

Medical Necessity Guideline: Patellofemoral Pain Syndrome (Runner’s Knee)	Creation Date: 09/01/2007	Review Update: 05/23/2023	Effective Date: 09/01/2007
---	-------------------------------------	-------------------------------------	--------------------------------------

PURPOSE:

To define authorization requirements for therapy with the diagnosis of Patellofemoral Pain Syndrome (PFPS, Runner’s Knee).

DEFINITIONS:

PFPS – a condition characterized by pain in the peripatellar/retropatellar area that aggravates with at least one activity that loads the patellofemoral joint during weight-bearing on a flexed knee (e.g., squatting, stair climbing, jogging/running, and hopping/jumping). ⁽¹⁾

GUIDELINE:

DHP finds benefit and medical necessity for a limited number of therapy (low intensity and low frequency) encounters for a member with Patellofemoral Pain Syndrome. ⁽⁵⁾

Additional modalities such as knee braces or foot orthotics alone or in combination with exercises will require additional documentation of medical necessity as there is limited evidence that these modalities are routinely useful. Braces and foot orthotics may be considered in cases that are unresponsive to conventional therapy.

Documentation Requirements: The treatment plan should indicate that these sessions will be dedicated to an evaluation, initial treatment, and instruction in proper strengthening exercises for the knee and hip with a rapid transition to a home program. The home program should emphasize therapeutic rest and avoidance of aggravating activities. Requests for other modalities, braces, or orthotics require documentation of unresponsiveness to appropriate trials of conventional therapy with good compliance with a home program and appropriate modification of activities and therapeutic rest.

BACKGROUND:

Patellofemoral pain affects physically active and sedentary individuals, accounting for 11 - 17% of knee pain presentations to general practice and 25 - 40% of all knee problems seen in a sports injury clinic ^(2, 3). Patellofemoral pain is characterized by anterior knee pain associated with activities such as squatting, rising from sitting, and stair ambulation. While traditionally viewed

Medical Necessity Guideline: STAR, CHIP, STAR Kids

Confidential: For use only by employees and authorized agents of Driscoll Health Plan. This document contains confidential and proprietary information NOT to be reproduced or distributed to others without the prior written consent of Driscoll Health Plan

as self-limiting, increasing research data suggest that patellofemoral pain is often recalcitrant and can persist for many years, and may cause a decline in sports participation ⁽⁴⁾.

Despite the high prevalence, chronicity, and burden, PFP continues to be one of the most difficult musculoskeletal conditions managed by medical professionals. It is evident that greater pain severity and longer symptom duration are indicators of poor prognosis. So, early efficient intervention may be crucial to limit the long-term effects of the condition. ⁽²⁾

The recommendations made by an expert panel at the 4th International Patellofemoral Pain Research Retreat ⁽⁴⁾ for the management of PFP are as follows:

1. Exercise therapy is recommended to reduce pain in the short, medium, and long term and improve function in the medium and long term.
2. Combining hip and knee exercises is recommended to reduce pain and improve function in the short, medium, and long term, and this combination should be used in preference to knee exercises alone.
3. Combined interventions are recommended to reduce pain in adults with patellofemoral pain in the short and medium term.
4. Foot orthoses are recommended to reduce pain in the short term.
5. Patellofemoral, knee, and lumbar mobilizations are not recommended.
6. Electrophysical agents are not recommended.

There is moderate evidence that knee braces have no additional benefit over exercise therapy on pain and function. There is also moderate evidence for no significant difference in efficiency between knee braces and exercise therapy versus placebo knee braces and exercise therapy ⁽³⁾.

Foot orthosis may not be helpful for all patients with PFP and identifying those most likely to benefit from foot orthosis is important. Published studies have described clinical characteristics that can be used to predict success with foot orthosis intervention, including greater midfoot mobility, less ankle dorsiflexion, and immediate improvements in PFP when performing a single-leg squat with foot orthosis ⁽²⁾.

Due to the multifactorial nature of PFP, the clinical approach should be individualized, and the contribution of different risk factors, including local, proximal (trunk and hip), and distal (foot) factors, should be considered and managed accordingly. This approach may add to the treatment effects on pain and function in patients ^(2, 6, 7).

Medical Necessity Guideline: STAR, CHIP, STAR Kids

Confidential: For use only by employees and authorized agents of Driscoll Health Plan. This document contains confidential and proprietary information NOT to be reproduced or distributed to others without the prior written consent of Driscoll Health Plan



PROVIDER CLAIMS CODES:

CPT	
97110	Therapeutic exercise
97112	Neuromuscular reeducation
97113	Aquatic therapy/exercises
97116	Gait training therapy
97124	Massage therapy
97140	Manual therapy 1/> regions
97530	Therapeutic activities
97535	Self- Care mgmt training
97537	Community/work reintegration
97014	Electrical stimulation - unattended

ICD-10	
M22	disorders of patella
M22.2	patellofemoral disorders
M22.3	other derangements of patella
M22.4	chondromalacia patella
M22.8	other disorders of patella
M22.9	disorders of patella, unspecified
M76.5	patellar tendinitis
S76.1	injury of quadriceps muscle and tendon
M65.86	other synovitis and tenosynovitis, lower extremity
M67.50	plica syndrome, unspecified knee
M24.469	recurrent dislocation of knee
M24.4	recurrent dislocation of joint
S83	Dislocation and sprain of joints and ligaments of knee
M25.361	Instability of the knee
M25.362	Instability of the knee
M25.30	Instability of joint
M92.4	Juvenile osteochondrosis of patella

