



**Kaiser Foundation Health Plan of Washington**

**Clinical Review Criteria**  
**Extracorporeal Shock Wave Lithotripsy (ESWL)**

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**Criteria**

**For Medicare Members**

Source	Policy
CMS Coverage Manuals	42 CFR 419.2242; CFR 422.101
National Coverage Determinations (NCD)	None
Local Coverage Determinations (LCD)	None
Local Coverage Article (LCA)	None
Kaiser Permanente Medical Policy	Due to the absence of Medicare (CMS or MACs) coverage guidance, Kaiser Permanente has chosen to use their own Clinical Review Criteria, <b>Extracorporeal Shock Wave Lithotripsy (ESWL)</b> , for medical necessity determinations. Refer to the Non-Medicare criteria below.

**For Non-Medicare Members**

Reviewed for [Elective Surgical Procedure \(Level of Care\)](#) and Medical Necessity Criteria below.

Service	Criteria
<b>Extracorporeal Shockwave Lithotripsy</b>	<p><b>Ureteral Stones</b></p> <p>In adult patients 18 years and older, with ureteral stones, shockwave lithotripsy may be medically necessary when <b>ALL</b> of the following criteria are met:</p> <ul style="list-style-type: none"> <li>• Patients with stones 4-6mm in size should have completed medical expulsive therapy with at least 2 weeks with alpha blockers unless not tolerated or contraindicated</li> <li>• Patients with stones ≤4mm should have completed medical expulsive therapy with at least 4 weeks with alpha blockers unless not tolerated or contraindicated</li> <li>• For stones in mid to distal ureter, URS is preferred. Requests for an ESWL will only be considered when rationale is provided that explains why URS is not being pursued</li> <li>• Stone is visible on plain radiograph (radiopaque)</li> </ul> <p><b>Renal Stones</b></p> <p>In adult patients 18 years and older, with renal stone(s), shockwave lithotripsy may be medically necessary when <b>ALL</b> of the following criteria are met:</p> <ul style="list-style-type: none"> <li>• A total stone burden is less than 20mm or the patient is not a candidate for Percutaneous nephrolithotomy (PCNL) or Ureteroscopy (URS)</li> </ul>

	<ul style="list-style-type: none"> <li>Stone is visible on plain radiograph (radiopaque)</li> <li></li> </ul> <p><b>Contraindication to Extracorporeal Shock Wave Lithotripsy (ESWL) (For ureteral or renal stones)</b></p> <ul style="list-style-type: none"> <li>Suspected cystine or uric acid stones (URS is recommended)</li> <li>Untreated active infections of the urinary tract</li> <li>A single lower pole stone &gt;10mm unless PCNL and/or URS have failed or are contraindicated</li> <li>Prior treatment with ESWL that failed to treat current stone</li> </ul> <p><b>Retreatment</b></p> <p>Extracorporeal shockwave lithotripsy (ESWL) has a higher retreatment rate than Cystourethroscopy therefore, retreatment within 12-months is not recommended and considered relatively contraindicated. We recommend definitive therapy with Cystourethroscopy in these cases.</p>
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**For covered criteria:**

**If requesting this service (or these services), please send the following documentation to support medical necessity:**

- Last 6 months of clinical notes from requesting provider &/or specialist

The following information was used in the development of this document and is provided as background only. It is provided for historical purposes and does not necessarily reflect the most current published literature. When significant new articles are published that impact treatment option, Kaiser Permanente will review as needed. This information is not to be used as coverage criteria. Please only refer to the criteria listed above for coverage determinations.

**Background**

ESWL uses pulsed energy to fragment urinary stones and thereby enable stone clearance via urinary voiding of the residual fragments. ESWL should be avoided during pregnancy, in the setting of uncontrolled hypertension, when there is untreated coagulopathy or urinary tract infection, and when there is anatomic or functional obstruction in the collecting system or ureter distal to the stone. Additionally, patient body habitus, patient anatomy, skeletal malformations, or stone composition must not preclude stone targeting or the shock wave path.

**Applicable Codes**

**Considered Medically Necessary when criteria in the applicable policy statements listed above are met:**

CPT® or HCPCS Codes	Description
50590	Lithotripsy, extracorporeal shock wave

**\*Note:** Codes may not be all-inclusive. Deleted codes and codes not in effect at the time of service may not be covered.

**\*\*To verify authorization requirements for a specific code by plan type, please use the [Pre-authorization Code Check](#).**

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Date Created	Date Reviewed	Date Last Revised
09/02/2025	09/02/2025 <sup>MPC</sup> , 03/03/2026 <sup>MPC</sup>	

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MPC Medical Policy Committee

Revision History	Description
09/02/2025	MPC approved to adopt criteria for Extracorporeal Shock Wave Lithotripsy (ESWL), for Medicare and non-Medicare members. Requires 60-day notice, effective date 02/01/2026.

## References

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