column)	Mechanism: <input type="checkbox"/> Gradual or chronic <input type="checkbox"/> Sudden, nontraumatic <input type="checkbox"/> Traumatic	Date of injury leading to surgery: __/__/__
Height: _____ inches			Recurrent problem? <input type="checkbox"/> No <input type="checkbox"/> Yes, < 1 month hx <input type="checkbox"/> Yes, 1-6 month hx <input type="checkbox"/> Yes, 6-12 month hx <input type="checkbox"/> Yes, > 12 month hx	Cause of surgery: <input type="checkbox"/> Gradual or chronic <input type="checkbox"/> Sudden, nontraumatic <input type="checkbox"/> Traumatic
Weight: _____ pounds			<input type="checkbox"/> Meniscectomy <input type="checkbox"/> Meniscus repair <input type="checkbox"/> ACL reconstruction/repair <input type="checkbox"/> Other lig. recon./repair <input type="checkbox"/> Cartilage procedure <input type="checkbox"/> Patellofemoral procedure <input type="checkbox"/> TKA <input type="checkbox"/> UKA <input type="checkbox"/> HTO <input type="checkbox"/> ORIF or other fx repair <input type="checkbox"/> Arthroscopic lavage/debridement <input type="checkbox"/> Other _____	
Ethnicity: <input type="checkbox"/> Not Hispanic <input type="checkbox"/> Hispanic				
Race (all that apply): <input type="checkbox"/> White/Caucasian <input type="checkbox"/> Black/African-American <input type="checkbox"/> Asian <input type="checkbox"/> Hawaiian/Pacific Islander <input type="checkbox"/> Am. Indian/Alaska Native <input type="checkbox"/> Other _____				
Insurance (all that apply): <input type="checkbox"/> Commercial <input type="checkbox"/> Medicare <input type="checkbox"/> Medicaid <input type="checkbox"/> Self-Pay <input type="checkbox"/> Automobile <input type="checkbox"/> Workers Compensation <input type="checkbox"/> Other _____				
Smoking: <input type="checkbox"/> None <input type="checkbox"/> Current <input type="checkbox"/> Past				

# Case Report Form: Page 1

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## Intake

### Episode of Care:

- Dates for start and end of care:
  - Use mm/dd/yyyy format
- Total number of visits during episode
- End of care status:
  - Discharged by PT
  - Patient terminated treatment
  - Physician terminated treatment
  - Other (e.g. patient deceased)



**Also See:  
MOP Page 7**

# Case Report Form Pg 1

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## Patient Characteristics:

### Demographics:

- Age
- Gender
- Height and Weight
- Ethnicity and Race
- Insurance

### Comorbidities:

- Per Charlson Index

**Smoking** (Current, Past, None)

### Knee History

- Current Meds (for Knee only)
- Recent injections?
- # of Prior Surgeries
- Unilateral vs. Bilateral treatment
- Surgery (yes/no)

### Non-Surgical (skip column if surgical)

- Onset date
- Onset mechanism
- Recurrent problem?

### Surgical (skip column if non-surgical)

- Date of surgery
- Date of injury
- Onset mechanism
- Surgical procedure

**Also See:  
MOP Pages 7-9**





Clinic ID \_\_\_\_\_

PT ID \_\_\_\_\_

Patient ID \_\_\_\_\_

<b>Functional Status</b>		
Limitations with activities of daily living <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A	Limitations with work or homemaking duties <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A	Limitations with strenuous activity or sport <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A

