Literature Search
ACR Appropriateness Criteria®
Shoulder Pain-Traumatic

Literature Search Performed on: 7/3/2017
Beginning Date: January 2007
End Date: June 2017

Database: Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>

Search Strategy:
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1  Peripheral Nerve Injuries/dg or *Brachial Plexus Neuropathies/ (1882)
2  Shoulder Fractures/dg and Vascular System Injuries/dg (3)
3  Peripheral Nerve/ and Trauma, Nervous System/di (5)
4  Acromioclavicular Joint/dg and Shoulder Dislocation/dg (40)
5  Scapula/dg and *Fractures, Bone/dg, di (64)
6  1 or 2 or 3 or 4 or 5 (1993)
7  exp diagnostic imaging/ (2613076)
8  6 and 7 (590)
9  remove duplicates from 8 (535)
10  limit 9 to (abstracts and english language and humans and yr="2000 -Current") (349)
11  limit 10 to case reports (105)
12  10 not 11 (244)
13  limit 12 to "all child (0 to 18 years)" (125)
14  limit 12 to "all adult (19 plus years)" (105)
15  12 not (13 or 14) (52)
16  14 or 15 (157)

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Literature Search Performed on: 7/3/2017
Beginning Date: January 2007
End Date: June 2017

Database: Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>

Search Strategy:
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1  positron emission tomography computed tomography/ or single photon emission computed tomography computed tomography/ or exp radionuclide imaging/ (196854)
2  Reflex Sympathetic Dystrophy/dg [Diagnostic Imaging] (359)
3  1 and 2 (202)
4  limit 3 to yr="2012 -Current" (3)
5  2 (359)
6  limit 5 to yr="2007 -Current" (21)
7  exp Adult/ (6500612)
8  6 and 7 (18)
9  limit 8 to case reports (12)
10  8 not 9 (6)

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Literature Search Performed on: 4/3/2017
Beginning Date: January 2000
End Date: March 2017

Database: Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>
Search Strategy:

1  Shoulder Pain/ or Rotator Cuff/ or Shoulder Joint/ or Rotator Cuff Injuries/ or Shoulder Injuries/ (24715)  
2  exp molecular imaging/ or exp multimodal imaging/ or exp radionuclide imaging/ (206249)  
3  1 and 2 (142)  
4  limit 3 to (abstracts and english language and humans and yr="2000 -Current") (53)

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Literature Search Performed on: 3/20/2017
Beginning Date: January 2008
End Date: February 2017

Database: Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>
Search Strategy:

