

Shoulder Arthroscopy

ORG: S-1045 (ISC)
Link to Codes

MCG Health
Inpatient & Surgical
Care
27th Edition

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Care Planning - Inpatient Admission and Alternatives

Clinical Indications for Procedure

- Procedure is indicated for **1 or more** of the following(1)(2):**N**
 - Rotator cuff injury, as indicated by **1 or more** of the following(6)(8)(9)(10)(11)(12)(13):
 - Acute full-thickness injury, as indicated by **1 or more** of the following:
 - Massive avulsion
 - New inability to externally rotate arm against resistance
 - Inability to elevate arm on physical examination
 - Disabling limitation of function in affected arm
 - Acute partial-thickness injury due to trauma(14)
 - Chronic partial-thickness or full-thickness injury that requires repair, as indicated by **ALL** of the following:
 - Symptomatic (ie, pain or significant functional impairment)
 - Lack of sufficient improvement after at least 6 weeks of nonoperative therapy (eg, NSAIDs, physical therapy)
 - Revision of prior rotator cuff repair(15)(16)(17)
 - Impingement (eg, on MRI or other imaging) necessitating acromioplasty, as indicated by **ALL** of the following:
 - Pain or significant functional impairment
 - Symptoms refractory to nonoperative therapy for at least 3 months (eg, NSAID use, physical therapy, corticosteroid injection)
 - Osteoarthritis, as indicated by^[A] **ALL** of the following(18)(19)(20)(21):
 - Significant pain or functional impairment
 - Symptoms refractory to at least 3 months of nonoperative treatment (eg, activity modification, NSAIDs, physical therapy, corticosteroid injection)(19)
 - Calcific tendinosis with symptoms (eg, pain, secondary bursitis) refractory to at least 6 months of nonoperative management (eg, corticosteroid injection, physical therapy)(22)(23)
 - Adhesive capsulitis release needed, as indicated by **ALL** of the following(24)(25)(26)(27)(28):
 - Imaging negative for other shoulder pathology (eg, rotator cuff tear) as cause of symptoms(29)

- Significant functional impairment or pain refractory to 6 months of nonoperative care (eg, corticosteroid injection, physical therapy, arthrographic distention)
- ☐ Anterior glenohumeral instability (eg, Bankart lesion), as indicated by **ALL** of the following(30)(31)(32)(33):
 - Joint instability, recurrent dislocation, pain, or limited range of motion
 - Surgical stabilization required, as indicated by **1 or more** of the following(34)(35)(36):
 - Age 30 years or younger with high level of shoulder activity (eg, throwing athlete)(34)(37)(38)(39)
 - Failed prior Bankart repair(40)
 - Failed trial of shoulder immobilization (eg, recurrent dislocation despite immobilization)(41)(42)
 - Associated fracture of anteroinferior glenoid(40)
 - Associated fracture of humerus (Hills Sachs lesion)(40)
- Posterior or multidirectional glenohumeral instability refractory to at least 6 weeks of nonsurgical management (eg, physical therapy)(43)
- Superior labrum anterior to posterior (SLAP) tear on imaging with symptoms (eg, pain, limited range of motion) refractory to at least 3 months of nonoperative management (eg, physical therapy, corticosteroid injection, NSAIDs)(43)(44)(45)(46)
- Septic arthritis of shoulder(47)(48)(49)
- Fracture amenable to arthroscopic repair (eg, humeral head fracture, glenoid fracture)
- Acromioclavicular joint separation with complete acromioclavicular or coracoclavicular ligament tear(50)(51)
- Posterior ossification of the glenoid (Bennett lesion or "thrower's shoulder") with pain refractory to nonoperative management (eg, structured rehabilitation)(52)(53)
- Suprascapular nerve entrapment with neuropathic pain or strength deficit unresponsive to nonoperative management (eg, ultrasound-guided aspiration and injection)(54)
- Subcoracoid impingement with coracohumeral distance of 6 mm or less and pain refractory to nonoperative therapy (eg, rest, physical therapy, anti-inflammatory medications)(55)
- Biceps tendon impingement or tendinitis requiring tenodesis or tenotomy(56)(57)(58)(59)(60)
- Bursitis or crepitus within scapulothoracic joint (snapping scapula) refractory to 3 months or more of nonoperative treatment (eg, analgesics, physical therapy, corticosteroid injection)(61)(62)
- Tumor resection amenable to arthroscopic approach(63)
- ☐ Synovectomy, indicated for **1 or more** of the following:
 - Noninfectious renal arthropathy
 - Pigmented villonodular synovitis
 - Synovial chondromatosis
 - Rheumatoid arthritis
 - Inflammatory disorder with synovial fluid analysis revealing white blood count of 2000 cells/mm³ (2 x10⁹/L) or more with neutrophil percentage of 50% or more(64)
- Osteonecrosis requiring core decompression(65)
- Arthrodesis required for flail shoulder or end-stage shoulder disease(66)(67)
- ☐ Diagnostic arthroscopy of shoulder, as indicated by **ALL** of the following(68):
 - Presence of significant signs or symptoms (eg, pain, functional impairment, instability)(68)
 - Diagnosis not clear (eg, after exam, imaging)
 - Nonoperative therapy has been tried and failed (eg, analgesics, rest, physical therapy, anti-inflammatory agents).