**Diagnostic Classification & Corresponding Examination Findings (check all that apply)**

<p><input type="checkbox"/> <b>Impaired Knee Joint Motion</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Limited extension ROM (&gt;3 deg side/side difference)</li> <li><input type="checkbox"/> Limited flexion ROM (&gt;5 deg side/side difference)</li> <li><input type="checkbox"/> Functional limitation of ROM, or stiffness</li> </ul> <p><input type="checkbox"/> <b>Impaired Quadriceps Strength or Endurance</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Presence of lag</li> <li><input type="checkbox"/> MMT 4/5 or lower on one or both sides</li> <li><input type="checkbox"/> 10% or greater deficit compared to uninvolved side on 1RM or dynamometer</li> <li><input type="checkbox"/> Functional strength or endurance deficit observed by PT</li> </ul> <p><input type="checkbox"/> <b>Impaired Musculotendinous Length</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Rectus Femoris</li> <li><input type="checkbox"/> Hamstrings</li> <li><input type="checkbox"/> Iliotibial band / tensor fascia latae</li> <li><input type="checkbox"/> Gastrocnemius</li> <li><input type="checkbox"/> Other muscle, limiting function</li> </ul> <p><input type="checkbox"/> <b>Impaired Hip Strength or Endurance</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> MMT 4/5 or lower (glut med, glut max, and/or hip rotators)</li> <li><input type="checkbox"/> 10% or greater deficit compared to uninvolved side on 1RM or dynamometry</li> <li><input type="checkbox"/> (+) hip hike test</li> </ul>	<p><input type="checkbox"/> <b>Pain or Impaired Mobility of Soft Tissue</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Limited or painful scar mobility</li> <li><input type="checkbox"/> Painful or hypomobile patellar glides</li> <li><input type="checkbox"/> Pain with palpation of knee soft tissue</li> </ul> <p><input type="checkbox"/> <b>Impaired Structural Alignment</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Knee varus or valgus observed in static postural exam</li> <li><input type="checkbox"/> Abnormal foot pronation or supination in static postural exam</li> <li><input type="checkbox"/> True leg length discrepancy</li> </ul> <p><input type="checkbox"/> <b>Impaired Neuromuscular Control</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sense of instability</li> <li><input type="checkbox"/> Abnormal laxity</li> <li><input type="checkbox"/> Unwanted compensatory movement and/or balance strategies during WB functional tasks</li> <li><input type="checkbox"/> Impaired balance/proprioception</li> </ul>
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**Also See:**  
**MOP Appendix D: Form**  
**MOP Appendix A: Detailed Definitions of Exam Findings**

# Case Report Form: Page 2

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## Functional Status:

- ADLs, work or homemaking, strenuous activity or sport
- Y/N question; indicate “N/A” if the patient never performed the tasks prior to the knee injury or surgery

## Diagnostic Classification & Corresponding Exam Findings (see next slides):

- Check ALL that apply – you do not need to select one classification. If a patient fits into several classifications, you may select all relevant classifications!



**Also See:  
MOP Pages 9-12**

# Case Report Form: Page 2

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- **Classifications**

- Impaired Knee Joint Motion**

- Limited extension ROM (>3 deg side/side difference)
- Limited flexion ROM (>5 deg side/side difference)
- Functional limitation of ROM, or stiffness

- Impaired Quadriceps Strength or Endurance**

- Presence of lag
- MMT 4/5 or lower on one or both sides
- 10% or greater deficit compared to uninvolved side on 1RM or dynamometer
- Functional strength or endurance deficit observed by PT

- Impaired Musculotendinous Length**

- Rectus Femoris
- Hamstrings
- Iliotibial band / tensor fascia latae
- Gastrocnemius
- Other muscle, limiting function

- Impaired Hip Strength or Endurance**

- MMT 4/5 or lower (glut med, glut max, and/or hip rotators)
- 10% or greater deficit compared to uninvolved side on 1RM or dynamometry
- (+) hip hike test



**Also See:  
MOP Pages  
10-11; 20-22**

# Case Report Form: Page 2

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- **Classifications, cont:**

- Pain or Impaired Mobility of Soft Tissue**

- Limited or painful scar mobility
- Painful or hypomobile patellar glides
- Pain with palpation of knee soft tissue

- Impaired Structural Alignment**

- Knee varus or valgus observed in static postural exam
- Abnormal foot pronation or supination in static postural exam
- True leg length discrepancy

