



Origination 07/2015  
 Last Approved 06/2024  
 Effective 06/2024  
 Last Revised 06/2024  
 Next Review 06/2025

Owner Sheila Almeida:  
 Supervisor  
 Utilization  
 Management  
 Area Utilization Review  
 - CA Region  
 Applicability CA - Physician  
 Enterprise  
 Southern

## UM CA Regional Medical Review Policy: Ultrasound Guided Joint Procedures Criteria

### Scope

Providence provider network includes: Southern California Networks Orange County / High Desert Medical Groups (St. Jude, St. Joseph, Mission, St. Mary's), LA County Medical Groups (Axminster Medical Group, Facey Medical Group, Providence Care Network, St. Johns Physician Partners Medical Group,) and Northern California Networks (Sonoma, Humboldt, and Napa Valley)

### I. Purpose

To define a regional policy and procedure to be followed by the practitioner who identifies a patient who meets medical necessity for ultrasound guided joint procedures.

### II. Definitions

Term	Definition
Regional Medical Review policy	The Medical Directors and Governing Board have directed the UM Department to follow a specific policy in regards to Referral Management.

### III. Policy:

- A. Joints: Ultrasound guidance is of greatest use for joints or other periarticular spaces that are especially difficult to enter based on external landmarks alone. Therefore, the use of ultrasound guided procedures for the following joints will require prior authorization when

medical necessity criteria are met as described below:

1. Acromioclavicular joint
2. Knee
3. Tibiotalar joint
4. Trochanteric bursa

B. Medical Necessity Criteria: The decision regarding which procedures to perform using ultrasound guidance depends upon multiple factors, including the expertise of the clinician performing musculoskeletal procedures without ultrasound. Ultrasound guided injections and/or aspirations will be approved for the joints above if at least one of the medical necessity criteria below are met:

1. The lack of success of an initial attempt to aspirate or inject the joint.
2. Difficulty based on external anatomical landmarks alone such as severe joint deformity or obesity (generally Body Mass Index of equal to or greater than 40).
3. Other criteria that demonstrate how patient safety/care may be compromised if the provider is unable to use an ultrasound guided approach.

## IV. Maintenance

Date	Revision, Description
6/1/15	Regional Medical Review policy written.
11/04/2021	Updated scope to remove Hoag, add Humboldt Updated business naming to Providence Corrected format to current business standard
08/07/2023	No content changes, Annual review
05/01/2024	Added 04/2024 version of UpToDate reference via link and PDF attachment. Updated to add LA Ministries and convert to an All UM CA Regional policy. Removed procedural section as not needed
05/06/2024	Revisions to add clarity around specific joints and medical necessity requirements. Review and updates made to identify more current/specific references.

## V. References:

- [UpToDate 2024: Musculoskeletal Ultrasonography: Guided Injection and Aspiration of Joints and Related Structures pg. 1-35.](#)
- American College of Rheumatology Musculoskeletal Ultrasound Task Force. Ultrasound in American rheumatology practice: report of the American College of Rheumatology musculoskeletal ultrasound task force. Arthritis Care Res (Hoboken) 2010; 62:1206.
- Koski JM. Ultrasound guided injections in rheumatology. J Rheumatol 2000; 27:2131.  
Fessell DP, Jacobson JA, Craig J, et al. Using sonography to reveal and aspirate joint effusions. AJR Am J Roentgenol 2000; 174:1353.

- Bruyn GA, Schmidt WA. Introductory guide to musculoskeletal ultrasound for the rheumatologist, 1st Edition, Bohn Stafleu van Loghum, The Netherlands 2006.
- d'Agostino MA, Ayrat X, Baron G, et al. Impact of ultrasound imaging on local corticosteroid injections of symptomatic ankle, hind-, and mid-foot in chronic inflammatory diseases. *Arthritis Rheum* 2005; 53:284.
- Klauser A, De Zordo T, Feuchtner G, et al. Feasibility of ultrasound-guided sacroiliac joint injection considering sonoanatomic landmarks at two different levels in cadavers and patients. *Arthritis Rheum* 2008; 59:1618.
- Jones A, Regan M, Ledingham J, et al. Importance of placement of intra-articular steroid injections. *BMJ* 1993; 307:1329.
- Eustace JA, Brophy DP, Gibney RP, et al. Comparison of the accuracy of steroid placement with clinical outcome in patients with shoulder symptoms. *Ann Rheum Dis* 1997; 56:59.
- Balint PV, Kane D, Hunter J, et al. Ultrasound guided versus conventional joint and soft tissue fluid aspiration in rheumatology practice: a pilot study. *J Rheumatol* 2002; 29:2209.
- Hall S, Buchbinder R. Do imaging methods that guide needle placement improve outcome? *Ann Rheum Dis* 2004; 63:1007.
- Raza K, Lee CY, Pilling D, et al. Ultrasound guidance allows accurate needle placement and aspiration from small joints in patients with early inflammatory arthritis. *Rheumatology (Oxford)* 2003; 42:976.
- Cunnington J, Marshall N, Hide G, et al. A randomized, double-blind, controlled study of ultrasound-guided corticosteroid injection into the joint of patients with inflammatory arthritis. *Arthritis Rheum* 2010; 62:1862.
- Sofka CM, Collins AJ, Adler RS. Use of ultrasonographic guidance in interventional musculoskeletal procedures: a review from a single institution. *J Ultrasound Med* 2001; 20:21.
- Delaunoy I, Feipel V, Appelboom T, Hauzeur JP. Sonography detection threshold for knee effusion. *Clin Rheumatol* 2003; 22:391.
- Jacobson JA, Andresen R, Jaovisidha S, et al. Detection of ankle effusions: comparison study in cadavers using radiography, sonography, and MR imaging. *AJR Am J Roentgenol* 1998; 170:1231.
- Raza K, Lee CY, Pilling D, et al. Ultrasound guidance allows accurate needle placement and aspiration from small joints in patients with early inflammatory arthritis. *Rheumatology (Oxford)* 2003; 42:976.
- Pourbagher MA, Ozalay M, Pourbagher A. Accuracy and outcome of sonographically guided intra-articular sodium hyaluronate injections in patients with osteoarthritis of the hip. *J Ultrasound Med* 2005; 24:1391.
- Rubens DJ, Fultz PJ, Gottlieb RH, Rubin SJ. Effective ultrasonographically guided intervention for diagnosis of musculoskeletal lesions. *J Ultrasound Med* 1997; 16:831.
- Zingas C, Failla JM, Van Holsbeeck M. Injection accuracy and clinical relief of de Quervain's tendinitis. *J Hand Surg Am* 1998; 23:89.
- Naredo E, Cabero F, Beneyto P, et al. A randomized comparative study of short term response to blind injection versus sonographic-guided injection of local corticosteroids in patients with painful shoulder. *J Rheumatol* 2004; 31:308.

