

Bilaga 9 Artiklar som experterna bedömt inte uppfyller specificerad relevans- respektive kvalitetskrav**Artiklar som experterna bedömt inte uppfyller specificerade relevanskriterier**

Lista över RCT-studier som inte uppfyller specificerade relevanskriterier (80 st)

Ahmed, A. R., T. Sweed and A. Wanas (2008) "The role of cancellous screw with tension band fixation in the treatment of displaced olecranon fractures, a comparative study." *European journal of orthopaedic surgery & traumatology : orthopedie traumatologie* 18, 571-576 DOI: 10.1007/s00590-008-0355-0.

Alkhayarin, M. and M. N. Said (2012) "Third tubular versus 3.5-mm dynamic compression plates for fixation of diaphyseal fractures of the ulna: A prospective randomized trial." *European journal of orthopaedic surgery & traumatology : orthopedie traumatologie* 22, 561-564 DOI: 10.1007/s00590-011-0882-y.

Benegas, E., A. A. Ferreira Neto, M. E. Gracitelli, E. A. Malavolta, J. H. Assuncao, S. Prada Fde, R. Bolliger Neto and R. Mattar, Jr. (2014). "Shoulder function after surgical treatment of displaced fractures of the humeral shaft: a randomized trial comparing antegrade intramedullary nailing with minimally invasive plate osteosynthesis." *J Shoulder Elbow Surg* 23(6): 767-774.

Bong, M. R., K. A. Egol, M. Leibman and K. J. Koval (2006). "A comparison of immediate postreduction splinting constructs for controlling initial displacement of fractures of the distal radius: a prospective randomized study of long-arm versus short-arm splinting." *J Hand Surg Am* 31(5): 766-770.

Casteleyn, P. P., F. Handelberg and P. Haentjens (1992). "Biodegradable rods versus Kirschner wire fixation of wrist fractures." *Journal of Bone and Joint Surgery - Series B* 74(6): 858-861.

Chan, Y. H., T. L. Foo, C. J. Yeo and W. Y. Chew (2014). "Comparison between cast immobilization versus volar locking plate fixation of distal radius fractures in active elderly patients, the Asian perspective." *Hand Surg* 19(1): 19-23.

Changulani, M., U. K. Jain and T. Keswani (2007). "Comparison of the use of the humerus intramedullary nail and dynamic compression plate for the management of diaphyseal fractures of the humerus. A randomised controlled study." *Int Orthop* 31(3): 391-395.

Chapman, J. R., M. B. Henley, J. Agel and P. J. Benca (2000). "Randomized prospective study of humeral shaft fracture fixation: intramedullary nails versus plates." *J Orthop Trauma* 14(3): 162-166.

Chappuis, J., P. Boute and P. Putz (2011). "Dorsally displaced extra-articular distal radius fractures fixation: Dorsal IM nailing versus volar plating. A randomized controlled trial." *Orthop Traumatol Surg Res* 97(5): 471-478.

Chen, X., P. Liu, X. Zhu, L. Cao, C. Zhang and J. Su (2013). "Design and application of nickel-titanium olecranon memory connector in treatment of olecranon fractures: a prospective randomized controlled trial." *Int Orthop* 37(6): 1099-1105.

Chen, X., S. C. Wang, L. H. Cao, G. Q. Yang, M. Li and J. C. Su (2011). "Comparison between radial head replacement and open reduction and internal fixation in clinical treatment of unstable, multi-fragmented radial head fractures." *Int Orthop* 35(7): 1071-1076.

Chiu, F. Y., C. M. Chen, C. F. J. Lin, W. H. Lo, Y. L. Huang and T. H. Chen (1997). "Closed humeral shaft fractures: A prospective evaluation of surgical treatment." *Journal of Trauma - Injury, Infection and Critical Care* 43(6): 947-951.

Cohen, M. S. and T. Frillman (1997). "Distal radius fractures: a prospective randomized comparison of fibreglass tape with QuickCast." *Injury* 28(4): 305-309.

Cooper, L., C. Mauffrey, P. Hull, M. Brewster, C. Lewis and P. Makrides (2008). "A short term functional outcome study comparing closed reduction percutaneous wire fixation with open reduction internal fixation for fractures of the distal radius: A pilot study." *European Journal of Orthopaedic Surgery and Traumatology* 18(8): 551-554.

D'Agostino, P. and O. Barbier (2013). "An investigation of the effect of AlloMatrix bone graft in distal radial fracture: a prospective randomised controlled clinical trial." *Bone Joint J* 95-b (11): 1514-1520.

Earnshaw, S. A., A. Aladin, S. Surendran and C. G. Moran (2002). "Closed reduction of colles fractures: comparison of manual manipulation and finger-trap traction: a prospective, randomized study." *J Bone Joint Surg Am* 84-a(3): 354-358.

Egol, K., M. Walsh, N. Tejwani, T. McLaurin, C. Wynn and N. Paksima (2008). "Bridging external fixation and supplementary Kirschner-wire fixation versus volar locked plating for unstable fractures of the distal radius: a randomised, prospective trial." *J Bone Joint Surg Br* 90(9): 1214-1221.

Egol, K. A., M. T. Sugi, C. C. Ong, N. Montero, R. Davidovitch and J. D. Zuckerman (2012). "Fracture site augmentation with calcium phosphate cement reduces screw penetration after open reduction-internal fixation of proximal humeral fractures." *J Shoulder Elbow Surg* 21(6): 741-748.

Ekrol, I., C. Hajducka, C. Court-Brown and M. M. McQueen (2008). "A comparison of RhBMP-7 (OP-1) and autogenous graft for metaphyseal defects after osteotomy of the distal radius." *Injury* 39 Suppl 2: S73-82.

Gebuhr, P., P. Holmich, T. Orsnes, M. Soelberg, M. Krasheninnikoff and A. G. Kjersgaard (1992). "Isolated ulnar shaft fractures. Comparison of treatment by a functional brace and long-arm cast." *J Bone Joint Surg Br* 74(5): 757-759.

Gil-Guillen, V. (2014) "Reverse shoulder arthroplasty versus hemiarthroplasty for acute proximal humeral fractures. A blinded, randomized, controlled, prospective study." *Journal of shoulder and elbow surgery* 23, 1419-1426 DOI: <http://dx.doi.org/10.1016/j.jse.2014.06.035>.

Grafstein, E., R. Stenstrom, J. Christenson, G. Innes, R. MacCormack, C. Jackson, K. Stothers and T. Goetz (2010). "A prospective randomized controlled trial comparing circumferential casting and splinting in displaced Colles fractures." *Cjem* 12(3): 192-200.

Grewal, R., B. Perey, M. Wilmlink and K. Stothers (2005). "A randomized prospective study on the treatment of intra-articular distal radius fractures: open reduction and internal fixation with dorsal plating versus mini open reduction, percutaneous fixation, and external fixation." *J Hand Surg Am* 30(4): 764-772.

Gupta, A., D. Barei, A. Khwaja and D. Beingessner (2014). "Single-staged treatment using a standardized protocol results in functional motion in the majority of patients with a terrible triad elbow injury." *Clin Orthop Relat Res* 472(7): 2075-2083.

Gupta, R., A. Raheja and U. Modi (1999). "Colles' fracture: management by percutaneous crossed-pin fixation versus plaster of Paris cast immobilization." *Orthopedics* 22(7): 680-682.

Hageman, M. G., P. Jayakumar, J. D. King, T. G. Guitton, J. N. Doornberg and D. Ring (2014). "The factors influencing the decision making of operative treatment for proximal humeral fractures." *J Shoulder Elbow Surg*.

Hahnloser, D., A. Platz, M. Amgwerd and O. Trentz (1999). "Internal fixation of distal radius fractures with dorsal dislocation: pi-plate or two 1/4 tube plates? A prospective randomized study." *J Trauma* 47(4): 760-765.

Handoll, H. H., L. Goodchild, S. D. Brealey, N. C. Hanchard, L. Jefferson, A. Keding and A. Rangan (2014). "Developing, delivering and documenting rehabilitation in a multi-centre randomised controlled surgical trial: experiences from the ProFHER trial." *Bone Joint Res* 3(12): 335-340.

