

<b>Policy</b> # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

Applies to all products administered or underwritten by Blue Cross and Blue Shield of Louisiana and its subsidiary, HMO Louisiana, Inc. (collectively referred to as the "Company"), unless otherwise provided in the applicable contract. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.

*Note: Scintimammography and Gamma Imaging of the Breast and Axilla is addressed separately in medical policy 00438.* 

Note: Temporomandibular Joint Dysfunction is addressed separately in medical policy 00583.

## **Services Are Considered Investigational**

Coverage is not available for investigational medical treatments or procedures, drugs, devices or biological products.

Based on review of available data, the Company considers the use of all forms of thermography to be **investigational.**\*

## **Background/Overview**

Infrared radiation from the skin or organ tissue reveals temperature variations by producing brightly colored patterns on a liquid crystal display. Thermography involves the use of an infrared scanning device and can include various types of telethermographic infrared detector images and heat-sensitive cholesteric liquid crystal systems.

Interpretation of the color patterns is thought to assist in the diagnosis of many disorders such as complex regional pain syndrome (previously known as reflex sympathetic dystrophy), breast cancer, Raynaud phenomenon, digital artery vasospasm in hand-arm vibration syndrome, peripheral nerve damage following trauma, impaired spermatogenesis in infertile men, degree of burns, deep vein thrombosis, gastric cancer, tear-film layer stability in dry-eye syndrome, Frey syndrome, headaches, lower back pain, and vertebral subluxation.

©2024 Blue Cross and Blue Shield of Louisiana

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from Blue Cross and Blue Shield of Louisiana.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

Thermography may also assist in treatment planning and procedure guidance by accomplishing the following tasks: identifying restricted areas of perfusion in coronary artery bypass grafting, identifying unstable atherosclerotic plaques, assessing response to methylprednisone in rheumatoid arthritis, and locating high undescended testicles.

## FDA or Other Governmental Regulatory Approval

### **U.S. Food and Drug Administration (FDA)**

A number of thermographic devices have been cleared for marketing by the U.S. Food and Drug Administration (FDA) through the 510(k) process. FDA product codes: LHQ, FXN. Devices with product code LHQ may only be marketed for adjunct use. Devices with product code FXN do not provide a diagnosis or therapy. Examples of these devices are shown in Table 1.

Device Name	Manufacturer	Clearance Date	510(K) No.
Infrared Sciences Breastscan IR System	Infrared Sciences	Feb 2004	K032350
Telethermographic Camera, Series A, E, S, and P	FLIR Systems	Mar 2004	K033967
Notouch Breastscan	UE Lifesciences	Feb 2012	K113259
WoundVision Scout <sup>™‡</sup>	WoundVision	Dec 2013	K131596
AlfaSight 9000 Thermographic System <sup>™</sup> ‡	Alfa Thermodiagnostics	Apr 2015	K150457
FirstSense Breast Exam <sup>®‡</sup>	First Sense Medical	Jun 2016	K160573
Sentinel BreastScan II System	First Sense Medical	Jan 2017	K162767
InTouchThermal Camera	InTouch Technologies	Feb 2019	K181716

### Table 1. Thermography Devices Cleared by the U.S. Food and Drug Administration

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

Device Name	Manufacturer	Clearance Date	510(K) No.
Smile-100 System	Niramai Health Analytix Private Limited	Mar 2022	K212965
ThermPix <sup>™‡</sup> Thermovisual Camera	USA Therm	Apr 2022	K213650

### **Rationale/Source**

This medical policy was developed through consideration of peer-reviewed medical literature generally recognized by the relevant medical community, U.S. Food and Drug Administration approval status, nationally accepted standards of medical practice and accepted standards of medical practice in this community, technology evaluation centers, reference to federal regulations, other plan medical policies, and accredited national guidelines.

### Description

Thermography is a noninvasive imaging technique that measures temperature distribution in organs and tissues. The visual display of this temperature information is known as a thermogram. Thermography has been proposed as a diagnostic tool for treatment planning and for evaluation of treatment effects for a variety of conditions.