- Chen MJ, Lew HL, Hsu TC, et al. Ultrasound-guided shoulder injections in the treatment of subacromial bursitis. *Am J Phys Med Rehabil* 2006; 85:31.
  - Sibbitt WL Jr, Peisajovich A, Michael AA, et al. Does sonographic needle guidance affect the clinical outcome of intraarticular injections? *J Rheumatol* 2009; 36:1892.
  - Shanahan EM, Smith MD, Wetherall M, et al. Suprascapular nerve block in chronic shoulder pain: are the radiologists better? *Ann Rheum Dis* 2004; 63:1035.
  - Taras JS, Raphael JS, Pan WT, et al. Corticosteroid injections for trigger digits: is intrasheath injection necessary? *J Hand Surg Am* 1998; 23:717.
  - Kane D, Greaney T, Shanahan M, et al. The role of ultrasonography in the diagnosis and management of idiopathic plantar fasciitis. *Rheumatology (Oxford)* 2001; 40:1002.
  - Rutten MJ, Maresch BJ, Jager GJ, de Waal Malefijt MC. Injection of the subacromial-subdeltoid bursa: blind or ultrasound-guided? *Acta Orthop* 2007; 78:254.
  - Naredo E, Bijlsma JW. Becoming a musculoskeletal ultrasonographer. *Best Pract Res Clin Rheumatol* 2009; 23:257.
  - Qvistgaard E, Kristoffersen H, Terslev L, et al. Guidance by ultrasound of intra-articular injections in the knee and hip joints. *Osteoarthritis Cartilage* 2001; 9:512.
  - Koski JM, Hermunen HS, Kilponen VM, et al. Verification of palpation-guided intra-articular injections using glucocorticoid-air-saline mixture and ultrasound imaging (GAS-graphy). *Clin Exp Rheumatol* 2006; 24:247.
  - Fredberg U, van Overeem Hansen G, Bolvig L. Placement of intra-articular injections verified by ultrasonography and injected air as contrast medium. *Ann Rheum Dis* 2001; 60:542.
  - Bruyn GA, Schmidt WA. How to perform ultrasound-guided injections. *Best Pract Res Clin Rheumatol* 2009; 23:269.
  - Pekkaflahli MZ, Kiralp MZ, Başekim CC, et al. Sacroiliac joint injections performed with sonographic guidance. *J Ultrasound Med* 2003; 22:553.
  - Chen CP, Lew HL, Tsai WC, et al. Ultrasound-guided injection techniques for the low back and hip joint. *Am J Phys Med Rehabil* 2011; 90:860.
  - Klauser AS, De Zordo T, Feuchtner GM, et al. Fusion of real-time US with CT images to guide sacroiliac joint injection in vitro and in vivo. *Radiology* 2010; 256:547.
  - Scirè CA, Epis O, Codullo V, et al. Immunohistological assessment of the synovial tissue in small joints in rheumatoid arthritis: validation of a minimally invasive ultrasound-guided synovial biopsy procedure. *Arthritis Res Ther* 2007; 9:R101.
  - Koski JM, Helle M. Ultrasound guided synovial biopsy using portal and forceps. *Ann Rheum Dis* 2005; 64:926.
- Topic 14926 Version 8.0

---

## Attachments

## Approval Signatures

Step Description	Approver	Date
Director Utilization Management	Alik Apikian: Director Utilization Management	06/2024
Senior Clinical Educator	Sheila Almeida: Supervisor Utilization Management	06/2024

---

## Applicability

CA - Physician Enterprise Southern

## Standards

No standards are associated with this document