- Impaired Neuromuscular Control**

- Sense of instability
- Abnormal laxity
- Unwanted compensatory movement and/or balance strategies during WB functional tasks
- Impaired balance/proprioception



**Also See:  
MOP Pages 11-12; 20-22**

Clinic ID: _____ PT ID: _____	Initial	Week 2	Week 3	Week 4	Week 5	Week 6	DC
Patient ID: _____							
Date: _____							
<b>Not Scheduled/Discharged/Terminated Tx:</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Irritability</b> (H = high; M = medium; L = low)	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
<b>Interventions</b> (# of times provided during week)							
ROM (A, AA, or P; could also be CPM or cycling)							
Stretching – manual							
Stretching – mechanical							
Joint mobilization – patellofemoral							
Joint mobilization – tibiofemoral							
Joint mobilization – other joint							
Soft tissue mobilization – instrumented							
Soft tissue mobilization – non-instrumented							
Strengthening: quadriceps NWB							
Strengthening: hamstrings NWB							
Strengthening: hips (WB or NWB)							
Strengthening: calves							
Strengthening: WB multijoint							
Strengthening: trunk (incl. trunk stabilization)							
Aerobic exercise							
Orthotics/bracing							
Taping for pain or dysfunction @ knee							
Modalities: heat or cold therapy							
Modalities: ultrasound							
Modalities: e-stim for pain/swelling							
Modalities: e-stim for muscle strength							
Modalities: e-stim for muscle re-education							
Modalities: Iontophoresis or phonophoresis							
Modalities: dry needling							
Agility training (walking/running-based)							
Balance training (incl. perturbation training)							
Movement re-education							
Task-specific training							
Plyometrics							
Assistive device fitting/prescription							
Other, please list _____							
<b>Change in Classification?</b> (if Y, go to other side)	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>Outcomes</b>	<b>Initial</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Week 5</b>	<b>Week 6</b>	<b>DC</b>
IKDC (0 to 100, 100 = best function): <i>Calculation: (sum of item scores / 87) * 100</i>							

Please Indicate Changes in Classification	Initial	Week 2	Week 3	Week 4	Week 5	Week 6	DC
Date:							
<b><i>Impaired Knee Joint Motion</i></b>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
Limited extension ROM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Limited flexion ROM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional limitation of ROM, or stiffness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Impaired Quadriceps Strength or Endurance</i></b>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
Presence of lag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MMT 4/5 or lower on one or both sides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10% or greater deficit compared to uninvolved side	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional strength or endurance deficit observed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Impaired Musculotendinous Length</i></b>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
Rectus Femoris	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hamstrings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Iliotibial band/tensor fascia latae	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gastrocnemius	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other muscle, limiting function	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Impaired Hip Strength or Endurance</i></b>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
MMT 4/5 or lower (glut med, max, hip rotators)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10% or greater deficit compared to uninvolved side	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(+) hip hike test if MMT 5/5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Pain or Impaired Mobility of Soft Tissue</i></b>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
Limited or painful scar mobility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Painful or hypomobile patellar glides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pain with palpation of knee soft tissue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Impaired Structural Alignment</i></b>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
Knee varus or valgus observed in static posture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abnormal foot pron/supin in static posture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
True leg length discrepancy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Impaired Neuromuscular Control</i></b>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
Sense of instability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abnormal laxity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unwanted compensatory movement during tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Impaired balance/proprioception	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Also See: MOP Appendix D**