Hargreaves, D. G., S. J. Drew and R. Eckersley (2004). "Kirschner wire pin tract infection rates: a randomized controlled trial between percutaneous and buried wires." *J Hand Surg Br* 29(4): 374-376.

Harley, B. J., A. Scharfenberger, L. A. Beaupre, N. Jomha and D. W. Weber (2004). "Augmented external fixation versus percutaneous pinning and casting for unstable fractures of the distal radius--a prospective randomized trial." *J Hand Surg Am* 29(5): 815-824.

Helling, H. J., A. Prokop, H. U. Schmid, M. Nagel, J. Lilienthal and K. E. Rehm (2006). "Biodegradable implants versus standard metal fixation for displaced radial head fractures. A prospective, randomized, multicenter study." *J Shoulder Elbow Surg* 15(4): 479-485.

Hutchinson, D. T., K. N. Bachus and T. Higgenbotham (2000) "External fixation of the distal radius: To predrill or not to predrill." *Journal of hand surgery* 25, 1064-1068
DOI: 10.1053/jhsu.2000.17866.

Hutchinson, D. T., G. O. Strenz and R. A. Cautilli (1995). "Pins and plaster vs external fixation in the treatment of unstable distal radial fractures. A randomized prospective study." *J Hand Surg Br* 20(3): 365-372.

Jongs, R. A., L. A. Harvey, T. Gwinn and B. R. Lucas (2012). "Dynamic splints do not reduce contracture following distal radial fracture: a randomised controlled trial." *J Physiother* 58(3): 173-180.

Juutilainen, T., H. Patiala, P. Rokkanen and P. Tormala (1995). "Biodegradable wire fixation in olecranon and patella fractures combined with biodegradable screws or plugs and compared with metallic fixation." *Archives of Orthopaedic and Trauma Surgery* 114(6): 319-323.

Kapoor, H., A. Agarwal and B. K. Dhaon (2000). "Displaced intra-articular fractures of distal radius: a comparative evaluation of results following closed reduction, external fixation and open reduction with internal fixation." *Injury* 31(2): 75-79.

Karantana, A., N. D. Downing, D. P. Forward, M. Hatton, A. M. Taylor, B. E. Scammell, C. G. Moran and T. R. Davis (2013). "Surgical treatment of distal radial fractures with a volar locking plate versus conventional percutaneous methods: a randomized controlled trial." *J Bone Joint Surg Am* 95(19): 1737-1744.

Karantana, A., B. E. Scammell, T. R. Davis and D. K. Whynes (2015). "Cost-effectiveness of volar locking plate versus percutaneous fixation for distal radial fractures: Economic evaluation alongside a randomised clinical trial." *Bone Joint J* 97-b(9): 1264-1270.

Kim, J. W., C. W. Oh, Y. S. Byun, J. J. Kim and K. C. Park (2015). "A prospective randomized study of operative treatment for noncomminuted humeral shaft fractures: conventional open plating versus minimal invasive plate osteosynthesis." *J Orthop Trauma* 29(4): 189-194.

Kreder, H. J., J. Agel, M. D. McKee, E. H. Schemitsch, D. Stephen and D. P. Hanel (2006). "A randomized, controlled trial of distal radius fractures with metaphyseal displacement but without joint incongruity: closed reduction and casting versus closed reduction, spanning external fixation, and optional percutaneous K-wires." *J Orthop Trauma* 20(2): 115-121.

Krishnan, J., A. E. Wigg, R. W. Walker and J. Slavotinek (2003). "Intra-articular fractures of the distal radius: a prospective randomised controlled trial comparing static bridging and dynamic non-bridging external fixation." *J Hand Surg Br* 28(5): 417-421.

Krukhaug, Y., S. Ugland, S. A. Lie and L. M. Hove (2009). "External fixation of fractures of the distal radius: a randomized comparison of the Hoffman compact II non-bridging fixator and the Dynawrist fixator in 75 patients followed for 1 year." *Acta Orthop* 80(1): 104-108.

Kulshrestha, V., T. Roy and L. Audige (2011). "Dynamic vs static external fixation of distal radial fractures: A randomized study." *Indian J Orthop* 45(6): 527-534.

Lee, S. K., K. J. Kim, K. H. Park and W. S. Choy (2013). "A comparison between orthogonal and parallel plating methods for distal humerus fractures: a prospective randomized trial." *Eur J Orthop Surg Traumatol*.

Leung, F. and S. P. Chow (2003). "A prospective, randomized trial comparing the limited contact dynamic compression plate with the point contact fixator for forearm fractures." *J Bone Joint Surg Am* 85-a(12): 2343-2348.

Leung, F., Y. K. Tu, W. Y. Chew and S. P. Chow (2008). "Comparison of external and percutaneous pin fixation with plate fixation for intra-articular distal radial fractures. A randomized study." *J Bone Joint Surg Am* 90(1): 16-22.

Li, Y., C. Wang, M. Wang, L. Huang and Q. Huang (2011). "Postoperative malrotation of humeral shaft fracture after plating compared with intramedullary nailing." *J Shoulder Elbow Surg* 20(6): 947-954.

Lian, K., L. Wang, D. Lin and Z. Chen (2013). "Minimally invasive plating osteosynthesis for mid-distal third humeral shaft fractures." *Orthopedics* 36(8): e1025-1032.

Litchfield, R. B., M. D. McKee, R. Balyk, S. Mandel, R. Holtby, R. Hollinshead, D. Drosdowech, S. E. Wambolt, S. H. Griffin and R. McCormack (2011). "Cemented versus uncemented fixation of humeral components in total shoulder arthroplasty for osteoarthritis of the shoulder: a prospective, randomized, double-blind clinical trial-A JOINTs Canada Project." *J Shoulder Elbow Surg* 20(4): 529-536.

Liu, Q. H., Z. G. Fu, J. L. Zhou, T. Lu, T. Liu, L. Shan, Y. Liu and L. Bai (2012). "Randomized prospective study of olecranon fracture fixation: cable pin system versus tension band wiring." *J Int Med Res* 40(3): 1055-1066.

Ludvigsen, T. C., S. Johansen and S. Svenningsen (1996). "[Unstable fractures of the distal radius. External fixation or percutaneous pinning?]." *Tidsskr Nor Laegeforen* 116(26): 3093-3097.

Ludvigsen, T. C., S. Johansen, S. Svenningsen and R. Saetermo (1997). "External fixation versus percutaneous pinning for unstable Colles' fracture. Equal outcome in a randomized study of 60 patients." *Acta Orthop Scand* 68(3): 255-258.

McCormack, R. G., D. Brien, R. E. Buckley, M. D. McKee, J. Powell and E. H. Schemitsch (2000). "Fixation of fractures of the shaft of the humerus by dynamic compression plate or intramedullary nail. A prospective, randomised trial." *J Bone Joint Surg Br* 82(3): 336-339.

Mittal, R., J. Morley, H. Dinopoulos, E. G. Drakoulakis, E. Vermani and P. V. Giannoudis (2005). "Use of bio-resorbable implants for stabilisation of distal radius fractures: the United Kingdom patients' perspective." *Injury* 36(2): 333-338.

Monument, M., G. Fick and R. Buckley (2009) "Quantifying the amount of padding improves the comfort and function of a fibreglass below-elbow cast." *Injury* 40, 257-261 DOI: 10.1016/j.injury.2008.06.035.

Ockert, B., V. Pedersen, L. Geyer, S. Wirth, W. Mutschler and S. Grote (2014). "Position of polyaxial versus monoaxial screws in locked plating for proximal humeral fractures: analysis of a prospective randomized study." *Eur J Orthop Surg Traumatol* 24(5): 747-752.

O'Connor, D., H. Mullett, M. Doyle, A. Mofidi, S. Kutty and M. O'Sullivan (2003). "Minimally displaced Colles' fractures: a prospective randomized trial of treatment with a wrist splint or a plaster cast." *J Hand Surg Br* 28(1): 50-53.