#### Summary of Evidence

For individuals who have an indication for breast cancer screening or diagnosis who receive thermography, the evidence includes diagnostic accuracy studies and systematic reviews. Relevant outcomes are overall survival, disease-specific survival, and test validity. Using histopathologic findings compared to the reference standard, a series of systematic reviews of studies have evaluated the accuracy of thermography to screen and/or diagnose breast cancer and reported wide ranges of sensitivities and specificities. To date, no study has demonstrated that thermography is sufficiently accurate to replace or supplement mammography for breast cancer diagnosis. Moreover, there are no studies on the impact of thermography on patient management or health outcomes for patients with breast cancer. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

For individuals who have musculoskeletal injuries who receive thermography, the evidence includes diagnostic accuracy studies, a longitudinal prospective study, and a systematic review. Relevant outcomes are test validity, symptoms, and functional outcomes. A systematic review of studies on thermography for diagnosing musculoskeletal injuries found moderate levels of accuracy compared with other diagnostic imaging tests. There is no consistent reference standard. This evidence does not permit conclusions as to whether thermography is sufficiently accurate to replace or supplement standard testing. Moreover, there are no high-quality or randomized studies on the impact of thermography on patient management or health outcomes for patients with musculoskeletal injuries. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have temporomandibular joint (TMJ) disorder who receive thermography, the evidence includes a systematic review. Relevant outcomes are test validity, symptoms, and functional outcomes. A systematic review of studies on thermography for diagnosing TMJ disorder found a wide variation in accuracy compared to other diagnostics. There is no consistent reference standard. The evidence does not permit conclusions as to whether thermography is sufficiently accurate to replace or supplement standard testing. Moreover, there are no studies on the impact of thermography on patient management or health outcomes for patients with the TMJ disorder. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have miscellaneous conditions (eg, herpes zoster, pressure ulcers, diabetic foot) who receive thermography, the evidence primarily includes diagnostic accuracy studies. Outcomes in these studies are test validity, symptoms, and functional outcomes. Most studies assessed temperature gradients or the association between temperature differences and the clinical condition. Due to the small number of studies for each indication, diagnostic accuracy could not adequately be evaluated. The clinical utility of thermography has only been considered in a single study of diabetic foot ulcers. For other miscellaneous conditions, the clinical utility of thermography has not been investigated. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

# **Supplemental Information**

### **Practice Guidelines and Position Statements**

Guidelines or position statements will be considered for inclusion in 'Supplemental Information' if they were issued by, or jointly by, a US professional society, an international society with US representation, or National Institute for Health and Care Excellence (NICE). Priority will be given to guidelines that are informed by a systematic review, include strength of evidence ratings, and include a description of management of conflict of interest.

#### **European Society of Breast Imaging**

A position paper by the European Society of Breast Imaging (2017) and 30 other national breast radiology bodies on screening for breast cancer stated that "screening with thermography or other optical tools as alternatives to mammography is discouraged."

#### **American College of Physicians**

The American College of Physicians (2019) issued a guidance statement for breast cancer screening in average-risk women that reviews existing screening guidelines. While the use of thermography was not mentioned in this statement, the authors concluded that evidence is insufficient to understand the benefits and harms of primary or adjunctive screening strategies in women who are found to have dense breasts on screening mammography.

#### American College of Radiology

The American College of Radiology guidelines for breast cancer screening (revised 2017) do not mention the use of thermography for breast cancer screening.

#### National Comprehensive Cancer Network

National Comprehensive Cancer Network guideline on breast cancer screening and diagnosis (v.2.2024) states that: "Current evidence does not support the routine use of thermography as screening procedures."

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

### **U.S. Preventive Services Task Force Recommendations**

The U.S. Preventive Services Task Force (2016) recommendations on breast cancer screening (currently undergoing an update) do not mention thermography. Additionally, there is insufficient evidence for the use of adjunctive screening methods for breast cancer (ultrasonography, magnetic resonance imaging, digital breast tomosynthesis, or other methods) in women identified to have dense breasts on a negative screening mammogram.