Clinic ID: _____ PT ID: _____	Initial	Week 2	Week 3	Week 4	Week 5	Week 6	DC
Patient ID: _____							
Date: _____							
<b>Not Scheduled/Discharged/Terminated Tx:</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Irritability</b> (H = high; M = medium; L = low)	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
<b>Interventions</b> (# of times provided during week)							
ROM (A, AA, or P; could also be CPM or cycling)							
Stretching – manual							
Stretching – mechanical							
Joint mobilization – patellofemoral							
Joint mobilization – tibiofemoral							
Joint mobilization – other joint							
Soft tissue mobilization – instrumented							
Soft tissue mobilization – non-instrumented							
Strengthening: quadriceps NWB							
Strengthening: hamstrings NWB							
Strengthening: hips (WB or NWB)							
Strengthening: calves							
Strengthening: WB multijoint							
Strengthening: trunk (incl. trunk stabilization)							
Aerobic exercise							
Orthotics/bracing							
Taping for pain or dysfunction @ knee							
Modalities: heat or cold therapy							
Modalities: ultrasound							
Modalities: e-stim for pain/swelling							
Modalities: e-stim for muscle strength							
Modalities: e-stim for muscle re-education							
Modalities: Iontophoresis or phonophoresis							
Modalities: dry needling							
Agility training (walking/running-based)							
Balance training (incl. perturbation training)							
Movement re-education							
Task-specific training							
Plyometrics							
Assistive device fitting/prescription							
Other, please list _____							
<b>Change in Classification?</b> (if Y, go to other side)	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>Outcomes</b>	<b>Initial</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Week 5</b>	<b>Week 6</b>	<b>DC</b>
IKDC (0 to 100, 100 = best function): <i>Calculation: (sum of item scores / 87) * 100</i>							

# Case Report Form: Page 3

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## Weekly Reporting

- **Enter date** for start of each week of treatment at the top of each column
- **Check box in column if patient was not seen during that week** – may be due to:
  - Patient was not scheduled during week
  - Patient has been discharged or
  - Patient has terminated treatment on his/her own
- **Check irritability box:** High/Medium/Low



**Also See:  
MOP Pages 14-17**



# Case Report Form: Page 3

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- **Irritability Classification**

- This is may change over an episode of care, record weekly
- Select the best option from the following definitions:
  - *High*: effusion of at least 2+ on sweep test, moderate to severe pain, limited ROM with pain before end range, increased skin temperature
  - *Medium*: stable 1+ or lower effusion on sweep test, mild and stable pain levels, pain around the end of ROM
  - *Low*: trace or zero effusion on sweep test, no pain at rest or with ADLs, may have some pain with overpressure at the end of ROM



**Also See:  
MOP Page 14**

# Case Report Form: Page 3

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- **Interventions**

- record number of times provided each week
- “Initial” treatment should include entire 1<sup>st</sup> week of treatment
- If patient was seen beyond 6 weeks, record total number of times each intervention was provided beyond 6 weeks in the column labeled “DC” (discharge)

- **Change in Classification?**

- If YES, then fill out page 4
- If NO, then do not fill out page 4 for that week

- **Outcomes – please measure weekly**

- IKDC
- KOOS



**Also See:  
MOP Pages 14-17**

# Case Report Form Page 4

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- Complete ***only*** when a change in classification occurred during the relevant week; **otherwise, leave blank** for that week.



**Also See:  
MOP Appendix D**

# Outcome Measures: IKDC

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- Found in Appendix B of MOP
- Record WEEKLY

**Also See:**  
**MOP Appendix B: Form**  
**MOP Page 16: Scoring Information**

# Outcome Measures: KOOS

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- Found in Appendix C of MOP
- Record WEEKLY

**Also See:  
MOP Appendix C: Form  
MOP Pages 16-17: Scoring Information**

# National Orthopaedic Physical Therapy Outcomes Database

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The NOPTOD is a Quality  
Improvement Project

**NOT**

a Research Project

IRB Approval Is Not Necessary



# National Orthopaedic Physical Therapy Outcomes Database

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## Questions???

Questions regarding registration or paperwork: contact Leah Vogt at Orthopaedic Section (contact info on Slide 10)

Questions regarding how to complete documentation or regarding physical therapy aspects of the project: contact Ally Bove  
[ams453@pitt.edu](mailto:ams453@pitt.edu); (412) 624-9255

