

Home Prothrombin Time INR Monitoring for Anticoagulation Management

Policy ID:	HHO-DE-MP-1175
Approved By:	Highmark Health Options – Market Leadership
Provider Notice Date:	12/15/2021; 03/01/2023
Original Effective Date:	01/15/2022; 04/01/2023
Annual Approval Date:	11/10/2021; 10/26/2022
Last Revision Date:	11/10/2021; 10/26/2022
Products:	Medicaid
Application:	All participating hospitals and providers
Page Number(s):	1-4

Disclaimer

Highmark Health Options medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.

POLICY STATEMENT

Highmark Health Options may provide coverage under the medical-surgical benefits of the Company's Medicaid products for medically necessary benefits.

This policy is designed to address medical necessity guidelines that are appropriate for the majority of individuals with a particular disease, illness or condition. Each person's unique clinical circumstances warrant individual consideration, based upon review of applicable medical records.

The qualifications of the policy will meet the standards of the National Committee for Quality Assurance (NCQA) and the Delaware Department of Health and Social Services (DHSS) and all applicable state and federal regulations.

DEFINITIONS

Highmark Health Options (HHO) – Managed care organization serving vulnerable populations that have complex needs and qualify for Medicaid. Highmark Health Options members include individuals and families with low income, expecting mothers, children, and people with disabilities. Members pay nothing to very little for their health coverage. Highmark Health Options currently serves Delaware Medicaid: Delaware Healthy Children Program (DHCP) and Diamond State Health Plan and Health Plan Plus members.

POLICY POSITION

Prior authorization is required if item is over \$500.

Use of the International Normalized Ratio (INR) or prothrombin time (PT) – standard measurement for reporting the blood's clotting time – allows physicians to determine the level of anticoagulation in an individual, independent of the laboratory reagents used. The INR is the ratio of the individual's PT (extrinsic or tissue-factor coagulation pathway) compared to the mean PT for a group of normal individuals.

The use of home PT/INR monitoring for chronic, oral anticoagulation management may be considered medically necessary when ALL of the following criteria are met:

- The individual has ONE of the following:
 - Chronic atrial fibrillation; or
 - Mechanical heart valves; or
 - Venous thromboembolism (inclusive of deep venous thrombosis and pulmonary embolism); and
- Self-testing with the device should not occur more frequently than once a week, unless otherwise clinically indicated; and
- The individual continues to correctly use the device in the context of the management of the anticoagulation therapy following the initiation of home monitoring; and
- The individual is currently taking Warfarin; and
- The individual must have been anticoagulated for at least three (3) months prior to use of the home INR device; and
- The individual must undergo a face-to-face educational program on anticoagulation management and must have demonstrated the correct use of the device prior to its use in the home; and
- The monitor and the home testing must be prescribed by a treating physician.

Home Prothrombin Time INR Monitoring for Anticoagulation Management procedures not meeting the criteria as indicated in this policy is considered not medically necessary.

ELIGIBLE PROCEDURE CODES

CPT Codes	Description
93792	Patient/caregiver training for initiation of home international normalized ratio (inr) monitoring under the direction of a physician or other qualified health care professional face-to-face including use and care of the inr monitor, obtaining blood sample, instructions for reporting home inr test results, and documentation of patients/caregivers ability to perform testing and report results.
93793	Anticoagulant management for a patient taking warfarin, must include review and interpretation of a new home, office, or lab international normalized ratio (inr) test result patient instructions dosage adjustment as needed), and scheduling of additional test(s), when performed.

ELIGIBLE DIAGNOSIS CODES FOR PROCEDURE CODES 93792 AND 93793

Codes						
D68.51	D68.52	D68.59	D68.61	D68.62	I26.01	I26.02
I26.09	I26.90	I26.92	I26.93	I26.94	I26.99	I48.0
I48.11	I48.19	I48.20	I48.21	I48.91	I80.00	I80.01
I80.02	I80.03	I80.10	I80.11	I80.12	I80.13	I80.201
I80.202	I80.203	I80.209	I80.211	I80.212	I80.213	I80.219
I80.221	I80.222	I80.223	I80.229	I80.231	I80.232	I80.233
I80.239	I80.241	I80.242	I80.243	I80.249	I80.251	I80.252
I80.253	I80.259	I80.291	I80.292	I80.293	I80.299	I80.3
I80.8	I80.9	I82.0	I82.1	I82.220	I82.221	I82.3