#### Medicare National Coverage

Medicare does not cover thermography. Current Medicare coverage policy states: "Thermography for any indication (including breast lesions which were excluded from Medicare coverage ...) is excluded from Medicare coverage because the available evidence does not support this test as a useful aid in the diagnosis or treatment of illness or injury. Therefore, it is not considered effective..."

#### **Ongoing and Unpublished Clinical Trials**

Some currently ongoing and unpublished trials that might influence this review are listed in Table 2.

NCT No.	Trial Name	Planned Enrollment	Completion Date
Unpublished			
NCT04013711	Quantitative Thermal Imaging to Evaluate Skin Toxicity from Radiation Treatment	200	Jul 2022
NCT03735550	Investigation of the Effectiveness of Liquid Crystal Contact Thermography in Detecting Pathological Changes in Female Breasts Compared to Standard Diagnostic Methods of Breast Cancer	3000	Jan 2019
NCT03217214	Investigation of Contact Based Method for Diagnosis of Cardiovascular Disease (INDICES)	67	Sep 2019

#### Table 2. Summary of Key Trials

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

NCT02776995	Tumor Monitoring Using Thermography During Radiation Therapy	80	Dec 2020
-------------	--	----	----------

NCT: national clinical trial.

## **References**

- 1. Vreugdenburg TD, Willis CD, Mundy L, et al. A systematic review of elastography, electrical impedance scanning, and digital infrared thermography for breast cancer screening and diagnosis. Breast Cancer Res Treat. Feb 2013; 137(3): 665-76. PMID 23288346
- 2. Fitzgerald A, Berentson-Shaw J. Thermography as a screening and diagnostic tool: a systematic review. N Z Med J. Mar 09 2012; 125(1351): 80-91. PMID 22426613
- Morales-Cervantes A, Kolosovas-Machuca ES, Guevara E, et al. An automated method for the evaluation of breast cancer using infrared thermography. EXCLI J. 2018; 17: 989-998. PMID 30564079
- 4. Neal CH, Flynt KA, Jeffries DO, et al. Breast Imaging Outcomes following Abnormal Thermography. Acad Radiol. Mar 2018; 25(3): 273-278. PMID 29275941
- 5. Omranipour R, Kazemian A, Alipour S, et al. Comparison of the Accuracy of Thermography and Mammography in the Detection of Breast Cancer. Breast Care (Basel). Aug 2016; 11(4): 260-264. PMID 27721713
- Rassiwala M, Mathur P, Mathur R, et al. Evaluation of digital infra-red thermal imaging as an adjunctive screening method for breast carcinoma: a pilot study. Int J Surg. Dec 2014; 12(12): 1439-43. PMID 25448668
- Sanchis-Sánchez E, Vergara-Hernández C, Cibrián RM, et al. Infrared thermal imaging in the diagnosis of musculoskeletal injuries: a systematic review and meta-analysis. AJR Am J Roentgenol. Oct 2014; 203(4): 875-82. PMID 25247955
- 8. Côrte AC, Pedrinelli A, Marttos A, et al. Infrared thermography study as a complementary method of screening and prevention of muscle injuries: pilot study. BMJ Open Sport Exerc Med. 2019; 5(1): e000431. PMID 30687515
- de Melo DP, Bento PM, Peixoto LR, et al. Is infrared thermography effective in the diagnosis of temporomandibular disorders? A systematic review. Oral Surg Oral Med Oral Pathol Oral Radiol. Feb 2019; 127(2): 185-192. PMID 30482738

©2024 Blue Cross and Blue Shield of Louisiana

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from Blue Cross and Blue Shield of Louisiana.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