Paschos, N. K., G. I. Mitsionis, H. S. Vasiliadis and A. D. Georgoulis (2013). "Comparison of early mobilization protocols in radial head fractures." *J Orthop Trauma* 27(3): 134-139.

Pieske, O., P. Geleng, J. Zaspel and S. Piltz (2008). "Titanium alloy pins versus stainless steel pins in external fixation at the wrist: a randomized prospective study." *J Trauma* 64(5): 1275-1280.

Pieske, O., F. Kaltenhauser, L. Pichlmaier, N. Schramm, H. Trentzsch, T. Loffler, A. Greiner and S. Piltz (2010). "Clinical benefit of hydroxyapatite-coated pins compared with stainless steel pins in external fixation at the wrist: a randomised prospective study." *Injury* 41(10): 1031-1036.

Pieske, O., L. Pichlmaier, F. Kaltenhauser, N. Schramm, B. Rubenbauer, A. Greiner and S. Piltz (2011). "Hydroxyapatite-coated pins versus titanium alloy pins in external fixation at the wrist: a controlled cohort study." *J Trauma* 70(4): 845-851.

Putti, A. B., R. B. Uppin and B. B. Putti (2009). "Locked intramedullary nailing versus dynamic compression plating for humeral shaft fractures." *J Orthop Surg (Hong Kong)* 17(2): 139-141.

Rangan, A., H. Handoll, S. Brealey, L. Jefferson, A. Keding, B. C. Martin, L. Goodchild, L. H. Chuang, C. Hewitt and D. Torgerson (2015). "Surgical vs nonsurgical treatment of adults with displaced fractures of the proximal humerus: the PROFHER randomized clinical trial." *Jama* 313(10): 1037-1047.

Ribak, S., C. E. Medina, R. Mattar, Jr., H. J. Ulson, H. J. Ulson and M. Etchebehere (2010). "Treatment of scaphoid nonunion with vascularised and nonvascularised dorsal bone grafting from the distal radius." *Int Orthop* 34(5): 683-688.

Rodriguez-Merchan, E. C. (1995). "Compression plating versus hackethal nailing in closed humeral shaft fractures failing nonoperative reduction." *J Orthop Trauma* 9(3): 194-197.

Shukla, R., R. K. Jain, N. K. Sharma and R. Kumar (2014). "External fixation versus volar locking plate for displaced intra-articular distal radius fractures: a prospective randomized comparative study of the functional outcomes." *J Orthop Traumatol*.

Singh, A. K., G. R. Arun, N. Narsaria and A. Srivastava (2014). "Treatment of non-union of humerus diaphyseal fractures: a prospective study comparing interlocking nail and locking compression plate." *Arch Orthop Trauma Surg* 134(7): 947-953.

Sommerkamp, T. G., M. Seeman, J. Silliman, A. Jones, S. Patterson, J. Walker, M. Semmler, R. Browne and M. Ezaki (1994). "Dynamic external fixation of unstable fractures of the distal part of the radius. A prospective, randomized comparison with static external fixation." *J Bone Joint Surg Am* 76(8): 1149-1161.

Stoffelen, D. and P. Broos (1998). "Minimally displaced distal radius fractures: do they need plaster treatment?" *J Trauma* 44(3): 503-505.

ur Rahman, O., M. Q. Khan, H. Rasheed and S. Ahmad (2012). "Treatment of unstable intraarticular fracture of distal radius: POP casting with external fixation." *J Pak Med Assoc* 62(4): 358-362.

Uschok, S., P. Magosch, M. Moe, S. Lichtenberg and P. Habermeyer (2016). "Is the stemless humeral head replacement clinically and radiographically a secure equivalent to standard stem humeral head replacement in the long-term follow-up? A prospective randomized trial." *J Shoulder Elbow Surg*.

Wali, M. G., A. N. Baba, I. A. Latoo, N. A. Bhat, O. K. Baba and S. Sharma (2014). "Internal fixation of shaft humerus fractures by dynamic compression plate or interlocking intramedullary nail: a prospective, randomised study." *Strategies Trauma Limb Reconstr* 9(3): 133-140.

Van Leemput, T. and G. Mahieu (2007). "Conservative management of minimally displaced isolated fractures of the ulnar shaft." *Acta Orthop Belg* 73(6): 710-713.

Wang, C., G. Dai, S. Wang, Q. Liu and W. Liu (2013). "The function and muscle strength recovery of shoulder after humeral diaphysis fracture following plating and intramedullary nailing." *Arch Orthop Trauma Surg* 133(8): 1089-1094.

Varitimidis, S. E., G. K. Basdekis, Z. H. Dailiana, M. E. Hantes, K. Bargiotas and K. Malizos (2008). "Treatment of intra-articular fractures of the distal radius: fluoroscopic or arthroscopic reduction?" *J Bone Joint Surg Br* 90(6): 778-785.

Wik, T. S., A. T. Aurstad and V. Finsen (2009). "Colles' fracture: dorsal splint or complete cast during the first 10 days?" *Injury* 40(4): 400-404.

Williksen, J. H., F. Frihagen, J. C. Hellund, H. D. Kvernmo and T. Husby (2013). "Volar locking plates versus external fixation and adjuvant pin fixation in unstable distal radius fractures: a randomized, controlled study." *J Hand Surg Am* 38(8): 1469-1476.

Xu, G. G., S. P. Chan, M. E. Puhaindran and W. Y. Chew (2009). "Prospective randomised study of intra-articular fractures of the distal radius: comparison between external fixation and plate fixation." *Ann Acad Med Singapore* 38(7): 600-606.

Yuan, P., D. Liu, Q. Zan, Y. Hao, Q. Dou, G. Zhang and H. Yuan (2012) "Clinical effect of sidong wubu method in treatment of closed fracture of upper limbs." *Journal of traditional Chinese medicine / Chung i tsa chih ying wen pan* 32, 393-396.

Zaino, C. J., M. R. Patel, M. S. Arief and R. Pivec (2015). "The effectiveness of bivalving, cast spreading, and webril cutting to reduce cast pressure in a fiberglass short arm cast." *J Bone Joint Surg Am* 97(5): 374-380.

Lista över kontrollerade icke-randomiserade studier som inte uppfyller specificerade relevanskriterier (44 st)

Abbaszadegan, H., P. Adolphson, N. Dalen, U. Jonsson, H. E. Sjöberg, S. Kalen (1991). "Bone mineral loss after Colles' fracture. Plaster cast and external fixation equivalent." *Acta Orthopaedica Scandinavica* 62(2): 156-158.

Abdelhady, A. M. (2013). "Timing of shoulder arthroplasty in comminuted proximal humerus fracture, how much does it matter?" *Eur J Orthop Surg Traumatol* 23(5): 515-519.

Aktekin, C. N., M. Altay, Z. Gursoy, L. A. Aktekin, A. M. Ozturk and A. Y. Tabak (2010). "Comparison between external fixation and cast treatment in the management of distal radius fractures in patients aged 65 years and older." *J Hand Surg Am* 35(5): 736-742.

