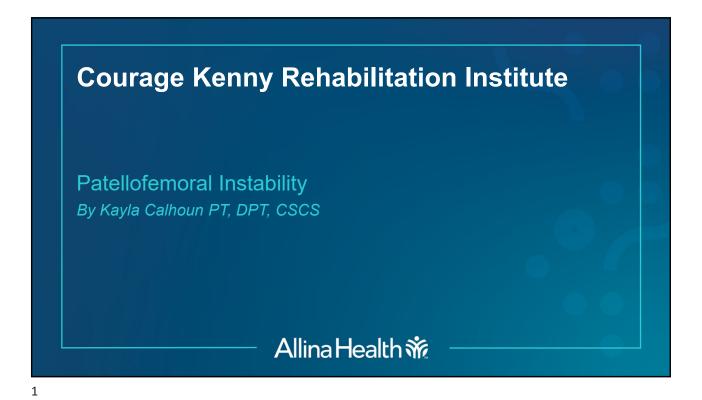
Lect. #12 8/5/22



**OBJECTIVES** 

- 1. Define and Identify Patellofemoral Instability
- 2. Select Applicable Interventions and Problem Solving

Allina Health %

# **DEFINE AND IDENTIFY**

## Types:

- Acute
- Chronic
- Genetic/ Mechanical / Anatomy

Most subluxations/ dislocations occur less than 45 degrees of flexion and laterally<sup>5</sup>

Prior to 60 degrees of flexion the patella is heavily reliant on MPFL and quadriceps for stability<sup>5</sup>



Allina Health %

3

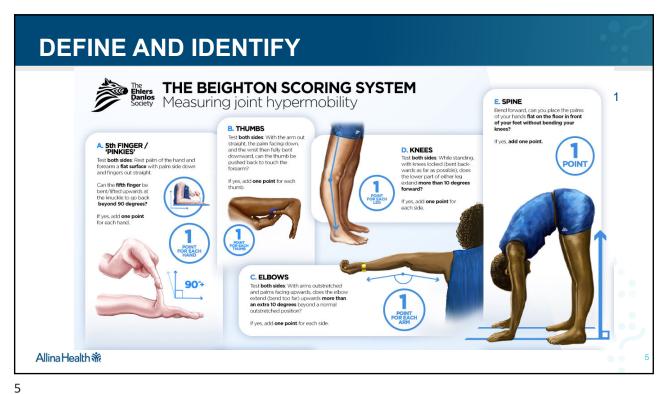
# **DEFINE AND IDENTIFY**

### Assessments

- General Hypermobility
- Neuromuscular Control Valgus and Rotational Abnormalities<sup>5</sup>
- J sign<sup>2</sup>
- Dynamic Valgus with Functional Movements<sup>6</sup>
- Hyperprontation of the foot<sup>6</sup>
- Weak Hip External Rotators and Quadriceps<sup>6</sup>



Allina Health 📆

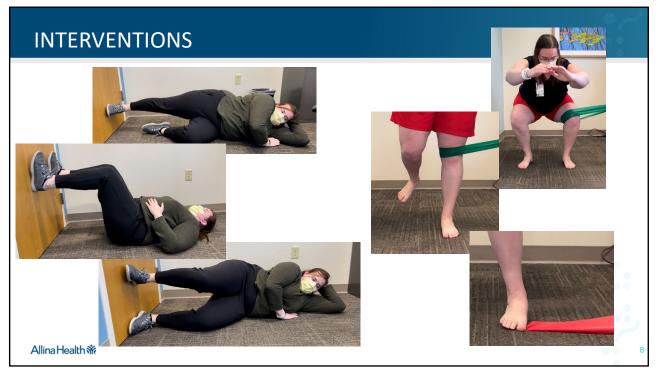


# **DEFINE AND IDENTIFY** Assessments General Hypermobility • Neuromuscular Control – Valgus and Rotational Abnormalities<sup>5</sup> Dynamic Valgus with Functional Movements<sup>6</sup> Hyperprontation of the foot<sup>6</sup> Weak Hip External Rotators and Quadriceps<sup>6</sup> Allina Health %

Lect. #12 8/5/22

# INTERVENTIONS - Emphasis on Proprioception - Closed Chain - Tactile Cues - Visual Feedback

7



Lect. #12 8/5/22

# **INTERVENTIONS**

- Emphasis on Proprioception
- Closed Chain
- Tactile Cues
- Visual Feedback

9

Allina Health %

9

# **REFERENCES**

- 1. Assessing Joint Hypermobility The Ehlers Danlos Society. The Ehlers Danlos Society. https://www.ehlersdanlos.com/assessing-joint-hypermobility/. Published 2022. Accessed July 25, 2022.
- 2. Wolfe S, Varacallo M, Thomas J, Carroll J, Kahwaji C. *Patellar Instability*. Treasure Island: StatPearls Publishing; 2022. (5)
- 3. Frings J, Balcarek P, Tscholl P, Liebensteiner M, Dirisamer F, Koenen P. Conservative Versus Surgical Treatment for Primary Patellar Dislocation. *Deutsches Ärzteblatt international*. 2020. doi:10.3238/arztebl.2020.0279 (3)
- 4. Migliorini F, Driessen A, Quack V, Gatz M, Tingart M, Eschweiler J. Surgical versus conservative treatment for first patellofemoral dislocations: a meta-analysis of clinical trials. *European Journal of Orthopaedic Surgery & Driessen Strategy* 2020;30(5):771-780. doi:10.1007/s00590-020-02638-x (4)
- 5. Post W, Fithian D. Patellofemoral Instability: A Consensus Statement From the AOSSM/PFF Patellofemoral Instability Workshop. *Orthop J Sports Med.* 2018;6(1):232596711775035. doi:10.1177/2325967117750352 6. Willy R, Hoglund L, Barton C et al. Patellofemoral Pain. *Journal of Orthopaedic & Sports Physical Therapy.* 2019;49(9):CPG1-CPG95. doi:10.2519/jospt.2019.0302 (11)
- 7. Seymour W, Fenstermacher S, Smith J, Dickenson S, Carter P, Manal T. The Knee: Evidenced-Informed Physical Therapy Patient Management. In: *Current Concepts Of Orthopaedic Physical Therapy*. 5th ed.; 2022.

Allina Health 🔆

10