Alternatives to Procedure

- Alternatives include(1)(2)(6)(7)(9)(69)(70)(71):
 - Nonoperative treatment(5)(6)(7)(14)(19)(27)(72)
 - Immobilization
 - Physical therapy(73)(74)
 - Home exercise program
 - Anti-inflammatory medications, oral and topical
 - Corticosteroid injections(69)(75)
 - Radiosynovectomy for inflammatory arthritis(76)
 - Ultrasound-guided percutaneous lavage for calcific tendinosis(77)
 - Arthrographic distention for adhesive capsulitis(28)(78)
 - Hemiarthroplasty. See Shoulder Hemiarthroplasty [↗](#) ISC.
 - Total or reverse total shoulder arthroplasty. See Shoulder Arthroplasty [↗](#) ISC.
 - Open or arthroscopic-assisted open approach for shoulder surgery. See Musculoskeletal Surgery or Procedure GRG [↗](#) GRG.

Operative Status Criteria

- Ambulatory(79)(80)

Preoperative Care Planning

- Preoperative care planning needs may include(1)(2)(6)(81):
 - Preoperative evaluation, including:
 - Routine preoperative evaluation. See Preoperative Education, Assessment, and Planning Tool [SR](#).
 - Diagnostic test scheduling, including:
 - Imaging study (radiographs, MRI, MR arthrography, 3-dimensional CT, ultrasound)(82)(83)(84)(85)
 - Preoperative treatment, procedures, and stabilization, including:
 - Physical therapy
 - Preoperative discharge planning as appropriate. See Discharge Planning in this guideline.

Hospitalization

Optimal Recovery Course

Day	Level of Care	Clinical Status	Activity	Routes	Interventions	Medications
1	<ul style="list-style-type: none"> • Social Determinants of Health Assessment • OR to recovery room to discharge[B] • Discharge planning 	<ul style="list-style-type: none"> • Successful uncomplicated repair • Pain absent or managed • No evidence of new neurologic impairment • No evidence of postoperative or surgical site infection • Discharge plans and education understood 	<ul style="list-style-type: none"> • Ambulatory or acceptable for next level of care[C] 	<ul style="list-style-type: none"> • Oral hydration[D] • Oral medications or regimen acceptable for next level of care • Oral diet or acceptable for next level of care • IV fluids, medications for procedure 	<ul style="list-style-type: none"> • Immobilizer or sling 	<ul style="list-style-type: none"> • Multimodal analgesia • Tranexamic acid[E]

(1)(2)(79)(80)(88)[N](#)

Recovery Milestones are indicated in **bold**.

Goal Length of Stay: Ambulatory

Note: Goal Length of Stay assumes optimal recovery, decision making, and care. Patients may be discharged to a lower level of care (either later than or sooner than the goal) when it is appropriate for their clinical status and care needs.

Extended Stay

Minimal (a few hours to 1 day), Brief (1 to 3 days), Moderate (4 to 7 days), and Prolonged (more than 7 days).