- Andersen, J. R., C. D. Williams, R. Cain, M. Mighell and M. Frankle (2013). "Surgically treated humeral shaft fractures following shoulder arthroplasty." *J Bone Joint Surg Am* 95(1): 9-18.
- Blonna, D., F. Castoldi, M. Scelsi, R. Rossi, G. Falcone and M. Assom (2010). "The hybrid technique: potential reduction in complications related to pins mobilization in the treatment of proximal humeral fractures." *J Shoulder Elbow Surg* 19(8): 1218-1229.
- Blonna, D., R. Rossi, G. Fantino, A. Maiello, M. Assom and F. Castoldi (2009). "The impacted varus (A2.2) proximal humeral fracture in elderly patients: is minimal fixation justified? A case control study." *J Shoulder Elbow Surg* 18(4): 545-552.
- Bockmann, B., B. Buecking, D. A. Eschbach, D. Franz, S. Ruchholtz and J. Mohr (2015). "Fixation of the greater tuberosity in proximal humeral fractures: FiberWire(R) or wire cerclage?" *Acta Orthop Belg* 81(1): 9-16.
- Brogren, E., M. Hofer, M. Petranek, P. Wagner, L. B. Dahlin and I. Atroshi (2011). "Relationship between distal radius fracture malunion and arm-related disability: a prospective population-based cohort study with 1-year follow-up." *BMC Musculoskeletal Disord* 12: 9.
- Caforio, M., P. Maniscalco, M. Colombo and G. M. Calori (2016). "Long endomedullary nail in proximal third humeral shaft fractures." *Injury* 47 Suppl 4: S64-s70.
- Cai, L., S. Zhu, S. Du, W. Lin, T. Wang, D. Lu and H. Chen (2015). "The relationship between radiographic parameters and clinical outcome of distal radius fractures in elderly patients." *Orthop Traumatol Surg Res* 101(7): 827-831.
- Chou, Y. C., I. C. Tseng, C. W. Chiang and C. C. Wu (2013). "Shoulder hemiarthroplasty for proximal humeral fractures: comparisons between the deltopectoral and anterolateral deltoid-splitting approaches." *J Shoulder Elbow Surg* 22(8): e1-7.
- Christensen, O. M., T. C. Christiansen, M. Krasheninnikoff, B. Lind, L. R. Holmich, F. F. Hansen, G. S. Rathje and P. Holmich (2001). "Plaster cast compared with bridging external fixation for distal radius fractures of the Colles' type." *Int Orthop* 24(6): 358-360.
- de Kruijf, M., J. P. Vroemen, K. de Leur, E. A. van der Voort, D. I. Vos and L. Van der Laan (2014). "Proximal fractures of the humerus in patients older than 75 years of age: should we consider operative treatment?" *J Orthop Traumatol* 15(2): 111-115.

DelSole, E. M., C. A. Pean, N. C. Tejwani and K. A. Egol (2016). "Outcome after olecranon fracture repair: Does construct type matter?" *Eur J Orthop Surg Traumatol* 26(2): 153-159.

Faraj, D., B. W. Kooistra, W. A. Vd Stappen and A. J. Werre (2011). "Results of 131 consecutive operated patients with a displaced proximal humerus fracture: an analysis with more than two years follow-up." *Eur J Orthop Surg Traumatol* 21(1): 7-12.

Hayes, A. J. H., 2008 #1523}, P. J. Duffy and M. M. McQueen (2008). "Bridging and non-bridging external fixation in the treatment of unstable fractures of the distal radius: a retrospective study of 588 patients." *Acta Orthop* 79(4): 540-547.

Hede, J. S., B. E. Lindblad, S. S. Mikkelsen and H. M. Knudsen (2000). "Comparison of intramedullary fixation and percutaneous pinning of displaced and comminuted Colles' fractures: a prospective and consecutive study." *Scand J Plast Reconstr Surg Hand Surg* 34(2): 161-166.

Hoffmann, M., M. Schroeder, K. Kossow, M. Gruber-Rathmann and A. H. Ruecker (2012). "Radiological dorsal tilt analysis of AO type A, B, and C fractures of the distal radius treated conservatively or with extra-focal K-wire plus external fixateur." *Skeletal Radiol* 41(9): 1133-1139.

Ilchmann, T., P. E. Ochsner, H. Wingstrand and K. Jonsson (1998). "Non-operative treatment versus tension-band osteosynthesis in three- and four-part proximal humeral fractures. A retrospective study of 34 fractures from two different trauma centers." *Int Orthop* 22(5): 316-320.

Jung, W. B., E. S. Moon, S. K. Kim, D. Kovacevic and M. S. Kim (2013). "Does medial support decrease major complications of unstable proximal humerus fractures treated with locking plate?" *BMC Musculoskelet Disord* 14: 102.

King, J. J., K. W. Farmer, A. M. Struk, T. W. Wright (2014). "Uncemented versus cemented humeral stem fixation in reverse shoulder arthroplasty." *International Orthopaedics*. 39(2):291-8.

Kurowicki, J., J. J. Triplet, E. Momoh, M. A. Moor and J. C. Levy (2016). "Reverse shoulder prosthesis in the treatment of locked anterior shoulders: a comparison with classic reverse shoulder indications." *J Shoulder Elbow Surg* 25(12): 1954-1960.

Larouche, J., J. Pike, G. Slobogean, P. Guy, H. Broekhuysse, P. O'Brien and K. Lefaivre (2016). "Determinants of Functional Outcome in Distal Radius Fractures in High-Functioning Patients over the age of 55." *J Orthop Trauma*.

Lee, J. I., J. H. Cho and S. J. Lee (2015). "The effects of the Frag-Loc((R)) compression screw on distal radius fracture with a displaced dorsoulnar fragment." *Arch Orthop Trauma Surg* 135(9): 1315-1321.

Lovy, A. J., A. Keswani, S. M. Koehler, J. Kim, M. Hausman (2016). "Short-Term Complications of Distal Humerus Fractures in Elderly Patients: Open Reduction Internal Fixation Versus Total Elbow Arthroplasty." *Geriatric Orthopaedic Surgery and Rehabilitation* 7(1): 39-44.

Milin, L., F. Sirveaux, F. Eloy, D. Mainard, D. Mole and H. Coudane (2014). "Comparison of modified Hackethal bundle nailing versus anterograde nailing for fixation of surgical neck fractures of the humerus: retrospective study of 105 cases." *Orthop Traumatol Surg Res* 100(3): 265-270.

Neuhaus, V., A. G. Bot, C. H. Swellengrebel, N. B. Jain, J. J. Warner and D. C. Ring (2014). "Treatment choice affects inpatient adverse events and mortality in older aged inpatients with an isolated fracture of the proximal humerus." *J Shoulder Elbow Surg* 23(6): 800-806.

Ockert, B., F. Haasters, G. Siebenbürger, T. Helfen, M. Daferner and W. Böcker (2016). "Complications of locked plating for proximal humeral fractures—are we getting any better?" *Journal of Shoulder and Elbow Surgery* 25(10): e295-e303.

Ong, C., C. Bechtel, M. Walsh, J. D. Zuckerman and K. A. Egol (2011). "Three- and four-part fractures have poorer function than one-part proximal humerus fractures." *Clin Orthop Relat Res* 469(12): 3292-3299.

Radulescu, R., A. Badila, O. Nutiu, I. Japie, S. Terinte, D. Radulescu and R. Manolescu (2014). "Osteosynthesis in fractures of the distal third of humeral diaphysis." *Maedica (Buchar)* 9(1): 44-48.

Rhee, Y. G., N. S. Cho and S. C. Moon (2015). "Effects of humeral component retroversion on functional outcomes in reverse total shoulder arthroplasty for cuff tear arthropathy." *J Shoulder Elbow Surg* 24(10): 1574-1581.

Roderer, G., J. Erhardt, M. Kuster, P. Vegt, C. Bahrs, L. Kinzl and F. Gebhard (2011). "Second generation locked plating of proximal humerus fractures--a prospective multicentre observational study." *Int Orthop* 35(3): 425-432.

Schairer, W. W., B. U. Nwachukwu, S. Lyman, E. V. Craig and L. V. Gulotta (2015). "Reverse shoulder arthroplasty versus hemiarthroplasty for treatment of proximal humerus fractures." *J Shoulder Elbow Surg* 24(10): 1560-1566.

Sirveaux, F., D. Saragaglia, D. Block, F. Gadea, R. Bouchet, T. D'ollonne, J. Gaillot and S. the (2016). "Non-operative treatment of four-part fractures of the proximal end of the humerus: results of a prospective and retrospective multicentric study." *International Orthopaedics* 40(8): 1669-1674.

Slobogean, G. P., P. Guy, J. Pike, P. O'Brien, K. A. Lefaivre, H. Broekhuysse and J. Larouche (2016). "Determinants of Functional Outcome in Distal Radius Fractures in High-Functioning Patients Older Than 55 Years." *J Orthop Trauma* 30(8): 445-449.

