Rehab Practice Guidelines for:
Proximal Realignment Surgery

Assumptions: Soft tissue healing for the proximal repair (4-6 weeks)

Primary surgery: Medial re-alignment of the VMO
Secondary surgery (possible): Limited lateral release

Precautions: **WBAT in immobilizer first 4 weeks**
No NMES over the VMO (Protect suture repair)
Perform protected electrical stimulation program
No restrictions on passive knee ROM

Expected # of visits: 20-36 visits

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Treatment</th>
<th>Milestones</th>
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| Early Post-Op Phase | Protected Electrical Stimulation Program  
- Knee stabilized isometrically at 30 degree knee flexion  
- **Patella taped medially**  
- Electrodes over proximal and distal quad (Do not place stim over the VMO, go proximal)  
- 10 second on/50 second off  
- 10-15 contractions | Full active quadriceps contraction with superior patellar glide  
Full passive knee extension  
WBAT in immobilizer (use crutches until safe without) |
| In immobilizer and using crutches for ambulation  
2-3 times / week | Treat impairments  
- Improve quadricep strength and control - active superior patellar glide | |
| **TOTAL VISITS** 2-3 visits | Prevent lateral scarring  
- Include ITB stretching in clinic and home  
- Modalities for pain control of distal ITB/Lateral PF ligament (PRN) | |
| **TOTAL VISITS** 2-3 visits | | |
### Weeks 2-6
#### Intermediate Post-op Phase
- In immobilizer or locked knee brace until week 4 for ambulation
- 2-3 times / week
- **TOTAL VISITS**
  - 12-18
- Incision Site Desensitization (PRN)
- Restore patellar mobility (clinic and home program), active and passive superior glide
- If flexion ROM is a concern, can use a hinged knee brace, locked during ambulation
- Gait training:
  - **+ quad lag** need to be in immobilizer or locked knee brace and/or crutches
  - **- quad lag** can DC the immobilizer
- 4-6 weeks: Begin closed chain activities: i.e.-partial wall squats
- **Full knee extension and flexion to 90° by week 2**
- **Knee flexion > 120° by week 6**
- **SLR without quad lag by week 6**
- **Ambulating without an immobilizer by week 6**

### Weeks 7-16
#### Late Post-Op Phase
- 1-3 times / week
- **TOTAL VISITS**
  - 20-36
- Resistive quad exercise may progress to angles greater than 30-40 degrees of knee flexion
- NMES may progress to angles greater than 30°
- **No MVIC until 8 weeks**
- **Full ROM**
- Ambulating without a brace
- Running progression initiated when: quadriceps index ≥ 80%, ROM is full and patient is ≥ 12 weeks post-op

### Considerations:
1. Full functional return for ADL’s expected in 3-4 months
2. No Burst testing and Functional Hop testing until 16 weeks post-op
3. Return to Sports expected in 4-6 months