1  Fractures, Cartilage/ or "Wounds and Injuries"/ or Wounds, Penetrating/ or Wounds, Stab/ or Multiple Trauma/ or "Sprains and Strains"/ or Vascular System Injuries/ or Joint Dislocations/ or Fractures, Bone/ or Athletic Injuries/ or Fracture Dislocation/ or Joint instability/ or Chronic pain/ or rupture/ or Wounds, Nonpenetrating/ (252626)  
2  Shoulder/ or Rotator Cuff/ or Humeral Head/ or Glenoid fossa of the scapula/ or Humeral Head/ or Glenoid Cavity/ or Acromion/ or Scapula/ or Clavicle/ or Joint, acromioclavicular/ or Joint, Shoulder/ or upper extremity/ or Brachial Plexus/ or Peripheral nerves.tw. (63519)  
3  1 and 2 (9559)  
4  Dislocation, shoulder/ or Fracture, shoulder/ or Pain, shoulder/ or Fracture, scapula/ or Shoulder Pain/ or Rotator Cuff Injuries/ or Arm Extremity/in or Shoulder Dislocation/ (20693)  
5  (Joint Capsule/ or Ligaments, Articular/) and shoulder.tw. and 1 (647)  
6  (Joint Capsule/ or Ligaments, Articular/ or Tendon Injuries.mp.) and (shoulder and trauma$).tw. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (306)  
7  3 or 4 or 5 or 6 (26936)  
8  exp Diagnostic Imaging/ (2366885)  
9  7 and 8 (7855)  
10  limit 9 to (abstracts and english language and humans and yr="2008 -Current") (2539)  
11  limit 10 to case reports (425)  
12  10 not 11 (2114)  
13  (12 and exp Child/) not (12 and exp adult/) (59)  
14  12 not 13 (2055)  
15  Joint Instability/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)  
16  Chronic Pain/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)  
17  Shoulder Dislocation/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)  
18  Shoulder Fractures/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)  
19  Fractures, Cartilage/ra, us [Radiography, Ultrasonography] (0)  
20  "Wounds and Injuries"/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)  
21  Wounds, Penetrating/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)  
22  Wounds, Stab/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)  
23  Multiple Trauma/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)  
24  Multiple Trauma/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)  
25  "Sprains and Strains"/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)  
26  Shoulder Pain/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (0)
<table>
<thead>
<tr>
<th></th>
<th>Vascular System Injuries/ra, us [Radiography, Ultrasonography] (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>Joint Instability/ (17886)</td>
</tr>
<tr>
<td>29</td>
<td>Chronic Pain/ (8112)</td>
</tr>
<tr>
<td>30</td>
<td>&quot;wounds and injuries&quot;/ or fractures, cartilage/ or multiple trauma/ or &quot;sprains and strains&quot;/ or vascular system injuries/ or wounds, penetrating/ or wounds, stab/ (102423)</td>
</tr>
<tr>
<td>31</td>
<td>Rotator Cuff/ (5327)</td>
</tr>
<tr>
<td>32</td>
<td>Humeral Head/ (431)</td>
</tr>
<tr>
<td>33</td>
<td>exp Scapula/ (6724)</td>
</tr>
<tr>
<td>34</td>
<td>Clavicle/ (5254)</td>
</tr>
<tr>
<td>35</td>
<td>acromioclavicular joint/ or shoulder joint/ (18329)</td>
</tr>
<tr>
<td>36</td>
<td>Shoulder/ (11326)</td>
</tr>
<tr>
<td>37</td>
<td>shoulder dislocation/ or shoulder fractures/ (7619)</td>
</tr>
<tr>
<td>38</td>
<td>Shoulder Pain/ (3802)</td>
</tr>
<tr>
<td>39</td>
<td>28 or 29 or 30 (127765)</td>
</tr>
<tr>
<td>40</td>
<td>31 or 32 or 33 or 34 or 35 or 36 (39497)</td>
</tr>
<tr>
<td>41</td>
<td>39 and 40 (3519)</td>
</tr>
<tr>
<td>42</td>
<td>37 or 38 (11284)</td>
</tr>
<tr>
<td>43</td>
<td>41 or 42 (13779)</td>
</tr>
<tr>
<td>44</td>
<td>exp Diagnostic Imaging/ (2366885)</td>
</tr>
<tr>
<td>45</td>
<td>43 and 44 (4564)</td>
</tr>
<tr>
<td>46</td>
<td>15 or 16 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 27 (0)</td>
</tr>
<tr>
<td>47</td>
<td>40 and 46 (0)</td>
</tr>
<tr>
<td>48</td>
<td>17 or 18 or 26 or 45 or 47 (4564)</td>
</tr>
<tr>
<td>49</td>
<td>limit 48 to (abstracts and english language and humans and yr=&quot;2005 -Current&quot;) (1755)</td>
</tr>
<tr>
<td>50</td>
<td>limit 49 to (&quot;all adult (19 plus years)&quot; or &quot;adolescent (13 to 18 years)&quot;) (1434)</td>
</tr>
<tr>
<td>51</td>
<td>limit 50 to case reports (353)</td>
</tr>
<tr>
<td>52</td>
<td>50 not 51 (1081)</td>
</tr>
<tr>
<td>53</td>
<td>exp Internal Fixators/ (47069)</td>
</tr>
<tr>
<td>54</td>
<td>52 not 53 (868)</td>
</tr>
<tr>
<td>55</td>
<td>exp Arthroplasty/ (52913)</td>
</tr>
<tr>
<td>56</td>
<td>54 not 55 (737)</td>
</tr>
<tr>
<td>57</td>
<td>remove duplicates from 56 (714)</td>
</tr>
<tr>
<td>58</td>
<td>remove duplicates from 14 (1994)</td>
</tr>
<tr>
<td>59</td>
<td>58 not 57 (1425)</td>
</tr>
<tr>
<td>60</td>
<td>limit 59 to yr=&quot;2014 -Current&quot; (490)</td>
</tr>
</tbody>
</table>