Smith, A. M., R. M. Mardones, J. W. Sperling and R. H. Cofield (2007). "Early complications of operatively treated proximal humeral fractures." *J Shoulder Elbow Surg* 16(1): 14-24.

Smucny, M., M. E. Menendez, D. Ring, B. T. Feeley and A. L. Zhang (2015). "Inpatient surgical site infection after shoulder arthroplasty." *J Shoulder Elbow Surg* 24(5): 747-753.

Solberg, B. D., C. N. Moon, D. P. Franco and G. D. Paiement (2009). "Surgical treatment of three and four-part proximal humeral fractures." *J Bone Joint Surg Am* 91(7): 1689-1697.

Solgaard, S., C. Bunger and K. Sllund (1990). "Displaced distal radius fractures. A comparative study of early results following external fixation, functional bracing in supination, or dorsal plaster immobilization." *Arch Orthop Trauma Surg* 109(1): 34-38.

Sudkamp, N. P., L. Audige, S. Lambert, R. Hertel and G. Konrad (2011). "Path analysis of factors for functional outcome at one year in 463 proximal humeral fractures." *J Shoulder Elbow Surg* 20(8): 1207-1216.

Tan, V., W. Bratchenko, A. Nourbakhsh and J. Capo (2012). "Comparative analysis of intramedullary nail fixation versus casting for treatment of distal radius fractures." *J Hand Surg Am* 37(3): 460-468.

Thorsness, R., J. Iannuzzi, K. Noyes, S. Kates and I. Voloshin (2014). "Open reduction and internal fixation versus hemiarthroplasty in the management of proximal humerus fractures." *Geriatr Orthop Surg Rehabil* 5(2): 56-62.

Ueda, K., S. Ikemura, A. Yamashita, T. Harada, T. Watanabe, K. Shirasawa (2014). "Three-dimensional analyses of proximal humeral fractures using computed tomography with multiplanar reconstruction: early stability of fixation after osteosynthesis in relation to preoperative bone quality." *European Journal of Orthopaedic Surgery and Traumatology* 24(8): 1389-1394.

Wang, B., K. Chen, J. Fan, B. Jiang, G. R. Yu, J. Mei and F. Yuang (2016). "Analysis of soft-tissue complications of volar plate fixation for managing distal radius fractures and clinical effect while preserving pronator quadratus." *Acta Orthop Belg* 82(2): 305-312.

Lista över kvalitativa studier som inte uppfyller specificerade relevanskriterier (42 st)

Bamford, R. and D. Walker (2010). "A qualitative investigation into the rehabilitation experience of patients following wrist fracture." *Hand Therapy* 15(3): 54-61.

Clarke, L. H., T. Liu-Ambrose, J. Zyla, H. McKay and K. Khan (2005). ""Being able to do the things that I want to do": older women with osteoporosis define health, quality of life, and well-being." *Activities, Adaptation & Aging* 29(4): 41-59.

De Souza, L. B., G. M. Da Silva Mazeto and S. C. Bocchi (2010). "Self-managing osteoporosis treatment for well-being recovery mediated by the (in)visibility of the disease signs." *Rev Lat Am Enfermagem* 18(3): 398-405.

Emmett, C. L., N. M. Redmond, T. J. Peters, S. Clarke, L. Shepstone, E. Lenaghan and A. R. Shaw (2012). "Acceptability of screening to prevent osteoporotic fractures: a qualitative study with older women." *Fam Pract* 29(2): 235-242.

Fry, M., L. Chenoweth and G. Arendts (2015). "Assessment and management of acute pain in the older person with cognitive impairment: A qualitative study." *Int Emerg Nurs*.

Giangregorio, L., L. Dolovich, A. Cranney, A. Adili, J. Debeer, A. Papaioannou, L. Thabane and J. D. Adachi (2009). "Osteoporosis risk perceptions among patients who have sustained a fragility fracture." *Patient Educ Couns* 74(2): 213-220.

Hagy, L. F., D. Brochetti and S. E. Duncan (2000). "Focus groups identified women's perceptions of dairy foods." *Journal of Women & Aging* 12(3/4): 99-115.

Halvarsson, A., A. Stahle, C. Halen and K. S. Roaldsen (2015). ""Better safe than sorry": a qualitative content analysis of participant's perspectives of fall-related concerns and balance in older women with osteoporosis after balance training." *Disabil Rehabil*: 1-7.

Hammond, G. K., G. E. Chapman and S. I. Barr (2011). "Healthy midlife Canadian women: how bone health is considered in their food choice systems." *J Hum Nutr Diet* 24(1): 61-67.

- Hampson, S. E., R. E. Glasgow and A. M. Zeiss (1994). "Personal models of osteoarthritis and their relation to self-management activities and quality of life." *J Behav Med* 17(2):143-158.
- Husk, J., J. Jensen and S. O'Riordan (2007). "The local falls and osteoporosis service: does it meet the needs of patients?" *Nurs Older People* 19(10): 34-38; quiz 39.
- Jachna, C. M. and S. Forbes-Thompson (2005). "Osteoporosis: Health beliefs and barriers to treatment in an assisted living facility." *J Gerontol Nurs* 31(1): 24-30; quiz 42-23.
- Jensen, A. L. and I. Harder (2004). "The osteoporotic pain experience." *Osteoporos Int* 15(3): 204-208.
- Lau, E., A. Papaioannou, L. Dolovich, J. Adachi, A. M. Sawka, S. Burns, K. Nair and A. Pathak (2008). "Patients' adherence to osteoporosis therapy: exploring the perceptions of postmenopausal women." *Can Fam Physician* 54(3): 394-402.
- Matsumoto, D., K. K. Pun, M. Nakatani, D. Kadowaki, M. Weissman, L. McCarter, D. Fletcher and S. Takeuchi (1995). "Cultural differences in attitudes, values, and beliefs about osteoporosis in first and second generation Japanese-American women." *Women Health* 23(4): 39-56.
- McCarthy, M. L., T. Ewashko and E. J. MacKenzie (1998). "Determinants of use of outpatient rehabilitation services following upper extremity injury." *Journal of Hand Therapy* 11(1): 32-38.
- Meadows, L. M. and L. A. Mrkonjic (2003). "Breaking - bad news: women's experiences of fractures at midlife." *Canadian Journal of Public Health* 94(6): 427-430.
- Meadows, L. M., L. A. Mrkonjic, K. M. A. Petersen and L. E. Lagendyk (2004). "After the fall: women's views of fractures in relation to bone health at midlife." *Women & Health* 39(2): 47-62.
- Nielsen, D., L. Huniche, K. Brixen, O. Sahota and T. Masud (2013). "Handling knowledge on osteoporosis--a qualitative study." *Scand J Caring Sci* 27(3): 516-524.
- Nielsen, D. S., K. Brixen and L. Huniche (2011). "Men's experiences of living with osteoporosis: focus group interviews." *Am J Mens Health* 5(2): 166-176.
- Qvist, N., I. Bergström, A.-C. G. Kronhed, S. Karlsson and A. Forss (2011). "Empowering the fragile body: Experiences of a back muscle group training program in

postmenopausal women with vertebral fractures A qualitative interview study." *Advances in Physiotherapy* 13(2): 63-70.

Reventlow, S. and H. Bang (2006). "Brittle bones: ageing or threat of disease exploring women's cultural models of osteoporosis." *Scand J Public Health* 34(3): 320-326.

Reventlow, S. D., L. Hvas and K. Malterud (2006). "Making the invisible body visible. Bone scans, osteoporosis and women's bodily experiences." *Soc Sci Med* 62(11): 2720-2731.

Rothmann, M. J., L. Huniche, J. Ammentorp, R. Barkmann, C. C. Gluer and A. P. Hermann (2014). "Women's perspectives and experiences on screening for osteoporosis (Risk-stratified Osteoporosis Strategy Evaluation, ROSE)." *Arch Osteoporos* 9: 192.

Sale, J. E., C. Cameron, G. Hawker, S. Jaglal, L. Funnell, R. Jain and E. Bogoch (2014). "Strategies used by an osteoporosis patient group to navigate for bone health care after a fracture." *Arch Orthop Trauma Surg* 134(2): 229-235.