- 10. Han SS, Jung CH, Lee SC, et al. Does skin temperature difference as measured by infrared thermography within 6 months of acute herpes zoster infection correlate with pain level?. Skin Res Technol. May 2010; 16(2): 198-201. PMID 20456100
- Park J, Jang WS, Park KY, et al. Thermography as a predictor of postherpetic neuralgia in acute herpes zoster patients: a preliminary study. Skin Res Technol. Feb 2012; 18(1): 88-93. PMID 21605168
- 12. Romanò CL, Logoluso N, Dell'Oro F, et al. Telethermographic findings after uncomplicated and septic total knee replacement. Knee. Jun 2012; 19(3): 193-7. PMID 21441031
- 13. Oliveira AL, Moore Z, O Connor T, et al. Accuracy of ultrasound, thermography and subepidermal moisture in predicting pressure ulcers: a systematic review. J Wound Care. May 02 2017; 26(5): 199-215. PMID 28475447
- 14. Nakagami G, Sanada H, Iizaka S, et al. Predicting delayed pressure ulcer healing using thermography: a prospective cohort study. J Wound Care. Nov 2010; 19(11): 465-6, 468, 470 passim. PMID 21135794
- 15. Bilska A, Stangret A, Pyzlak M, et al. Skin surface infrared thermography in pressure ulcer outcome prognosis. J Wound Care. Dec 02 2020; 29(12): 707-718. PMID 33320753
- 16. Wu CL, Yu KL, Chuang HY, et al. The application of infrared thermography in the assessment of patients with coccygodynia before and after manual therapy combined with diathermy. J Manipulative Physiol Ther. May 2009; 32(4): 287-93. PMID 19447265
- 17. Hara Y, Shiraishi A, Yamaguchi M, et al. Evaluation of allergic conjunctivitis by thermography. Ophthalmic Res. 2014; 51(3): 161-6. PMID 24603108
- Singer AJ, Relan P, Beto L, et al. Infrared Thermal Imaging Has the Potential to Reduce Unnecessary Surgery and Delays to Necessary Surgery in Burn Patients. J Burn Care Res. 2016; 37(6): 350-355. PMID 26720102
- 19. Dang J, Lin M, Tan C, et al. Use of Infrared Thermography for Assessment of Burn Depth and Healing Potential: A Systematic Review. J Burn Care Res. Jun 12 2021. PMID 34120173
- 20. Martínez-Jiménez MA, Ramirez-GarciaLuna JL, Kolosovas-Machuca ES, et al. Development and validation of an algorithm to predict the treatment modality of burn wounds using thermographic scans: Prospective cohort study. PLoS One. 2018; 13(11): e0206477. PMID 30427892

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

- 21. Dong F, Tao C, Wu J, et al. Detection of cervical lymph node metastasis from oral cavity cancer using a non-radiating, noninvasive digital infrared thermal imaging system. Sci Rep. May 08 2018; 8(1): 7219. PMID 29739969
- 22. Agazzi A, Fadanelli G, Vittadello F, et al. Reliability of LoSCAT score for activity and tissue damage assessment in a large cohort of patients with Juvenile Localized Scleroderma. Pediatr Rheumatol Online J. Jun 18 2018; 16(1): 37. PMID 29914516
- 23. Ranosz-Janicka I, Lis-Święty A, Skrzypek-Salamon A, et al. Detecting and quantifying activity/inflammation in localized scleroderma with thermal imaging. Skin Res Technol. Mar 2019; 25(2): 118-123. PMID 30030915
- 24. Cruz-Segura A, Cruz-Domínguez MP, Jara LJ, et al. Early Detection of Vascular Obstruction in Microvascular Flaps Using a Thermographic Camera. J Reconstr Microsurg. Sep 2019; 35(7): 541-548. PMID 31067581
- 25. Unger M, Markfort M, Halama D, et al. Automatic detection of perforator vessels using infrared thermography in reconstructive surgery. Int J Comput Assist Radiol Surg. Mar 2019; 14(3): 501-507. PMID 30519870
- 26. Chen R, Huang ZQ, Chen WL, et al. Value of a smartphone-compatible thermal imaging camera in the detection of peroneal artery perforators: Comparative study with computed tomography angiography. Head Neck. May 2019; 41(5): 1450-1456. PMID 30636085
- 27. Li DG, Dewan AK, Xia FD, et al. The ALT-70 predictive model outperforms thermal imaging for the diagnosis of lower extremity cellulitis: A prospective evaluation. J Am Acad Dermatol. Dec 2018; 79(6): 1076-1080.e1. PMID 30003987
- 28. Al Shakarchi J, Inston N, Dabare D, et al. Pilot study on the use of infrared thermal imaging to predict infrainguinal bypass outcome in the immediate post-operative period. Vascular. Dec 2019; 27(6): 663-667. PMID 31067207
- 29. Magalhaes C, Vardasca R, Rebelo M, et al. Distinguishing melanocytic nevi from melanomas using static and dynamic infrared thermal imaging. J Eur Acad Dermatol Venereol. Sep 2019; 33(9): 1700-1705. PMID 30974494
- Anzengruber F, Alotaibi F, Kaufmann LS, et al. Thermography: High sensitivity and specificity diagnosing contact dermatitis in patch testing. Allergol Int. Apr 2019; 68(2): 254-258. PMID 30598404
- 31. Aydemir U, Sarıgoz T, Ertan T, et al. Role of digital infrared thermal imaging in diagnosis of acute appendicitis. Ulus Travma Acil Cerrahi Derg. Nov 2021; 27(6): 647-653. PMID 34710229