- Inpatient stay may be needed for(1)(89)(90):
 - Failure to achieve discharge status criteria
 - See Ambulatory Surgery Discharge and Complications: Common Complications and Conditions [ISC](#) for further information.
 - Septic joint(47)(48)(49)
 - Complications of procedure (eg, air embolism, hematoma, biceps rupture, acromial fracture, axillary nerve injury, deltoid detachment)(91)(92)(93)

See Common Complications and Conditions [ISC](#) for further information.

Hospital Care Planning

- Hospital evaluation and care needs may include(1)(2)(6)(81):
 - Monitoring patient's status for deterioration and comorbid conditions (see Inpatient Monitoring and Assessment Tool [SR](#)); key items include(94):
 - Multimodal analgesia(88)(95)(96)(97)
 - Neurologic status in both arms
 - Ability to void

- Physical therapy and postoperative mobilization(98)

Discharge

Discharge Planning

- Discharge planning includes[F]:
 - Assessment of needs and planning for care, including(100):
 - Develop treatment plan (involving multiple providers as needed).
 - Evaluate and address preadmission functioning as needed.
 - Evaluate and address psychosocial status issues as indicated. See Psychosocial Assessment [SR](#) for further information.
 - Evaluate and address social determinants of health (eg, housing, food). See Social Determinants of Health Screening Tool [SR](#) for further information.(99)
 - Evaluate and address patient or caregiver preferences as indicated.
 - Identify skilled services needed at next level of care, with specific attention to(101)(102):
 - Neurovascular status assessment
 - Pain management(6)(15)
 - Wound or dressing management
 - Early identification of anticipated discharge destination; options include(103)(104):
 - Home, considerations include:
 - Access to follow-up care
 - Home safety assessment. See Home Safety Assessment [SR](#) for further information.
 - Self-management ability if appropriate. See Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) Assessment [SR](#) for further information.
 - Caregiver need, ability, and availability
 - Post-acute skilled care or custodial care as indicated. See Discharge Planning Tool [SR](#) for further information.
 - Transitions of care plan complete, including(104):
 - Patient and caregiver education complete. See Shoulder Arthroscopy: Patient Education for Clinicians [SR](#) for further information.
 - See Teach Back Tool [SR](#) for further information.
- ☐ Medication reconciliation completion includes(105)(106):
 - Compare patient's discharge list of medications (prescribed and over-the-counter) against provider's admission or transfer orders.
 - Assess each medication for correlation to disease state or medical condition.
 - Report medication discrepancies to prescribing provider, attending physician, and primary care provider, and ensure accurate medication order is identified.
 - Provide reconciled medication list to all treating providers.
 - Confirm that patient or caregiver can acquire medication.
 - Educate patient and caregiver.
 - Provide complete medication list to patient and caregiver.
 - Importance of presenting personal medication list to all providers at each care transition, including all provider appointments
 - Reason, dosage, and timing of medication (eg, use "teach-back" techniques)(107)
 - Encourage communication between patient, caregiver, and pharmacy for obtaining prescriptions, setting up home medication delivery, and reviewing for drug-drug interactions.
 - See Medication Reconciliation Tool [SR](#) for further information.
- Plan communicated to patient, caregiver, and all members of care team, including(108)(109):
 - Inpatient care and service providers
 - Primary care provider
 - All post-discharge care and service providers
- Appointments planned or scheduled, which may include:
 - Primary care provider
 - Orthopedic surgeon
 - Rehabilitation therapy services(110)
 - Specialists for management of comorbidities as needed(111)
 - Other
- Outpatient testing and procedure plans made, which may include:
 - Bone densitometry(111)
 - Other

- Referrals made for assistance or support, which may include:
 - Financial, for follow-up care, medication, and transportation
 - Self-help or support groups
 - Tobacco use treatment(112)
 - Other
- Medical equipment and supplies coordinated (ie, delivered or delivery confirmed), which may include:
 - Immobilizers (eg, braces, splints)(2)(6)(101)
 - Wound care equipment and supplies(113)
 - Other

Discharge Destination

- Post-hospital levels of admission may include:
 - Home.
 - Home healthcare. See Home Care Indications for Admission Section [HC](#) in Shoulder Arthroscopy guideline in Home Care.

Evidence Summary

Criteria

The evidence for the clinical indications found in this guideline includes 59 published peer reviewed articles, 2 specialty society or other evidence-based guidelines, 2 Cochrane systematic reviews, and 5 book sections.