Sale, J. E., M. A. Gignac, L. Frankel, G. Hawker, D. Beaton, V. Elliot-Gibson and E. Bogoch (2012). "Patients reject the concept of fragility fracture-a new understanding based on fracture patients' communication." *Osteoporos Int* 23(12): 2829-2834.

Sale, J. E., M. A. Gignac, G. Hawker, D. Beaton, E. Bogoch, F. Webster, L. Frankel and V. Elliot-Gibson (2014). "Non-pharmacological strategies used by patients at high risk for future fracture to manage fracture risk-a qualitative study." *Osteoporos Int* 25(1): 281-288.

Sale, J. E., M. A. Gignac, G. Hawker, D. Beaton, L. Frankel, E. Bogoch and V. Elliot-Gibson (2015). "Patients do not have a consistent understanding of high risk for future fracture: a qualitative study of patients from a post-fracture secondary prevention program." *Osteoporos Int*.

Sale, J. E., M. A. Gignac, G. Hawker, L. Frankel, D. Beaton, E. Bogoch and V. Elliot-Gibson (2011). "Decision to take osteoporosis medication in patients who have had a fracture and are 'high' risk for future fracture: a qualitative study." *BMC Musculoskelet Disord* 12: 92.

Salter, C. I., A. Howe, L. McDaid, J. Blacklock, E. Lenaghan and L. Shepstone (2011). "Risk, significance and biomedicalisation of a new population: older women's experience of osteoporosis screening." *Soc Sci Med* 73(6): 808-815.

- Sharts-Hopko, N. C. and S. Smeltzer (2004). "Perceptions of women with multiple sclerosis about osteoporosis follow-up." *J Neurosci Nurs* 36(4): 189-194, 199.
- Sharts-Hopko, N. C. and M. P. Sullivan (2002). "Beliefs, perceptions, and practices related to osteoporosis risk reduction among women with multiple sclerosis." *Rehabil Nurs* 27(6): 232-236.
- Skolbekken, J. A., W. Osterlie and S. Forsmo (2008). "Brittle bones, pain and fractures-lay constructions of osteoporosis among Norwegian women attending the Nord-Trøndelag Health Study (HUNT)." *Soc Sci Med* 66(12): 2562-2572.
- Skolbekken, J.-A., W. Østerlie and S. Forsmo (2012). "Risk categorisation through standard deviations – the challenge of bone density measurements: A focus group study among women attending the Nord-Trøndelag Health Study (HUNT)." *Health, Risk & Society* 14(2): 191-206.
- Solimeo, S. L. (2011). "Living with a 'women's disease': risk appraisal and management among men with osteoporosis." *J Mens Health* 8(3): 185-191.
- Solimeo, S. L., T. J. Weber and D. T. Gold (2011). "Older men's explanatory model for osteoporosis." *Gerontologist* 51(4): 530-539.
- Swiers, D. (1996). "Women's knowledge of HRT and the prevention of osteoporosis." *Nurs Stand* 10(26): 35-37.
- Toscan, J., K. Mairs, S. Hinton and P. Stolee (2012). "Integrated transitional care: patient, informal caregiver and health care provider perspectives on care transitions for older persons with hip fracture." *Int J Integr Care* 12: e13.
- Unson, C. G., E. Siccione, J. Gaztambide, S. Gaztambide, P. Mahoney Trella and K. Prestwood (2003). "Nonadherence and osteoporosis treatment preferences of older women: a qualitative study." *J Womens Health (Larchmt)* 12(10): 1037-1045.
- Weston, J. M., E. V. Norris and E. M. Clark (2011). "The invisible disease: making sense of an osteoporosis diagnosis in older age." *Qual Health Res* 21(12): 1692-1704.
- Wilkins, S. (2001). "Aging, chronic illness and self-concept: a study of women with osteoporosis." *J Women Aging* 13(1): 73-92.
- Wilkins, S. (2001). "Women with osteoporosis: strategies for managing aging and chronic illness." *J Women Aging* 13(3): 59-77.

Lista över hälsoekonomiska studier lästa i fulltext som inte uppfyller specificerade relevanskriterier (113 st)

Aggarwal S, Kumar V, Bhagwat KR, Behera P. AO extra-articular distal humerus locking plate: extended spectrum of usage in intra-articular distal fractures with metaphyseal extension--our experience with 20 cases. *European journal of orthopaedic surgery & traumatology : orthopedie traumatologie*. 2014;24(4):505-11.

Ahmed AR, Sweed T, Wanas A, Author A, Department of Orthopedic Surgery Fo, Medicine AUPOLAE, et al. The role of cancellous screw with tension band fixation in the treatment of displaced olecranon fractures, a comparative study. *European Journal of Orthopaedic Surgery and Traumatology*. 2008;18(8):571-6.

Amini MH, Azar FM, Wilson BR, Smith RA, Mauck BM, Throckmorton TW. Comparison of Outcomes and Costs of Tension-Band and Locking-Plate Osteosynthesis in Transverse Olecranon Fractures: A Matched-Cohort Study. *American journal of orthopedics (Belle Mead, NJ)*. 2015;44(7):E211-5.

Bartl C, Stengel D, Bruckner T, Rossion I, Luntz S, Seiler C, et al. Open reduction and internal fixation versus casting for highly comminuted and intra-articular fractures of the distal radius (ORCHID): protocol for a randomized clinical multi-center trial. *Trials*. 2011;12:84.

Beredjikian PK. Shelf Pricing for Distal Radius Fracture Implants. *Clinical orthopaedics and related research*. 2016.

Borrero F, Garcia LA, Jupiter JB, Author A, Diagonal A. Molded Kirschner wire for fixation of Barton's fracture dislocations of the radius. *Journal of Orthopaedic Techniques*. 1996;4(1):44-7.

Brorson S, Rasmussen JV, Frich LH, Olsen BS, Hrobjartsson A. Benefits and harms of locking plate osteosynthesis in intraarticular (OTA Type C) fractures of the proximal humerus: a systematic review (Provisional abstract). *Injury [Internet]*. 2012; 43(7):[999-1005 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12012033057/frame.html>.

Chang HC, Poh SY, Seah SC, Chua DT, Cha BK, Low CO. Fragment-specific fracture fixation and double-column plating of unstable distal radial fractures using AO mini-fragment implants and Kirschner wires. *Injury*. 2007;38(11):1259-67.

Chang L, Author A, Department of Orthopedics CT, Hospital TCT, Correspondence A, L. Chang DoOCTHZ, et al. Antegrade intramedullary fixation of humeral shaft fractures by Rush pins. *Formosan Journal of Musculoskeletal Disorders*. 2011;2(1):24-7.

Chaudhry H, Kleinlugtenbelt YV, Mundi R, Ristevski B, Goslings JC, Bhandari M. Are Volar Locking Plates Superior to Percutaneous K-wires for Distal Radius Fractures? A Meta-analysis. *Clinical orthopaedics and related research*. 2015;473(9):3017-27.

Chen M, Zhao JM, Li B, Peng XZ, Ding XF, Su W, et al. Effectiveness and safety of external fixation versus open reduction and internal fixation for the adults' unstable distal radius fractures: a systematic review (Provisional abstract). *Chinese Journal of Evidence-Based Medicine [Internet]*. 2010; 10(11):[1269-75 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12011000886/frame.html>.

Cohen MS, Frillman T. Distal radius fractures: a prospective randomized comparison of fibreglass tape with QuickCast. *Injury*. 1997;28(4):305-9.

Costa ML, Achten J, Caroline P, Parsons NR, Rangan A, Tubeuf S, et al. UK DRAFFT: A randomised controlled trial of percutaneous fixation with kirschner wires versus volar locking-plate fixation in the treatment of adult patients with a dorsally displaced fracture of the distal radius. *Health Technology Assessment*. 2015;19:17.