I82.401	I82.402	I82.403	I82.409	I82.411	I82.412	I82.413
I82.419	I82.421	I82.422	I82.423	I82.429	I82.431	I82.432
I82.433	I82.439	I82.441	I82.442	I82.442	I82.B23	I82.443
I82.449	I82.451	I82.452	I82.453	I82.459	I82.461	I82.462
I82.463	I82.469	I82.491	I82.492	I82.493	I82.499	I82.4Y1
I82.4Y2	I82.4Y3	I82.4Y9	I82.4Z1	I82.4Z2	I82.4Z3	I82.4Z9
I82.501	I82.502	I82.503	I82.509	I82.511	I82.512	I82.513
I82.519	I82.519	I82.521	I82.522	I82.523	I82.529	I82.531
I82.532	I82.533	I82.539	I82.541	I82.542	I82.543	I82.549
I82.551	I82.552	I82.553	I82.559	I82.561	I82.562	I82.563
I82.569	I82.591	I82.592	I82.593	I82.599	I82.5Y1	I82.5Y2
I82.5Y3	I82.5Y9	I82.5Z1	I82.5Z2	I82.5Z3	I82.5Z9	I82.601
I82.602	I82.603	I82.609	I82.611	I82.612	I82.613	I82.619
I82.621	I82.622	I82.623	I82.629	I82.701	I82.702	I82.703
I82.709	I82.711	I82.712	I82.713	I82.719	I82.721	I82.722
I82.723	I82.729	I82.811	I82.812	I82.813	I82.819	I82.890
I82.891	I82.90	I82.91	I82.A11	I82.A12	I82.A13	I82.A19
I82.A21	I82.A22	I82.A23	I82.A29	I82.B11	I82.B12	I82.B13
I82.B19	I82.B21	I82.B22	I82.B29	I82.C11	I82.C12	I82.C13
I82.C19	I82.C21	I82.C22	I82.C23	I82.C29	T80.0XXA	T80.0XXD
T80.0XXS	T81.718A	T81.718D	T81.718S	T81.72XA	T81.72XD	T81.72XS
T82.817A	T82.817D	T82.817S	T82.818A	T82.818D	T82.817S	T82.818A
T82.818D	T82.818S	Z79.01	Z95.2			

References

Downing A, Mortimer M, Hiers J. Impact of a pharmacist-driven warfarin management protocol on achieving therapeutic International Normalized Ratios. *American Journal of Health-System Pharmacy*. 2016;73(5): S69-S73 5p.

Hon H, Elmously A, Hoey B, et al. Inappropriate preinjury warfarin use in trauma patients: A call for a safety initiative. *Journal of Postgraduate Medicine*. 2016;62(2):73-79.

Benade E, Jacobson B, Louw S, Schapkaite E. Validation of the CoaguChek XS international normalised ratio point-of-care analyser in patients at Charlotte Maxeke Johannesburg Academic Hospital, South Africa. *South African Medical Journal*. 2016;106(3):280-283.

Hue MK, Welborn T, and Nagykaldi Z. Clinical Question: In adult patients on warfarin does home self-testing of prothrombin time and/or international normalized ratio provide the same outcomes compared to testing by a home health nurse or in a clinical setting? *J Okla State Med Assoc*. 2016;109(3):99-100.

Phibbs C, Love S, Jacobson A, et al. At-home versus in-clinic INR monitoring: A cost–utility analysis from the home INR study (THINRS). *J Gen Intern Med*. 2016;31(9):1061–1067.

Cayley WE Jr. Self-Monitoring and Self-Management of Oral Anticoagulation. American Family Physician. 2017;95(11):700-701

da Silva Saraiva S, Orsi FA, Santos MP, et al. Home management of INR in the public health system: Feasibility of self-management of oral anticoagulation and long-term performance of individual POC devices in determining INR. J of Thromb and Thrombol. 2016;42(1):146-153.

Matchar DB, Love SR, Jacobson AK, et al. The impact of frequency of patient self-testing of prothrombin time on time in target range within VA Cooperative Study #481: The Home INR Study (THINRS), a randomized, controlled trial. J Thromb Thrombolysis. 2015; 40:17–25.

Tripathi, M.M., Egawa, S., Wirth, A.G. et al. Clinical evaluation of whole blood prothrombin time (PT) and international normalized ratio (INR) using a Laser Speckle Rheology sensor. Sci Rep 7, 9169. 2017;017-08693-5

Jiang, N., Ge, J., Xian, Y., Huang, et al. Clinical application of a new warfarin-dosing regimen based on the CYP2C9 and VKORC1 genotypes in atrial fibrillation patients. Biomed Rep. 2016;4 453-458.

Barcellona D, Mastino D, Marongiu F. Portable coagulometer for vitamin K-antagonist monitoring: the patients' point of view. Patient Prefer Adherence. 2018;22; 12:1521-1526.

InterQual® Level of Care Criteria 2019. Acute Care Adult. Change Healthcare, LLC.

Novitas Solutions, Inc., LCA A53252. Revised 07/01/2020 (R25), 09/24/2020 (R26).

Novitas Solutions, Inc., LCD L35448. Revised 09/26/2019 (R16)

POLICY UPDATE HISTORY

10/26/2022	Approved in Medical Policy Committee
11/2022	Approved in QI/UM