REFERENCES:

1. Crossley KM, Stefanik JJ, Selfe J, et al. 2016 Patellofemoral pain consensus statement from the 4th International Patellofemoral Pain Research Retreat, Manchester. Part 1: Terminology, definitions, clinical examination, natural history, patellofemoral osteoarthritis and patient-reported outcome measures. *Br J Sports Med.* 2016;50(14):839-843. doi:10.1136/bjsports-2016-096384

Medical Necessity Guideline: STAR, CHIP, STAR Kids

Confidential: For use only by employees and authorized agents of Driscoll Health Plan. This document contains confidential and proprietary information NOT to be reproduced or distributed to others without the prior written consent of Driscoll Health Plan

2. Halabchi F, Abolhasani M, Mirshahi M, Alizadeh Z. Patellofemoral pain in athletes: clinical perspectives. *Open Access J Sports Med.* 2017;8:189-203. Published 2017 Oct 9. doi:10.2147/OAJSM.S127359; Accessed 05/23/2022.
3. Swart NM, van Linschoten R, Bierma-Zeinstra SM, van Middelkoop M. The additional effect of orthotic devices on exercise therapy for patients with patellofemoral pain syndrome: a systematic review. *Br J Sports Med.* 2012; 46 (8):570–577. [PubMed]; <https://www.ncbi.nlm.nih.gov/pubmed/21402565>; Abstract accessed 05/22/2022.
4. Crossley KM, van Middelkoop M, Callaghan MJ, Collins NJ, Rathleff MS, Barton CJ. 2016 Patellofemoral pain consensus statement from the 4th International Patellofemoral Pain Research Retreat, Manchester. Part 2: recommended physical interventions (exercise, taping, bracing, foot orthoses and combined interventions). *Br J Sports Med* 2016; 50 (14):844–852.[PMC free article][PubMed]; <https://www.ncbi.nlm.nih.gov/pubmed/27247098>; Accessed 05/17/2022.
5. Texas Medicaid Provider Procedure Manual (Current Edition); Physical, Occupational, and Speech Therapy Services Handbook, 4.5 (Frequency and Duration Criteria for PT, OT, and ST services) (May 2022).
6. Saltychev M, Dutton RA, Laimi K, Beaupré GS, Virolainen P, Fredericson M. Effectiveness of conservative treatment for patellofemoral pain syndrome: A systematic review and meta-analysis. *J Rehabil Med.* 2018 May 8;50(5):393-401. doi: 10.2340/16501977-2295. PMID: 29392329; <https://pubmed.ncbi.nlm.nih.gov/29392329/>; Accessed 05/20/2022.
7. Gaitonde DY, Ericksen A, Robbins RC. Patellofemoral Pain Syndrome. *Am Fam Physician.* 2019 Jan 15;99(2):88-94. PMID: 30633480; <https://pubmed.ncbi.nlm.nih.gov/30633480/>; Accessed 05/18/2022.

Medical Necessity Guideline: STAR, CHIP, STAR Kids

Confidential: For use only by employees and authorized agents of Driscoll Health Plan. This document contains confidential and proprietary information NOT to be reproduced or distributed to others without the prior written consent of Driscoll Health Plan

DOCUMENT HISTORY:

DHP Committee that Approved	<i>Review Approval Date (last 5 years)</i>						
Medical Director	11/21/2018	06/13/2019	06/22/2020	06/10/2021	05/23/2022	06/07/2022	05/23/2023
CMO	10/23/2017	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>	10/23/2017	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>	11/16/2017	02/28/2019	08/22/2019	06/22/2020			
Provider Advisory Committee (PAC) <i>Effective 2022</i>						06/17/2022	06/09/2023

Medical Necessity Guideline: STAR, CHIP, STAR Kids

Confidential: For use only by employees and authorized agents of Driscoll Health Plan. This document contains confidential and proprietary information NOT to be reproduced or distributed to others without the prior written consent of Driscoll Health Plan

Clinical Management Committee <i>Effective March 2021</i>					06/17/2021	06/24/2022 & 08/23/2022	07/20/2023
Quality Management <i>Retired 2020</i>	01/23/2018	04/16/2019	10/22/2019	06/26/2020			
Executive Quality Committee <i>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	No changes
09/01/2015	No changes
11/28/2016	No changes
11/28/2017	No changes
11/15/2018	Added PT reference
11/30/2019	Format change, language change, and updated references
05/15/2020	Extensive rewrite of the guideline, updated references, codes, and conversion to newer format – Dr. Akthar
06/03/2020	Simple revisions by Dr. Brendel and Dr. Serrao
06/16/2020	Additional revisions by Brendel
05/17/2021	Updated references, 2 new references, codes verified by Dr. Brendel
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

Medical Necessity Guideline: STAR, CHIP, STAR Kids

Confidential: For use only by employees and authorized agents of Driscoll Health Plan. This document contains confidential and proprietary information NOT to be reproduced or distributed to others without the prior written consent of Driscoll Health Plan