A systematic review and meta-analysis of 6 randomized trials (626 patients in total, mean age 66 years) in patients with degenerative rotator cuff tear found that both surgical repair and arthroscopic subacromial decompression resulted in clinically insignificant improvement in outcomes over nonoperative treatment.(3) **(EG 1)** A meta-analysis of 4 randomized controlled studies including 354 patients with full-thickness rotator cuff tears found no difference in outcomes at a mean follow-up of 22 months between repair with and without concomitant acromioplasty.(4) **(EG 1)** A systematic review and meta-analysis of 8 studies including 1062 patients with rotator cuff disease (excluding full-thickness rotator cuff tears) and painful subacromial impingement found high-certainty evidence that subacromial decompression was not associated with improvement in pain, shoulder function, or health-related quality of life at 1-year follow-up.(5) **(EG 1)** A subspecialty society guideline concludes with moderate-strength evidence that the routine use of acromioplasty as a concomitant treatment for patients with small-sized to medium-sized full-thickness rotator cuff tears is not supported as compared to arthroscopic repair alone.(6) **(EG 2)** Another guideline panel concludes that in patients with atraumatic shoulder pain for 3 months or more, surgical subacromial decompression has not been shown to improve pain, function, or quality of life, and would therefore not be recommended.(7) **(EG 2)**

Length of Stay

Database analysis of 16,472 patients who underwent rotator cuff repair found that patients who had open repair had a mean length of stay of 11.5 hours, and those who had arthroscopic repair had a mean length of stay of 5.5 hours.(79) **(EG 2)** Analysis of procedure data for a large commercially insured pediatric population shows 99% of shoulder arthroscopy procedures being performed on an outpatient basis.(80) **(EG 3)** Analysis of procedure data for a large commercially insured adult population shows 99% of shoulder arthroscopy procedures being performed on an outpatient basis.(80) **(EG 3)** Analysis of procedure data for a Medicare population shows 99% of shoulder arthroscopy procedures being performed on an outpatient basis.(80) **(EG 3)**

Rationale

Surgical MCG care guidelines help the clinician to identify, for a given procedure, which patient-specific factors and clinical conditions are appropriate for that procedure. The evidence-based clinical indication criteria assist the clinician in the decision to appropriately perform a procedure, evaluating whether the potential benefits of a procedure outweigh the potential risks. For Medicare enrollees, surgical MCG care guidelines also identify which procedures CMS has designated as inpatient only.

Related CMS Coverage Guidance

This guideline supplements but does not replace, modify, or supersede existing Medicare regulations or applicable National Coverage Determinations (NCDs) or Local Coverage Determinations (LCDs).

Code of Federal Regulations (CFR): 42 CFR 412.3(114); 42 CFR 419.22(n)(115); 42 CFR 422.101(116)

Internet-Only Manual (IOM) Citations: CMS IOM Publication 100-02, Medicare Benefit Policy Manual, Chapter 1 - Inpatient Hospital Services Covered Under Part A(117); CMS IOM Publication 100-02, Medicare Benefit Policy Manual, Chapter 6 - Hospital Services Covered Under Part B(118); CMS IOM Publication 100-02, Medicare Benefit Policy Manual, Chapter 15 - Covered Medical and Other Health Services(119); CMS IOM Publication 100-08, Medicare Program Integrity Manual, Chapter 6, Section 6.5 - Medical Review of Inpatient Hospital Claims for Part A Payment(120)

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Footnotes

[A] Arthroscopic procedures to treat glenohumeral arthritis may include capsular release, axillary nerve release or neurolysis, humeral osteoplasty, microfracture, osteochondral allograft, biological resurfacing, loose body removal, subacromial decompression, or biceps tenodesis.(18) Arthroscopic procedures to treat acromioclavicular joint osteoarthritis include distal clavicle resection.(19) [A in Context Link 1]

[B] See Ambulatory Surgery Discharge and Complications: Common Complications and Conditions  ISC for further information. [B in Context Link 1]

[C] The patient is ambulatory or near baseline activity for age and development. [C in Context Link 1]

