Jordawn Jones Case Study Project

SOAP NOTE

S: 26 year old male presented in the clinic one week post op from an ACL surgery on his left leg. The injury occurred at work when a loading truck backed up into him. He stated he felt a sliding motion in his knee, among other issues when he was pinned against the wall and 'bumper' of the truck. He rates his current pain level at 2 out of 10. He has had no hx of knee issues. He has never been through a rehabilitation program before however he has a hx of working out 3 to 4 times a week; including cardio exercise and weightlifting.

O: He is in a straight leg brace limiting his walking to 20 degrees of flexion. We have orders allowing us to do ROM exercises within his pain limits. His left knee is presenting with edema and some bruising around the incision sites. ROM is at 10 degrees of extension and 55 degrees of flexion. He is able to partially weight bare using crutches. ACL feels solid after Lachmans and anterior drawer test.

A: Complete ACL repair- hamstring graft- intact.

P: Patient will go through rehabilitation protocol for ACL reconstruction 2 times a week. This will consist of 1-2 weeks working on range of motion, increasing weight bearing, and soft tissue treatments. 2 to weeks of active ROM exercises, closed chain focused exercises, balance and proprioception exercises. Week 4 to 6 will consist of ROM activities, scar tissue mobilization, functional exercises and core stabilization. He will then follow up with his M.D to determine his further visit requirements and reduce visits to once a week.

Week 1-Session 1- 7 days post op

Exercise	Sets	Reps	Weight
Bike	8 min		Level 1

One crutch standing	5	15 sec	
Knee flex. leg dangle	2	1 min	
Knee. Ext. with towel	2	1 min	
Straight leg raise	2	10	
Clam shells	2	10	No band
TKE	2	10	No resist

Treatment	
GameReady	15 min low pressure intermittent 3:1
Stem	15 min patient regulated

Ice and elevation 3 times daily for 15 minutes.

Session 2- 10 days post op

Exercise	Sets	Reps	Weight
Bike	10 min		Level 2

One crutch standing	5	30 sec	
Knee flex. leg dangle	3	1 min	
Knee. Ext. with towel	3	1 min	
Straight leg raise	2	10	
Clam shells	2	10	Yellow band
TKE	3	10	No resist

Treatment	
GameReady	15 min low pressure intermittent 3:1
Stem	15 min patient regulated

Ice and elevation 3 times daily for 15 minutes.

Week 2

Treatment	Treatment
-----------	-----------

GameReady	15 min- mid pressure intermittent 3:1
Stem	15 min- patient regulated

Session 3- 14 days post op.

Sutures removed. Crutches have been eliminated. Flexion is at 90. Extension at 5.

Exercise	Sets	Rep s	Weight
Bike	10 min		Level 2
Heel slides	2	10	
Straight leg raise	2	10	
Clam shells	2	10	Yellow band
TKE	2	10	Green
Half squats	2	10	
Hip bridges	2	10	
2" step ups	2	10	
Single leg balance	2	20 sec	

AT- HOME EXERCISES- 2 times
daily (off days)

Ice w/ elevation	3 times for 15 minutes
Straight leg raise (w/ brace on)	2x10
Single leg balance (w/ brace on)	2x 20 seconds

Session 4 - 17 days post op.

Brace has been removed. Patient is able to extend to 0 and flex to 115. No edema is present. Full weight bearing and normal gate.

Exercise	Sets	Rep s	Weight
Bike	10 min		Level 2
Treadmill	10 min		Level 4
Heel slides	2	15	
Straight leg raise	2	15	
Clam shells	2	10	Green band
TKE	2	10	Yellow band
Half squats	2	10	

Hip bridges	2	10	
2" step ups	2	10	
Single leg balance	2	30 sec	

Treatment	
GameReady	15 min- mid pressure intermittent 3:1
Stem	15 min- patient regulated

AT- HOME EXERCISES- 2 times daily (off days)		
Heel slides	2x10	
Straight leg raise	2x10	
Hip bridges	2x10	
Half squats	2 x 15	
Single leg balance	2x 20 seconds	
Ice w/ elevation	3 times for 15 minutes	

Week 3-Session 5-21 days post op

Extension is at -5 flexion is at 120. Pain levels are at 2 out of 10. Edema is not present.