Costa ML, Achten J, Parsons NR, Rangan A, Edlin RP, Brown J, et al. UK DRAFFT - a randomised controlled trial of percutaneous fixation with kirschner wires versus volar locking-plate fixation in the treatment of adult patients with a dorsally displaced fracture of the distal radius. *BMC musculoskeletal disorders*. 2011;12:201.

Coulibaly MO, Jones CB, Sietsema DL, Schildhauer TA, Author A, Orthopaedic R, et al. Results of 70 consecutive ulnar nightstick fractures. *Injury*. 2015;46(7):1359-66.

Couzens GB, Peters SE, Cutbush K, Hope B, Taylor F, James CD, et al. Stainless steel versus titanium volar multi-axial locking plates for fixation of distal radius fractures: a randomised clinical trial. *BMC musculoskeletal disorders*. 2014;15:74.

Den Hartog D, Van Lieshout EM, Tuinebreijer WE, Polinder S, Van Beeck EF, Breederveld RS, et al. Primary hemiarthroplasty versus conservative treatment for comminuted fractures of the proximal humerus in the elderly (ProCon): a multicenter randomized controlled trial. *BMC musculoskeletal disorders*. 2010;11:97.

Dzaja I, MacDermid JC, Roth J, Grewal R. Functional outcomes and cost estimation for extra-articular and simple intra-articular distal radius fractures treated with open reduction and internal fixation versus closed reduction and percutaneous Kirschner wire fixation. *Canadian journal of surgery Journal canadien de chirurgie*. 2013;56(6):378-84.

Farner S, Malkani A, Lau E, Day J, Ochoa J, Ong K. Outcomes and cost of care for patients with distal radius fractures. *Orthopedics*. 2014;37(10):e866-78.

Fowler JR, Buterba GA, Author A, Department of Orthopaedics U, of Pittsburgh KBFASPPA, States U, et al. Patient perception of physician reimbursement for common hand surgical procedures. *Orthopedics*. 2013;36(9):e1149-e54.

Franceschi F, Franceschetti E, Paciotti M, Cancilleri F, Maffulli N, Denaro V. Volar locking plates versus K-wire/pin fixation for the treatment of distal radial fractures: a systematic review and quantitative synthesis. *British medical bulletin*. 2015;115(1):91-110.

Freeland AE, Sud V, Jemison DM. Early wrist arthrodesis for irreparable intra-articular distal radial fractures. *Hand surgery : an international journal devoted to hand and upper limb surgery and related research : journal of the Asia-Pacific Federation of Societies for Surgery of the Hand*. 2000;5(2):113-8.

Gadegone WM, Salphale Y, Magarkar D. Percutaneous osteosynthesis of Galeazzi fracture-dislocation. *Indian journal of orthopaedics*. 2010;44(4):448-52.

Gadegone WM, Salphale YS, Author A, Department o, Orthopaedic, Traumatology CMHMR, et al. Antegrade Rush nailing for fractures of humeral shaft: An analysis of 200 cases with an average follow-up of 1 year. *European Journal of Orthopaedic Surgery and Traumatology*. 2008;18(2):93-9.

Garrigues GE, Johnston PS, Pepe MD, Tucker BS, Ramsey ML, Austin LS. Hemiarthroplasty versus reverse total shoulder arthroplasty for acute proximal humerus fractures in elderly patients. *Orthopedics*. 2012;35(5):e703-8.

Glickel SZ, Catalano LW, Raia FJ, Barron OA, Grabow R, Chia B. Long-term outcomes of closed reduction and percutaneous pinning for the treatment of distal radius fractures. *The Journal of hand surgery*. 2008;33(10):1700-5.

Gomar F, Orozco R, Villar JL, Arrizabalaga F, Author A, Department of Surgery Uo, et al. P-15 small peptide bone graft substitute in the treatment of non-unions and delayed union. A pilot clinical trial. *International orthopaedics*. 2007;31(1):93-9.

Gosler Maurits W, Testroote M, Morrenhof JW, Janzing Heinrich MJ. Surgical versus non-surgical interventions for treating humeral shaft fractures in adults. *Cochrane Database of Systematic Reviews* [Internet]. 2012; (1). Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD008832.pub2/abstract>.

Gruber G, Zacherl M, Giessauf C, Glehr M, Fuerst F, Liebmann W, et al. Quality of life after volar plate fixation of articular fractures of the distal part of the radius. *The Journal of bone and joint surgery American volume*. 2010;92(5):1170-8.

Hagenaars T, Vroemen J, Oijen G, Roerdink W, Vegt P, Verhofstad M, et al. Functional recovery after treatment of extra-articular distal radius fractures in the elderly using the IlluminOss System (IO-Wrist); A multicenter prospective observational study. *BMC musculoskeletal disorders*. 2016;17(1).

Handoll H, Brealey S, Rangan A, Keding A, Corbacho B, Jefferson L, et al. The ProFHER (PROximal Fracture of the Humerus: Evaluation by Randomisation) trial - a pragmatic multicentre randomised controlled trial evaluating the clinical effectiveness and cost-effectiveness of surgical compared with non-surgical treatment for proximal fracture of the humerus in adults. *Health technology assessment (Winchester, England)*. 2015;19(24):1-280.

Handoll H, Brealey S, Rangan A, Torgerson D, Dennis L, Armstrong A, et al. Protocol for the ProFHER (PROximal Fracture of the Humerus: Evaluation by Randomisation) trial: a pragmatic multi-centre randomised controlled trial of surgical versus non-surgical treatment for proximal fracture of the humerus in adults. *BMC musculoskeletal disorders*. 2009;10:140.

Handoll Helen HG, Madhok R. Closed reduction methods for treating distal radial fractures in adults. *Cochrane Database of Systematic Reviews* [Internet]. 2003; (1). Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD003763/abstract>.

Handoll Helen HG, Madhok R. Conservative interventions for treating distal radial fractures in adults. *Cochrane Database of Systematic Reviews: Reviews*. 2003;Issue 2.

Handoll Helen HG, Madhok R. Surgical interventions for treating distal radial fractures in adults. *Cochrane Database of Systematic Reviews* [Internet]. 2009; (3). Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD003209.pub2/abstract>.

Handoll HH, Ollivere BJ. Interventions for treating proximal humeral fractures in adults. *The Cochrane database of systematic reviews*. 2010(12):Cd000434.

Handoll HH, Pearce PK. Interventions for isolated diaphyseal fractures of the ulna in adults. The Cochrane database of systematic reviews. 2004(2):Cd000523.

Helweg J, Boesen J, Hellberg S, Thyregod HC, Author A, Ortopaedkirurgiske, et al. Colles' fracture. Therapeutic results and use of resources. A comparative study between 2 departments in the same county ORIGINAL (NON-ENGLISH) TITLE Fractura Collesi. Behandlingsresultater og ressourceforbrug. En sammenlignende undersøgelse imellem to afdelinger i et amt. Ugeskrift for læger. 1991;153(8):576-8.

Hoare Christopher P, Dickson David R, Armstrong Daniel J, Nuttall D, Watts Adam C. Internal fixation for treating distal radius fractures in adults. Cochrane Database of Systematic Reviews [Internet]. 2014; (7). Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD011213/abstract>.

Hobby JL. Cost effectiveness of percutaneous fixation with Kirschner wires versus locking plate for adult patients with a dorsally displaced fracture of the distal radius from the DRAFFT trial: a commentary. The bone & joint journal. 2015;97-b(8):1015-6.

Hutchinson DT, Strenz GO, Cautilli RA. Pins and plaster vs external fixation in the treatment of unstable distal radial fractures. A randomized prospective study. Journal of hand surgery (Edinburgh, Scotland). 1995;20(3):365-72.

Iida K, Sudo A, Ishiguro S. Clinical and radiological results of calcium phosphate cement-assisted balloon osteoplasty for Colles' fractures in osteoporotic senile female patients. Journal of orthopaedic science : official journal of the Japanese Orthopaedic Association. 2010;15(2):204-9.

Innocenti M, Carulli C, Civinini R, Matassi F, Tani M, Muncibi F. Displaced fragility fractures of proximal humerus in elderly patients affected by severe comorbidities: percutaneous fixation and conservative treatment. Aging clinical and experimental research. 2013;25(4):447-52.