[D] Some patients may have their hydration needs met via alternative means (eg, percutaneous endoscopic gastrostomy tube). [D in Context Link 1]

[E] Tranexamic acid administration has been associated with fewer hemarthrosis-related complications.(86)(87) [E in Context Link 1]

Definitions

Multimodal analgesia

- Multimodal analgesia involves the utilization of 2 or more analgesic agents with different mechanisms of action in order to provide additive or synergistic pain control, while minimizing side effects and reliance on opioids.(1)(2)(3)

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Social Determinants of Health Assessment

- Risk of poor health outcomes may be increased by the presence of **1 or more** of the following social determinants of health(1)(2)(3)(4):
 - Housing insecurity, as indicated by **1 or more** of the following:
 - Individual or caregiver's current living situation is **1 or more** of the following(5):
 - Does not have own housing (eg, staying in a hotel, shelter, or with others)
 - Has own housing (eg, house, apartment), but at risk of losing it in the future (ie, behind on rent or mortgage)
 - Has own housing (eg, house, apartment), but has lived in 3 or more places in past year
 - Current housing has **1 or more** of the following:
 - Electrical appliances (eg, stove, refrigerator) not working or unavailable
 - Insufficient heating or cooling
 - Insufficient ventilation
 - Lead paint or pipes
 - Mold
 - Pests (eg, bugs) or rodents
 - Smoke detectors not working or unavailable
 - Food insecurity, as indicated by **1 or more** of the following(6):
 - In the past year, individual or caregiver ran out of food and did not have money to buy more food.
 - In the past year, individual or caregiver worried that they would run out of food before they received money to buy more food.
 - Insufficient transportation, as indicated by **1 or more** of the following(7):
 - In the past year, individual or caregiver missed medical appointments or could not get medications due to lack of transportation.
 - In the past year, individual or caregiver missed nonmedical activities, work, or could not get things needed for daily living due to lack of transportation.
 - Insufficient utilities, as indicated by **1 or more** of the following(8):
 - Utilities (eg, electricity, water, gas, or oil) are currently shut off or unavailable.
 - In the past year, electric, water, gas, or oil company threatened to shut off services.
 - Personal safety risk, as indicated by **2 or more** of the following(6):
 - Individual is sometimes or frequently physically hurt by another person (including family member).
 - Individual is sometimes or frequently insulted or talked down to by another person (including family member).
 - Individual is sometimes or frequently threatened with physical harm by another person (including family member).
 - Individual is sometimes or frequently screamed or cursed at by another person (including family member).
 - Insufficient dependent care, as indicated by **1 or more** of the following:
 - In the past year, individual or caregiver was unable to work due to lack of dependent care.
 - In the past year, individual or caregiver was unable to work more (additional) hours due to lack of dependent care.
 - In the past year, individual or caregiver missed medical appointments or could not get medications due to lack of dependent care.
 - In the past year, individual or caregiver missed nonmedical activities (eg, school, church, social activity) due to lack of dependent care.
 - Depression risk, as indicated by **ALL** of the following:
 - In the past 2 weeks, individual had little interest or pleasure in normal activities on at least several days.
 - In the past 2 weeks, individual felt down, depressed, or hopeless on at least several days.