Exercise	Sets	Rep s	Weight
Bike	10 min		Level 2
Treadmill	15 min		Level 4
Clam shells	2	10	Green band
TKE	2	10	Yellow band
Full ROM squats	2	10	
Hip bridges	3	10	
2" step	3	10	
Single leg balance	2	45 sec	

Treatment	
GameReady	15 min- mid pressure intermittent 3:1
Stem	15 min- patient regulated

AT- HOME EXERCISES- 2 times daily (off days)		
Squats 2x10		

TKE- no band	2x10
Hip bridges	2x10
Single leg balance	2x 45 seconds
Ice w/ elevation	2 times daily for 10 to 15 minutes

Session 6- 24 days post op.

Exercise	Sets	Rep s	Weight
Bike	10 min		Level 2
Treadmill	15 min		Level 4
Clam shells	2	10	Green band
TKE	2	10	Green band
Full ROM squats	3	10	
Hip bridges	3	10	
2" step ups	2	10	
Single leg balance	2	60 sec	

Treatment	
GameReady	15 min- mid pressure intermittent 3:1
Stem	15 min- patient regulated

AT- HOME EXERCISES- 2 times daily (off days)		
Squats	3x10	
Straight leg raise	3x10	
Hip bridges	3x10	
Single leg balance	2x 60 seconds	
Ice w/ elevation	2 times daily for 10 to 15 min	

A 26 year old male presented in the clinic one week post op from an ACL surgery on his left leg. The injury occurred at work when a loading truck backed up into him. He stated he felt a sliding motion in his knee, among other issues when he was pinned against the wall and 'bumper' of the truck. Prior to this injury he had no history of knee issues. He has never been through a rehabilitation program before however he has a history of working out three to four times a week; including cardio exercise and weightlifting. He requested time off of work until he is able to weight bare, walk without crutches and not use a brace.

It should be noted that the physical therapist also performed stretching of quad and hamstring muscles as well as soft tissue mobilization of the patella, patella tendon, incisions, and posterior musculature to improve range of motion and decrease fibrosis. This was completed on this client after he performed his exercises prior to Game Ready application.

For this patient, rehabilitation started off by incorporating range of motion exercises. The first four sessions focused on VMO recruitment for full extension. It was essential to get extension into full range of motion as soon as possible. The goals for the first few weeks before the patient meet with his surgeon were to reduce edema, improve range of motion and to increase muscle activation to later improve strength. Additionally balance was worked on. When he was able to balance for one minute, the addition of foam mats will be used to further his proprioception abilities.

The first two sessions of rehabilitation, goals were be to have range of motion at zero degrees of extension and 90 degrees of flexion. Pain scales were to be less than three out of 10 with minimal edema. Weight bearing was as tolerated. Walking was controlled with a good gait. Exercises were increased as tolerated; this depended on pain level and edema/ swelling post exercises. His exercise in the clinic pushed for increased weight bearing and for extension and flexion improvements. This was achieved by slowly moving his knee joint. Since he was still in a brace limiting his extension and flexion during walking, no at home exercises were prescribed. However he was able to ice and elevate whenever he felt necessary.

For the first two sessions, the client warmed up his knee by using the bike. On a very low level and with his seat back, he was able to get some range of motion, but all within the limits of pain. The exercises used during his first two visits included one crutch standing, knee flexion by

dangling his leg over the table, knee extension using a towel under his heel, straight leg raise, clam shells and terminal knee extensions. These exercises focused on range of motion for flexion and extension. The second session increased the time he stood on his leg as well as the time his leg was flexed and extended.

The next four sessions focused active ROM to get his knee joint back to normal activities. There was a goal to achieve 0 degrees of extension and 120 degrees of flexion. Closed chain exercises like squats, TKE's, and step ups were incorporated in order to simulate daily activities of climbing stairs, sitting in chairs and general walking mechanics. During this time, all activities were done with no to minimal resistance. Progressions were made to increase the reps to improve his muscle activation.

