A. LEARNING OBJECTIVES
   a. Discuss Current Opportunity in the Return to Sport/Activity Team Care Model
   b. Discuss Modified Performance Model

B. CURRENT OPPORTUNITY IN RETURN TO SPORT/ACTIVITY CARE TEAM MODEL

Objective: To get athletes and clients back to playing their sport as quickly and safely as possible after injury

   a. Return to Sport/Play protocols and programs are a necessity
      i. # of ACL tears alone – most common ligamentous injuries of the knee requiring a highly technical surgical intervention and an extensive rehabilitation program. (example)
         1. National estimates of the annual incidence of ACL reconstruction vary between 60,000 – 175,000¹.
         2. Estimated total cost of over 2 billion dollars²
      
      ii. Statics around Return to Sport/Play after an ACL reconstruction²(147 players – High school and collegiate football players)
         1. % of High School Football players returning to play: ~63%
         2. % of Collegiate Football players returning to play: ~69%
         3. % able to return to play at the same self-described performance level prior to ACL tear (based on player perception): ~43%
         4. % reporting they did not feel they attained the same level of performance prior to their ACL tear: ~27%
         5. % of athletes that do not return to play: ~30%
         6. 2/3 of players reported “other interests” contributing to decision not to return; at both levels of competition fear of re-injury or greater damage cited by ~50% of those who did not return to play.
iii. Return to Sport Timeline for an ACL Reconstruction

1. ACL reconstruction rehabilitation timeline: 9 – 12 months
2. On average # of physical therapy visits
   a. Approximately 20 – 30 visits
      i. Regular visits first 6 months
      ii. Less frequent visits for an additional 3 – 6 months
3. # of Max visits covered by insurances
   a. HealthPartners (largest insurance company in MN) covers 20 visit max and then can ask for extension. Potentially 10 visits short
   b. Many insurances companies do not have a defined max, but will cover as long as medically necessary
4. Potential gap in coverage:
   a. ADLs vs Performance: When athlete no longer has issues with ‘activities of daily living’ (approximately 6 months post-surgery) but has performance/athletic goals. Insurance only covers ADLs but athlete wants direction the remaining 3 – 6 months.
   b. High deductibles. Athlete self-selects to stop coming because an HSA plan with high deductible

b. Contribution to the Solution: Add Modified Performance to the Return to Sport Care Team Model
i. Goals:
   1. Contribute to the patient care experience
   2. Utilize the expertise of the integrated team – much like the professional team and collegiate model
   3. Improve return to sport outcomes

ii. How:
   1. Complement and integrate with existing return to sport/play protocols
   2. Increase ‘the number of touches’ on the athlete
   3. ‘Fill Gap’ provide the athlete with more oversight once ADL achieved
   4. Small investment considering the cost of surgery and physical therapy
   5. Confidence boosting – small group training with other athletes with similar goals
iii. Small Investment Considering Potential Outcome (Example ACL):
   1. National Average – ACL reconstruction cost $12,600
   2. Cost of Physical Therapy –
      a. Insurance: 30 visits at 90 units. Approximately $45-$65/unit (insurance dependent). $3,500 to $6,000 over a course of a year
      b. Out of pockets: Approximately $170

C. MODIFIED PERFORMANCE MODEL

a. Communication
   i. Physician and physical therapy team’s decision to progress athlete to modified performance
   ii. Requires communication between the modified performance team (strength and conditioning specialist, athletic trainer, dietitian) and medical/rehabilitation team (physician and Physical therapist)
   iii. Common language regarding restrictions and corresponding ability scale
   iv. Creates a comprehensive and systematic approach to meeting needs of the athlete.

b. Evaluation
   i. Return to sport testing criteria to determine athlete’s eligibility into the program
   ii. Additional Pre and Post Screening: SFMA, FMS, Upper and Lower Y balance. To influence program and determine programs efficacy
   iii. Performance Testing when appropriate (not to duplicate return to sport protocol and testing with physician and physical therapist)
   iv. Body composition measurements and nutrition consultation to establish baseline knowledge of nutrition

c. Programmatic Elements
   i. Small Group
   ii. Scalable
      1. Progression and regressions across all elements – prehab, dynamic warm up, movement skill, strength, and energy system development
      2. Strength Progression:
         a. Stability, dynamic stability, performance/strength themes (max strength, power)
            i. Video Examples:
               1. Upper Push – horizontal
                  a. Stability – Tall Kneel KB Front Push
b. Dynamic Stability – Alt DB Bench
   c. Strength – DB or BB bench

2. Upper Pull Vertical
   a. Stability – supine KB Arm Bar
   b. Dynamic Stability - ½ Kneeling Single arm Lat Pulldown
   c. Strength – Pull Up

3. Lower Pull – Partial Single Leg
   a. Stability - KB Bottoms-Up Hip Flexor stretch w 2inch lift
   b. Dynamic Stability – Single arm split squat DB (contra)
   c. Strength – RFE Split Squat

4. Lower Pull – Single Leg Hip dominant
   a. Stability – Active Straight leg Lowering w support or Toe touch progression
   b. Dynamic Stability – Supported Inverted hamstring or contra Single Leg RDL DB
   c. Strength - Barbell SL RDL

3. Movement Skill Progression
   i. Video:
      1. Linear Acceleration
         a. Stability – Technical - Wall drills
         b. Technical – dynamic – march/skip
         c. Performance – PreProgrammed – accel. Drills
         d. Performance – Random – accel drills
References