©2024 Blue Cross and Blue Shield of Louisiana

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from Blue Cross and Blue Shield of Louisiana.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

- 32. Umapathy S, Thulasi R, Gupta N, et al. Thermography and colour Doppler ultrasound: a potential complementary diagnostic tool in evaluation of rheumatoid arthritis in the knee region. Biomed Tech (Berl). May 26 2020; 65(3): 289-299. PMID 31821162
- 33. Jones B, Hassan I, Tsuyuki RT, et al. Hot joints: myth or reality? A thermographic joint assessment of inflammatory arthritis patients. Clin Rheumatol. Sep 2018; 37(9): 2567-2571. PMID 29679167
- 34. Schiavon G, Capone G, Frize M, et al. Infrared Thermography for the Evaluation of Inflammatory and Degenerative Joint Diseases: A Systematic Review. Cartilage. Dec 2021; 13(2\_suppl): 1790S-1801S. PMID 34933442
- 35. Branco JHL, Branco RLL, Siqueira TC, et al. Clinical applicability of infrared thermography in rheumatic diseases: A systematic review. J Therm Biol. Feb 2022; 104: 103172. PMID 35180959
- 36. Gatt A, Falzon O, Cassar K, et al. The Application of Medical Thermography to Discriminate Neuroischemic Toe Ulceration in the Diabetic Foot. Int J Low Extrem Wounds. Jun 2018; 17(2): 102-105. PMID 29947290
- 37. Gatt A, Falzon O, Cassar K, et al. Establishing Differences in Thermographic Patterns between the Various Complications in Diabetic Foot Disease. Int J Endocrinol. 2018; 2018: 9808295. PMID 29721019
- Balbinot LF, Robinson CC, Achaval M, et al. Repeatability of infrared plantar thermography in diabetes patients: a pilot study. J Diabetes Sci Technol. Sep 01 2013; 7(5): 1130-7. PMID 24124938
- 39. van Doremalen RFM, van Netten JJ, van Baal JG, et al. Validation of low-cost smartphone-based thermal camera for diabetic foot assessment. Diabetes Res Clin Pract. Mar 2019; 149: 132-139. PMID 30738090
- 40. Sandi S, Yusuf S, Kaelan C, et al. Evaluation risk of diabetic foot ulcers (DFUs) using infrared thermography based on mobile phone as advanced risk assessment tool in the community setting: A multisite cross-sectional study. Enferm Clin. Mar 2020; 30 Suppl 2: 453-457. PMID 32204210
- 41. Hazenberg CE, van Netten JJ, van Baal SG, et al. Assessment of signs of foot infection in diabetes patients using photographic foot imaging and infrared thermography. Diabetes Technol Ther. Jun 2014; 16(6): 370-7. PMID 24690146
- 42. Petrova NL, Donaldson NK, Tang W, et al. Infrared thermography and ulcer prevention in the high-risk diabetic foot: data from a single-blind multicentre controlled clinical trial. Diabet Med. Jan 2020; 37(1): 95-104. PMID 31629373

