

<b>Medical Necessity Guideline:</b> Osgood-Schlatter Disease – Physical Therapy, Occupational Therapy, and Orthoses	<b>Creation Date:</b> 09/01/2007	<b>Review Update:</b> 05/23/2023	<b>Effective Date:</b> 10/01/2007
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**PURPOSE:**

To outline the Driscoll Health Plan (DHP) indications and requirements for requests for Physical and Occupational therapy (PT and OT) aimed to strengthen and condition the painful affected knees of adolescents during growth spurt periods - Osgood-Schlatter disease.

**DEFINITIONS:**

**Osgood-Schlatter Disease** - a tibial tubercle apophysitis resulting from repetitive strain on the patellar tendon insertion.

**GUIDELINE:**

DHP considers limited physical therapy (PT) or occupational therapy (OT) sessions medically necessary to instruct the member in:

- A home exercise, strengthening, and exercise program.
- Provide education on the natural history of this aggravating, but self-limited disease
- Modifications of activities of daily living, avoidance or modification of aggravating activities, instructions in strapping and/or elastic bracing

Current evidence does not support aggressive therapy in this self-limited disease; DHP will consider brief, limited therapy that rapidly transitions to a home program. DHP will consider additional therapy sessions if there is a functional need after documentation of compliance with an appropriate home program and an adequate period of therapeutic rest.

Though the evidence for the use of foot orthoses and complex knee braces is lacking for this diagnosis, DHP will consider requests for foot orthoses and knee braces in cases that are unresponsive to therapeutic rest and appropriate and conservative treatment.

**Required Documentation:** DHP requires documentation of history and course of the condition, limitations in Activities of Daily Living, treatments, medications, and trials of other modalities, including Over the Counter items, along with the results of their use.

**BACKGROUND:**

Osgood-Schlatter syndrome (OSS) is the most common cause of knee pain in adolescents, especially those who participate in sports. The incidence has been reported as 21% among

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adolescent athletes compared to 4.5% among adolescent nonathletes. The incidence rate has been reported as 9.8% among the general adolescent population. <sup>(1, 5)</sup>

During activities that involve running, jumping, and bending (e.g., soccer, basketball, volleyball, and ballet) the child's thigh muscles (quadriceps) pull on the tendon that connects the kneecap to the growth plate at the top part of the shinbone. <sup>(4)</sup> This repeated stress can cause the tendon to pull on the growth plate where the tendon inserts into the shinbone, resulting in the pain and swelling associated with Osgood-Schlatter disease. <sup>(2, 3)</sup>; as well as other overuse syndromes and other knee disorders. <sup>(6, 7, 8)</sup>

Osgood-Schlatter disease usually resolves without formal treatment. Symptoms typically disappear after the child's bones stop growing – closure of the tibial growth plan in 1-2 years. About 90% of patients respond well to conservative treatment plans that include relative rest with activity modification (including avoidance of activities that reproduce pain), cryotherapy for pain management, therapeutic exercises, and patient education as the primary components. <sup>(1, 2, 3)</sup> However, symptoms may persist for 12-24 months before complete resolution. <sup>(1, 2, 3)</sup>

There is strong evidence that supports appropriate strengthening, primarily the quadriceps. However, exercise and aggravating activity should be performed only if pain-free to decrease the risk of tibial tubercle avulsion therapy. Initially, isometric quadriceps exercises may be indicated if there is atrophy and significant pain. <sup>(1)</sup>

There is scarce evidence in the literature to support aggressive physical therapy interventions. <sup>(1, 2)</sup>

Support for custom or complex knee orthotics and foot orthotics over taping, sleeves, and other over-the-counter modalities is scarce in the literature. Only one citation addresses knee orthotics. <sup>(2, 3, 4)</sup>

**PROVIDER CLAIMS CODES:**

ICD 10	
M92.4	Juvenile osteochondrosis of the patella

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**DOCUMENT HISTORY:**

DHP Committee that Approved	<i>Review Approval Date (last 5 years)</i>					
Medical Director	06/13/2019	06/22/2020	06/10/2021	05/23/2022	06/07/2022	05/23/2023
CMO	11/21/2018	06/13/2019	06/22/2020	06/10/2021	06/07/2022	06/06/2023
Medical Policy Workgroup <i>Effective 2022</i>					06/07/2022	06/06/2023
Medical Management <i>Retired December 2020</i>	11/21/2018	06/13/2019	06/22/2020			
Utilization Management & Appeals <i>Effective January 2021</i>				06/10/2021	06/21/2022	06/20/2023
Utilization Management Behavioral Health <i>Retired December 2020</i>	02/28/2019	08/22/2019	06/22/2020			
Provider Advisory Committee <i>Effective 2022</i>					06/17/2022	06/09/2023
Clinical Management Committee				06/17/2021	06/24/2022 & 08/23/2022	07/20/2023

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<i>Effective March 2021</i>						
<i>Quality Management Retired 2020</i>	04/16/2019	10/22/2019	06/26/2020			
<i>Executive Quality Committee Effective 2021</i>				08/04/2021	06/28/2022	07/25/2023

<i>Document Owner</i>	<i>Organization</i>	<i>Department</i>
Dr. Fred McCurdy, Medical Director	Driscoll Health Plan	Utilization Management

<i>Review/Revision Date</i>	<i>Review/Revision Information, etc.</i>
03/04/2014 & 09/01/2015	No changes
11/28/2016	No changes
11/28/2017	No changes
11/15/2018	Updated reference
11/30/2019	Updated to the new format by Dr. Brendel – additional language and references added. Modified authorization to 1 low-level evaluation and 3 – 1-hour PT/OT sessions. Added Prior Authorization for foot orthotics and knee braces.
05/13/2020	Updated to the new format. Rewording. Updating of references. Added pertinent codes
06/03/2020	Dr. Serrao – minor improvements in language
06/16/2020	Additional editing of material
05/18/2021	Updated and/or validated referenced and codes
05/20/2022	Reviewed and updated by Dr. Albert Gest
05/23/2022	Reviewed and edited by Dr. Fred McCurdy
05/23/2023	Reviewed by Drs Noorullah Akthar and Fred McCurdy

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