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Codes

ICD-10 Diagnosis: M00.011, M00.012, M00.019, M00.811, M00.812, M00.819, M00.9, M12.211, M12.212, M12.219, M12.511, M12.512, M12.519, M12.811, M12.812, M12.819, M13.811, M13.812, M13.819, M19.011, M19.012, M19.019, M19.111, M19.112, M19.119, M19.211, M19.212, M19.219, M24.011, M24.012, M24.019, M24.111, M24.112, M24.119, M24.211, M24.212, M24.219, M24.411, M24.412, M24.419, M24.511, M24.512, M24.519, M24.611, M24.612, M24.619, M24.811, M24.812, M24.819, M25.311, M25.312, M25.319, M25.511, M25.512, M25.519, M25.611, M25.612, M25.619, M25.711, M25.712, M25.719, M25.811, M25.812, M25.819, M65.811, M65.812, M65.819, M66.311, M66.312, M66.319, M66.321, M66.322, M66.329, M66.811, M66.812, M66.819, M66.821, M66.822, M66.829, M67.813, M67.814, M67.819, M67.911, M67.912, M67.919, M67.921, M67.922, M67.929, M75.00, M75.01, M75.02, M75.100, M75.101, M75.102, M75.110, M75.111, M75.112, M75.120, M75.121, M75.122, M75.20, M75.21, M75.22, M75.30, M75.31, M75.32, M75.40, M75.41, M75.42, M75.50, M75.51, M75.52, M75.80, M75.81, M75.82, M75.90, M75.91, M75.92, M89.311, M89.312, M89.319, M89.511, M89.512, M89.519, M89.8X1, M94.211, M94.212, M94.219, M94.8X1, S42.141A, S42.142A, S42.143A, S42.251A, S42.252A, S42.253A, S42.291A, S42.292A, S42.293A, S43.001A, S43.002A, S43.003A, S43.004A, S43.005A, S43.006A, S43.011A, S43.012A, S43.013A, S43.014A, S43.015A, S43.016A, S43.021A, S43.022A, S43.023A, S43.024A, S43.025A, S43.026A, S43.081A, S43.082A, S43.083A, S43.084A, S43.085A, S43.086A, S43.101A, S43.102A, S43.109A, S43.121A, S43.122A, S43.129A, S43.401A, S43.402A, S43.409A, S43.421A, S43.422A, S43.429A, S43.431A, S43.432A, S43.439A, S43.491A, S43.492A, S43.499A, S43.50XA, S43.51XA, S43.52XA, S43.80XA, S43.81XA, S43.82XA, S46.001A, S46.002A, S46.009A, S46.011A, S46.012A, S46.019A, S46.021A, S46.022A, S46.029A, S46.091A, S46.092A, S46.099A, S46.101A, S46.102A, S46.109A, S46.111A, S46.112A, S46.119A, S46.191A, S46.192A, S46.199A, S46.211A, S46.212A, S46.219A, S46.811A, S46.812A, S46.819A, S46.911A, S46.912A, S46.919A, S49.80XA, S49.81XA, S49.82XA [Hide]

ICD-10 Procedure: 0KN74ZZ, 0KN84ZZ, 0LB14ZZ, 0LB24ZZ, 0LM14ZZ, 0LM24ZZ, 0LN14ZZ, 0LN24ZZ, 0LN34ZZ, 0LN44ZZ, 0LQ14ZZ, 0LQ24ZZ, 0LQ34ZZ, 0LQ44ZZ, 0LS34ZZ, 0LS44ZZ, 0LU14KZ, 0LU24KZ, 0MB14ZZ, 0MB24ZZ, 0MD14ZZ, 0MD24ZZ, 0MN14ZZ, 0MN24ZZ, 0MT14ZZ, 0MT24ZZ, 0MT94ZZ, 0MTB4ZZ, 0PB54ZX, 0PB64ZX, 0PB94ZZ, 0PBB4ZZ, 0PBC4ZX, 0PBD4ZX, 0PS74ZZ, 0PS84ZZ, 0R9J40Z, 0R9J4ZX, 0R9J4ZZ, 0R9K40Z, 0R9K4ZX, 0R9K4ZZ, 0RBG4ZZ, 0RBH4ZZ, 0RBJ4ZX, 0RBJ4ZZ, 0RBK4ZX, 0RBK4ZZ, 0RCG4ZZ, 0RCH4ZZ, 0RCJ4ZZ, 0RCK4ZZ, 0RJ4ZZ, 0RJK4ZZ, 0RNG4ZZ, 0RNH4ZZ, 0RNJ4ZZ, 0RNK4ZZ, 0RPJ40Z, 0RPJ44Z, 0RPJ4JZ, 0RPK40Z, 0RPK44Z, 0RPK4JZ, 0RQG4ZZ, 0RQH4ZZ, 0RQJ4ZZ, 0RQK4ZZ, 0RUG47Z, 0RUG4JZ, 0RUG4KZ, 0RUH47Z, 0RUH4JZ, 0RUH4KZ, 0RUJ47Z, 0RUJ4JZ, 0RUJ4KZ, 0RUK47Z, 0RUK4JZ, 0RUK4KZ, 0RWJ40Z, 0RWJ4JZ, 0RWK40Z, 0RWK4JZ [Hide]

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