©2024 Blue Cross and Blue Shield of Louisiana

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from Blue Cross and Blue Shield of Louisiana.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

- 43. Sardanelli F, Aase HS, Álvarez M, et al. Position paper on screening for breast cancer by the European Society of Breast Imaging (EUSOBI) and 30 national breast radiology bodies from Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Israel, Lithuania, Moldova, The Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Spain, Sweden, Switzerland and Turkey. Eur Radiol. Jul 2017; 27(7): 2737-2743. PMID 27807699
- 44. Qaseem A, Lin JS, Mustafa RA, et al. Screening for Breast Cancer in Average-Risk Women: A Guidance Statement From the American College of Physicians. Ann Intern Med. Apr 16 2019; 170(8): 547-560. PMID 30959525
- 45. Mainiero MB, Moy L, Baron P, et al. ACR Appropriateness Criteria ® Breast Cancer Screening. J Am Coll Radiol. Nov 2017; 14(11S): S383-S390. PMID 29101979
- 46. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Breast Cancer Screening and Diagnosis. Version 2.2024; https://www.nccn.org/professionals/physician\_gls/pdf/breast-screening.pdf.
- 47. U.S. Preventive Services Task Force. Breast Cancer: Screening. 2016; https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/breast-cancerscreening.
- 48. Centers for Medicare & Medicaid Services (CMS). National Coverage Determination for Thermography (220.11). 1992; https://www.cms.gov/medicare-coverage-database/details/ncd-

details.aspx?NCDId=164&ncdver=1&DocID=220.11.

## **Policy History**

Original Effecti	ve Date: 0	3/1995
Current Effectiv	ve Date: 0	5/13/2024
08/16/2001	Medical Policy (	Committee review
09/17/2001	Managed Care A	Advisory Council approval
06/24/2002	Format revision.	Coverage eligibility unchanged.
09/16/2003	Medical Policy (	Committee review.
09/29/2003	Managed Care A	Advisory Council approval
09/16/2003	Format revision.	Coverage eligibility unchanged.

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.



Policy # 001 Original Effection Current Effection	ive Date: 03/1995 ve Date: 05/13/2024	
Archived Date:		
Returned to Act	tive Status: 11/21/2018	
09/07/2005	Medical Director review	
09/20/2005	Medical Policy Committee review. Format revision. FDA approval information added.	
09/22/2005	Quality Care Advisory Council approval	
08/01/2007	Medical Director review	
08/15/2007	Medical Policy Committee approval. No change to coverage eligibility.	
08/06/2009	Medical Policy Committee approval	
08/26/2009	Medical Policy Implementation Committee approval. No change to coverage	
	eligibility.	
08/05/2010	Medical Policy Committee review	
08/01/2010	Medical Policy Implementation Committee approval. No change to coverage	
	eligibility.	
08/04/2011	Medical Policy Committee review	
08/17/2011	Medical Policy Implementation Committee approval. No change to coverage	
	eligibility.	
08/02/2012	Medical Policy Committee review	
08/15/2012	Medical Policy Implementation Committee approval. No change to coverage eligibility.	
08/01/2013	Medical Policy Committee review. Recommend archiving policy.	
08/21/2013	Medical Policy Implementation Committee approval. Archived	
11/08/2018	Medical Policy Committee review	
11/21/2018	Medical Policy Implementation Committee approval. Returned to active status.	
11/07/2019	Medical Policy Committee review	
11/13/2019	Medical Policy Implementation Committee approval. No change to coverage.	
04/02/2020	Medical Policy Committee review	
04/08/2020	Medical Policy Implementation Committee approval. Coverage eligibility	
	unchanged.	
04/01/2021	Medical Policy Committee review	
04/14/2021	Medical Policy Implementation Committee approval. Coverage eligibility	
	unchanged.	
04/07/2022	Medical Policy Committee review	

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.