Warm up for these sessions included the bike, which was moved up to level two. Since his flexion has been increased, he was able to bend more during the bike, so his seat was lowered. Session four included the use of the treadmill since crutches and the brace had been removed. The goal of this was to get the patient back into a normal gate as well as warm up the muscles in his legs before exercising. His exercises during week two included heel slides, straight leg raises, clam shells, half squats, hip bridges, two inch step ups and single leg balance. The heel slides and straight leg raises emphasized the range of motion in flexion and extension. No resistance was used due to the new ligament not being ready for additional weight. By the next session of week two the repetitions were increased to further increase range of motion abilities. Clam shells, half squats and hip bridges were used to keep muscles around the knee working in their normal limits. These exercise were not increased between sessions. However, terminal knee extensions were added since the patient was able to weight bare.

At home exercises after session three and four changed due to the ability to weight bare, then the removal of the brace. After session three, the patient was able to do straight leg raises and single leg balance with his brace on. After session four, the brace was removed. He was able to do exercises done in the clinic; ensuring he knew the proper mechanics to perform them at home. These activities worked on his range of motion, balance as well as muscle recruitment. He was still able to ice and elevate as needed.

During sessions four and five, range of motion were considered within normal limits. Some exercises still focused on range of motion, however there was a shift to exercises that would be more functional. Squats were changed to full squats and the resistance on his band exercises changed to green to improve his muscle strength. Single leg stance increased to 45 seconds then 60 seconds. This was crucial to starting more intense exercises. The balance shows that his leg is strong and stable enough to support his weight to further progress his rehabilitation. At home exercises were changed to perform squats, TKE's, hip bridges and single leg balance. He was recommended to ice two times daily.

After these sessions, the patient was scheduled to meet with his surgeon. Ideally, the client wanted to return to work at this time. However this needed to be approved by the surgeon. With his knee being back within normal limits for range of motion and no present edema, there was a good chance the patient would be able to start adding resistance. In addition to strengthening, the patient would go through more intense balancing exercises. On top of this, agility drills would slowly be incorporated in order to get the client back to normal function without having to worry about moving too quickly in any direction; causing another injury. Rehabilitation would continue for at least another 8 to 12 weeks to fully ensure his knee and ACL were at functioning levels. It

would be ideal to continue longer, however due to this injury being done at work and through his job's insurance, once he is back to normal limits, funding would be cut.

Case Study Project

SOAP NOTE

S: 26 year old male presented in the clinic one week post op from an ACL surgery on his left leg. The injury occurred at work when a loading truck backed up into him. He stated he felt a sliding motion in his knee, among other issues when he was pinned against the wall and 'bumper' of the truck. He rates his current pain level at 2 out of 10. He has had no hx of knee issues. He has never been through a rehabilitation program before however he has a hx of working out 3 to 4 times a week; including cardio exercise and weightlifting.

O: He is in a straight leg brace limiting his walking to 20 degrees of flexion. We have orders allowing us to do ROM exercises within his pain limits. His left knee is presenting with edema and some bruising around the incision sites. ROM is at 10 degrees of extension and 55 degrees of flexion. He is able to partially weight bare using crutches. ACL feels solid after Lachmans and anterior drawer test.

A: Complete ACL repair- hamstring graft- intact.

P: Patient will go through rehabilitation protocol for ACL reconstruction 2 times a week. This will consist of 1-2 weeks working on range of motion, increasing weight bearing, and soft tissue treatments. 2 to weeks of active ROM exercises, closed chain focused exercises, balance and proprioception exercises. Week 4 to 6 will consist of ROM activities, scar tissue mobilization, functional exercises and core stabilization. He will then follow up with his M.D to determine his further visit requirements and reduce visits to once a week.

Week 1-Session 1- 7 days post op

Exercise	Sets	Reps	Weight
Bike	8 min		Level 1
One crutch standing	5	15 sec	
Knee flex. leg dangle	2	1 min	
Knee. Ext. with towel	2	1 min	
Straight leg raise	2	10	
Clam shells	2	10	No band
TKE	2	10	No resist

Treatment	
GameReady	15 min low pressure intermittent 3:1
Stem	15 min patient regulated

Ice and elevation 3 times daily for 15 minutes.

Session 2- 10 days post op

Exercise Sets Reps weight	Exercise	Sets	Reps	Weight
---------------------------	----------	------	------	--------

Bike	10 min		Level 2
One crutch standing	5	30 sec	
Knee flex. leg dangle	3	1 min	
Knee. Ext. with towel	3	1 min	
Straight leg raise	2	10	
Clam shells	2	10	Yellow band
TKE	3	10	No resist

Treatment	
GameReady	15 min low pressure intermittent 3:1
Stem	15 min patient regulated

Ice and elevation 3 times daily for 15 minutes.