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Literature Search Performed on: 12/10/2015
Beginning Date: January 2005
End Date: November 2015
Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily, Ovid MEDLINE(R) and Ovid OLDMEDLINE(R) <1946 to Present>
Search Strategy:

<table>
<thead>
<tr>
<th></th>
<th>Joint Instability/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (2433)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Chronic Pain/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (63)</td>
</tr>
<tr>
<td>3</td>
<td>Shoulder Dislocation/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (1164)</td>
</tr>
<tr>
<td>4</td>
<td>Shoulder Fractures/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (904)</td>
</tr>
<tr>
<td>5</td>
<td>Fractures, Cartilage/ra, us [Radiography, Ultrasonography] (59)</td>
</tr>
<tr>
<td>6</td>
<td>&quot;Wounds and Injuries&quot;/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (1271)</td>
</tr>
<tr>
<td>7</td>
<td>Wounds, Penetrating/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (1098)</td>
</tr>
<tr>
<td>8</td>
<td>Wounds, Stab/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (461)</td>
</tr>
<tr>
<td>9</td>
<td>Multiple Trauma/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (1267)</td>
</tr>
<tr>
<td>10</td>
<td>Multiple Trauma/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (1267)</td>
</tr>
<tr>
<td>11</td>
<td>&quot;Sprains and Strains&quot;/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (317)</td>
</tr>
</tbody>
</table>
12 Shoulder Pain/ra, ri, us [Radiography, Radionuclide Imaging, Ultrasonography] (210)
13 Vascular System Injuries/ra, us [Radiography, Ultrasonography] (237)
14 Joint Instability/ (15999)
15 Chronic Pain/ (5617)
16 "wounds and injuries"/ or fractures, cartilage/ or multiple trauma/ or "sprains and strains"/ or vascular system injuries/ or wounds, penetrating/ or wounds, stab/ (96011)
17 Rotator Cuff/ (5578)
18 Humeral Head/ (284)
19 exp Scapula/ (6151)
20 Clavicle/ (4749)
21 acromioclavicular joint/ or shoulder joint/ (16556)
22 Shoulder/ (10606)
23 shoulder dislocation/ or shoulder fractures/ (6977)
24 Shoulder Pain/ (3277)
25 14 or 15 or 16 (117054)
26 17 or 18 or 19 or 20 or 21 or 22 (36748)
27 25 and 26 (3307)
28 23 or 24 (10126)
29 27 or 28 (12510)
30 exp Diagnostic Imaging/ (1885173)
31 29 and 30 (2064)
32 1 or 2 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 13 (7018)
33 26 and 32 (378)
34 3 or 4 or 12 or 31 or 33 (3733)
35 limit 34 to (abstracts and english language and humans and yr="2005 -Current") (1343)
36 limit 35 to ("all adult (19 plus years)" or "adolescent (13 to 18 years)") (1080)
37 limit 36 to case reports (264)
38 36 not 37 (816)
39 exp Internal Fixators/ (42832)
40 38 not 39 (652)
41 exp Arthroplasty/ (46008)
42 40 not 41 (570)
43 remove duplicates from 42 (551)

**Literature Search Summary**

Of the 30 citations in the original bibliography, 0 were retained in the final document.

A literature search was conducted in December 2015, March 2017, April 2017, and July 2017 to identify additional evidence published since the *ACR Appropriateness Criteria® Shoulder Pain-Traumatic* topic was finalized. Using the search strategies described above, 1,193 unique articles were found. Seventy-eight articles were added to the bibliography. The remaining articles were not used due to either poor study design, the articles were not relevant or generalizable to the topic, or the results were unclear or biased.

The author added 11 citations from bibliographies, websites, or books that were not found in the literature searches.

One citation is a supporting document that was added by staff.