Policy # 001	15
Original Effecti	ve Date: 03/1995
Current Effectiv	ve Date: 05/13/2024
Archived Date:	08/21/2013
Returned to Ac	tive Status: 11/21/2018
04/13/2022	Medical Policy Implementation Committee approval. Coverage eligibility
	unchanged.
04/06/2023	Medical Policy Committee review
04/12/2023	Medical Policy Implementation Committee approval. Coverage eligibility
	unchanged.
04/04/2024	Medical Policy Committee review
04/10/2024	Medical Policy Implementation Committee approval. Coverage eligibility
	unchanged.
Novt Schodulad	Parion Data: 04/2025

Next Scheduled Review Date: 04/2025

## **Coding**

The five character codes included in the Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines are obtained from Current Procedural Terminology  $(CPT^{\circledast})^{\ddagger}$ , copyright 2023 by the American Medical Association (AMA). CPT is developed by the AMA as a listing of descriptive terms and five character identifying codes and modifiers for reporting medical services and procedures performed by physician.

The responsibility for the content of Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines is with Blue Cross and Blue Shield of Louisiana and no endorsement by the AMA is intended or should be implied. The AMA disclaims responsibility for any consequences or liability attributable or related to any use, nonuse or interpretation of information contained in Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines. Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein. Any use of CPT outside of Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines should refer to the most current Current Procedural Terminology which contains the complete and most current listing of CPT codes and descriptive terms. Applicable FARS/DFARS apply.

CPT is a registered trademark of the American Medical Association.

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

Codes used to identify services associated with this policy may include (but may not be limited to) the following:

Code Type	Code
CPT	93740, 93799
HCPCS	No codes
ICD-10 Diagnosis	All related diagnoses

\*Investigational – A medical treatment, procedure, drug, device, or biological product is Investigational if the effectiveness has not been clearly tested and it has not been incorporated into standard medical practice. Any determination we make that a medical treatment, procedure, drug, device, or biological product is Investigational will be based on a consideration of the following:

- A. Whether the medical treatment, procedure, drug, device, or biological product can be lawfully marketed without approval of the U.S. Food and Drug Administration (FDA) and whether such approval has been granted at the time the medical treatment, procedure, drug, device, or biological product is sought to be furnished; or
- B. Whether the medical treatment, procedure, drug, device, or biological product requires further studies or clinical trials to determine its maximum tolerated dose, toxicity, safety, effectiveness, or effectiveness as compared with the standard means of treatment or diagnosis, must improve health outcomes, according to the consensus of opinion among experts as shown by reliable evidence, including:
  - 1. Consultation with technology evaluation center(s);
  - 2. Credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community; or
  - 3. Reference to federal regulations.

‡ Indicated trademarks are the registered trademarks of their respective owners.

**NOTICE:** If the Patient's health insurance contract contains language that differs from the BCBSLA Medical Policy definition noted above, the definition in the health insurance contract will be relied upon for specific coverage determinations.

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.



Policy # 00115	
Original Effective Date:	03/1995
Current Effective Date:	05/13/2024
Archived Date:	08/21/2013
Returned to Active Status:	11/21/2018

**NOTICE:** Medical Policies are scientific based opinions, provided solely for coverage and informational purposes. Medical Policies should not be construed to suggest that the Company recommends, advocates, requires, encourages, or discourages any particular treatment, procedure, or service, or any particular course of treatment, procedure, or service.

**NOTICE:** Federal and State law, as well as contract language, including definitions and specific contract provisions/exclusions, take precedence over Medical Policy and must be considered first in determining eligibility for coverage.

©2024 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.