Week 2

Treatment	
GameReady	15 min- mid pressure intermittent 3:1
Stem	15 min- patient regulated

Session 3- 14 days post op.

Sutures removed. Crutches have been eliminated. Flexion is at 90. Extension at 5.

Exercise	Sets	Rep s	Weight
Bike	10 min		Level 2
Heel slides	2	10	
Straight leg raise	2	10	
Clam shells	2	10	Yellow band
TKE	2	10	Green
Half squats	2	10	
Hip bridges	2	10	
2" step ups	2	10	
Single leg balance	2	20 sec	

AT- HOME EXERCISES- 2 times daily (off days)		
Ice w/ elevation	3 times for 15 minutes	
Straight leg raise (w/ brace on)	2x10	
Single leg balance (w/ brace on)	2x 20 seconds	

Session 4 - 17 days post op.

Brace has been removed. Patient is able to extend to 0 and flex to 115. No edema is present. Full weight bearing and normal gate.

Exercise	Sets	Rep s	Weight
Bike	10 min		Level 2
Treadmill	10 min		Level 4
Heel slides	2	15	
Straight leg raise	2	15	
Clam shells	2	10	Green band
TKE	2	10	Yellow band

Half squats	2	10	
Hip bridges	2	10	
2" step ups	2	10	
Single leg balance	2	30 sec	

Treatment	
GameReady	15 min- mid pressure intermittent 3:1
Stem	15 min- patient regulated

AT- HOME EXERCISES- 2 times daily (off days)		
Heel slides	2x10	
Straight leg raise	2x10	
Hip bridges	2x10	
Half squats	2 x 15	
Single leg balance	2x 20 seconds	
Ice w/ elevation	3 times for 15 minutes	

Week 3Session 5-21 days post op
Extension is at -5 flexion is at 120. Pain levels are at 2 out of 10. Edema is not present.

Extension is at	J HCKIOH I	120.1	dili ie veis die t
Exercise	Sets	Rep s	Weight
Bike	10 min		Level 2
Treadmill	15 min		Level 4
Clam shells	2	10	Green band
TKE	2	10	Yellow band
Full ROM squats	2	10	
Hip bridges	3	10	
2" step ups	3	10	
Single leg balance	2	45 sec	

Treatment	
GameReady	15 min- mid pressure intermittent 3:1
Stem	15 min- patient regulated

AT- HOME EXERCISES- 2	
times daily (off days)	

Squats	2x10
TKE- no band	2x10
Hip bridges	2x10
Single leg balance	2x 45 seconds
Ice w/ elevation	2 times daily for 10 to 15 minutes

Session 6- 24 days post op.

Exercise	Sets	Rep s	Weight
Bike	10 min		Level 2
Treadmill	15 min		Level 4
Clam shells	2	10	Green band
TKE	2	10	Green band
Full ROM squats	3	10	
Hip bridges	3	10	
2" step ups	2	10	

Single leg	2	60	
balance		sec	

Treatment	
GameReady	15 min- mid pressure intermittent 3:1
Stem	15 min- patient regulated

	<u> </u>	
AT- HOME EXERCISES- 2 times daily (off days)		
Squats	3x10	
Straight leg raise	3x10	
Hip bridges	3x10	
Single leg balance	2x 60 seconds	
Ice w/ elevation	2 times daily for 10 to 15 min	

A 26 year old male presented in the clinic one week post op from an ACL surgery on his left leg. The injury occurred at work when a loading truck backed up into him. He stated he felt a sliding motion in his knee, among other issues when he was pinned against the wall and 'bumper' of the truck. Prior to this injury he had no history of knee issues. He has never been through a

rehabilitation program before however he has a history of working out three to four times a week; including cardio exercise and weightlifting. He requested time off of work until he is able to weight bare, walk without crutches and not use a brace.

It should be noted that the physical therapist also performed stretching of quad and hamstring muscles as well as soft tissue mobilization of the patella, patella tendon, incisions, and posterior musculature to improve range of motion and decrease fibrosis. This was completed on this client after he performed his exercises prior to Game Ready application.

For this patient, rehabilitation started off by incorporating range of motion exercises. The first four sessions focused on VMO recruitment for full extension. It was essential to get extension into full range of motion as soon as possible. The goals for the first few weeks before the patient meet with his surgeon were to reduce edema, improve range of motion and to increase muscle activation to later improve strength. Additionally balance was worked on. When he was able to balance for one minute, the addition of foam mats will be used to further his proprioception abilities.

The first two sessions of rehabilitation, goals were be to have range of motion at zero degrees of extension and 90 degrees of flexion. Pain scales were to be less than three out of 10 with minimal edema. Weight bearing was as tolerated. Walking was controlled with a good gait. Exercises were increased as tolerated; this depended on pain level and edema/ swelling post exercises. His exercise in the clinic pushed for increased weight bearing and for extension and flexion improvements. This was achieved by slowly moving his knee joint. Since he was still in a brace limiting his extension and flexion during walking, no at home exercises were prescribed. However he was able to ice and elevate whenever he felt necessary.

For the first two sessions, the client warmed up his knee by using the bike. On a very low level and with his seat back, he was able to get some range of motion, but all within the limits of pain. The exercises used during his first two visits included one crutch standing, knee flexion by dangling his leg over the table, knee extension using a towel under his heel, straight leg raise, clam shells and terminal knee extensions. These exercises focused on range of motion for flexion and extension. The second session increased the time he stood on his leg as well as the time his leg was flexed and extended.

The next four sessions focused active ROM to get his knee joint back to normal activities. There was a goal to achieve 0 degrees of extension and 120 degrees of flexion. Closed chain exercises like squats, TKE's, and step ups were incorporated in order to simulate daily activities of climbing stairs, sitting in chairs and general walking mechanics. During this time, all activities were done with no to minimal resistance. Progressions were made to increase the reps to improve his muscle activation.

Warm up for these sessions included the bike, which was moved up to level two. Since his flexion has been increased, he was able to bend more during the bike, so his seat was lowered. Session four included the use of the treadmill since crutches and the brace had been removed. The goal of this was to get the patient back into a normal gate as well as warm up the muscles in his legs before exercising. His exercises during week two included heel slides, straight leg raises, clam shells, half squats, hip bridges, two inch step ups and single leg balance. The heel slides and straight leg raises emphasized the range of motion in flexion and extension. No resistance was used due to the new ligament not being ready for additional weight. By the next session of week two the repetitions were increased to further increase range of motion abilities. Clam

shells, half squats and hip bridges were used to keep muscles around the knee working in their normal limits. These exercise were not increased between sessions. However, terminal knee extensions were added since the patient was able to weight bare.

At home exercises after session three and four changed due to the ability to weight bare, then the removal of the brace. After session three, the patient was able to do straight leg raises and single leg balance with his brace on. After session four, the brace was removed. He was able to do exercises done in the clinic; ensuring he knew the proper mechanics to perform them at home. These activities worked on his range of motion, balance as well as muscle recruitment. He was still able to ice and elevate as needed.

During sessions four and five, range of motion were considered within normal limits. Some exercises still focused on range of motion, however there was a shift to exercises that would be more functional. Squats were changed to full squats and the resistance on his band exercises changed to green to improve his muscle strength. Single leg stance increased to 45 seconds then 60 seconds. This was crucial to starting more intense exercises. The balance shows that his leg is strong and stable enough to support his weight to further progress his rehabilitation. At home exercises were changed to perform squats, TKE's, hip bridges and single leg balance. He was recommended to ice two times daily.

After these sessions, the patient was scheduled to meet with his surgeon. Ideally, the client wanted to return to work at this time. However this needed to be approved by the surgeon. With his knee being back within normal limits for range of motion and no present edema, there was a good chance the patient would be able to start adding resistance. In addition to strengthening, the patient would go through more intense balancing exercises. On top of this, agility drills would

slowly be incorporated in order to get the client back to normal function without having to worry about moving too quickly in any direction; causing another injury. Rehabilitation would continue for at least another 8 to 12 weeks to fully ensure his knee and ACL were at functioning levels. It would be ideal to continue longer, however due to this injury being done at work and through his job's insurance, once he is back to normal limits, funding would be cut.