Jain NB, Kuye I, Higgins LD, Warner JJP, Author A, Orthopedic, et al. Surgeon volume is associated with cost and variation in surgical treatment of proximal humeral fractures shoulder. Clinical orthopaedics and related research. 2013;471(2):655-64.

Jariwala Arpit C, Phillips Alistair R, Storey Philip A, Nuttall D, Watts Adam C. Internal fixation versus other surgical methods for treating distal radius fractures in adults. Cochrane Database of Systematic Reviews [Internet]. 2014; (7). Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD011212/abstract>.

Juutilainen T, Patiala H, Rokkanen P, Tormala P, Author A, Department, et al. Biodegradable wire fixation in olecranon and patella fractures combined with

biodegradable screws or plugs and compared with metallic fixation. *Archives of orthopaedic and trauma surgery*. 1995;114(6):319-23.

Karantana A, Scammell BE, Davis TR, Whynes DK. Cost-effectiveness of volar locking plate versus percutaneous fixation for distal radial fractures: Economic evaluation alongside a randomised clinical trial. *The bone & joint journal*. 2015;97-b(9):1264-70.

Karthik K, Patil S, Miranda S, Author A, King's College Hospital Dh, London SERSUK, et al. A safe and cost-effective method for treatment of angulated fifth metacarpal shaft fractures in the out-patient clinic. *European Orthopaedics and Traumatology*. 2014;5(1):31-5.

Kay HF, Sathiyakumar V, Yoneda ZT, Lee YM, Jahangir AA, Ehrenfeld JM, et al. The effects of American society of anesthesiologists physical status on length of stay and inpatient cost in the surgical treatment of isolated orthopaedic fractures. *Journal of orthopaedic trauma*. 2014;28(7):e153-e9.

Kim BJ, Kim JH, Park YK, Moon HJ, Hur JW. Risk Factors for Delayed Hinge Fracture after Plate-Augmented Cervical Open-Door Laminoplasty. *J Korean Neurosurg Soc*. 2016;59(4):368-73.

Kimura M, Kuroshima N, Torihama T, Fukasawa K, Matsushita T. A convenient dynamic wire traction-fixation method for hand and forearm fractures. *Journal of orthopaedic trauma*. 2006;20(9):631-6.

Kontakis G, Koutras C, Tosounidis T, Giannoudis P. Early management of proximal humeral fractures with hemiarthroplasty: a systematic review (Structured abstract). *Journal of Bone and Joint Surgery British volume* [Internet]. 2008; 90-b(11):[1407-13 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12009102429/frame.html>.

Kurup H, Hossain M, Andrew JG. Dynamic compression plating versus locked intramedullary nailing for humeral shaft fractures in adults. *Cochrane Database of Systematic Reviews* [Internet]. 2011; (6). Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD005959.pub2/abstract>.

Lanting B, MacDermid J, Drosdowech D, Faber KJ. Proximal humeral fractures: a systematic review of treatment modalities (Structured abstract). *Journal of Shoulder and Elbow Surgery* [Internet]. 2008; 17(1):[42-54 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12008102803/frame.html>.

Launonen AP, Lepola V, Flinkkila T, Strandberg N, Ojanpera J, Rissanen P, et al. Conservative treatment, plate fixation, or prosthesis for proximal humeral fracture. A prospective randomized study. *BMC musculoskeletal disorders*. 2012;13:167.

Lee YH, Hsu YN, Yu IL, Phan DV, Chou P, Chan CL, et al. Treatment incidence of and medical utilization for hospitalized subjects with pathologic fractures in Taiwan-Survey of the 2008 National Health Insurance data. *BMC health services research*. 2011;11:230.

Li B, Bai JP, Wu TX. Intramedullary nailing or compression plates for humeral shaft fractures in adults: a systematic review (Provisional abstract). *Chinese Journal of Evidence-Based Medicine* [Internet]. 2006; 6(10):[705-11 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12006009140/frame.html>.

Li LH, Sun TS, Liu Z, Guo YZ, Li SG, Qin CC. Plating versus intramedullary nailing of humeral shaft fractures in adults: a systematic review (Provisional abstract). *Chinese Journal of Evidence-Based Medicine* [Internet]. 2008; 8(8):[662-7 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12009100856/frame.html>.

Li LH, Wang H, Zhang Y, Cai YH, Zhang H, Liu Z, et al. Plating versus intramedullary nail fixation for the treatment of humeral shaft fractures in adults: a systematic review update (Provisional abstract). *Database of Abstracts of Reviews of Effects* [Internet]. 2013; (2):[6970-7 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12014059779/frame.html>.

Li Y, Zhao L, Zhu L, Li J, Chen A. Internal fixation versus nonoperative treatment for displaced 3-part or 4-part proximal humeral fractures in elderly patients: a meta-analysis of randomized controlled trials (Provisional abstract). *PloS one* [Internet]. 2013; 8(9):[e75464 p.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12013056027/frame.html>.

Liebergall M, Jaber S, Laster M, Abu-Snieneh K, Mattan Y, Segal D. Ender nailing of acute humeral shaft fractures in multiple injuries. *Injury*. 1997;28(9-10):577-80.

Lippuner K, Johansson H, Borgstrom F, Kanis JA, Rizzoli R. Cost-effective intervention thresholds against osteoporotic fractures based on FRAX in Switzerland. *Osteoporosis International*. 2012;23(11):2579-89.

Lovy AJ, Keswani A, Dowdell J, Koehler S, Kim J, Hausman MR. Outcomes, complications, utilization trends, and risk factors for primary and revision total elbow replacement. *Journal of shoulder and elbow surgery / American Shoulder and Elbow Surgeons [et al]*. 2016;25(6):1020-6.

Lu M, McPhillamy A, Gurnea TP, Moody AE, Kurnik CG. The Clinical and Economic Impact of Generic Locking Plate Utilization at a Level II Trauma Center. *Journal of orthopaedic trauma*. 2016;30:S32-s6.

Ludvigsen TC, Johansen S, Svenningsen S. [Unstable fractures of the distal radius. External fixation or percutaneous pinning?]. *Tidsskrift for den Norske laegeforening : tidsskrift for praktisk medicin, ny raekke*. 1996;116(26):3093-7.

Mackay D, Wood L, Rangan A. The treatment of isolated ulnar fractures in adults: a systematic review (Structured abstract). *Injury [Internet]*. 2000; 31(8):[565-70 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12000001826/frame.html>.

Mahabier KC, Hartog DD, Van Veldhuizen J, Panneman MJ, Polinder S, Verhofstad MH, et al. Trends in incidence rate, health care consumption, and costs for patients admitted with a humeral fracture in The Netherlands between 1986 and 2012. *Injury*. 2015;46(10):1930-7.

Mahabier KC, Van Lieshout EM, Bolhuis HW, Bos PK, Bronkhorst MW, Bruijninx MM, et al. HUMeral shaft fractures: measuring recovery after operative versus non-operative treatment (HUMMER): a multicenter comparative observational study. *BMC musculoskeletal disorders*. 2014;15:39.

Maire N, Lebailly F, Zemirline A, Hariri A, Facca S, Liverneaux P. Prospective continuous study comparing intrafocal cross-pinning HK2((R)) with a locking plate in distal radius fracture fixation. *Chirurgie de la main*. 2013;32(1):17-24.

Majumdar SR, Lier DA, Leslie WD. Cost-effectiveness of two inexpensive postfracture osteoporosis interventions: results of a randomized trial. *Journal of Clinical Endocrinology and Metabolism*. 2013;98(5):1991-2000.

Majumdar SR, Lier DA, Rowe BH, Russell AS, McAlister FA, Maksymowych WP, et al. Cost-effectiveness of a multifaceted intervention to improve quality of osteoporosis care after wrist fracture. *Osteoporosis International*. 2011;22(6):1799-808.

Mata-Fink A, Meinke M, Jones C, Kim B, Bell JE. Reverse shoulder arthroplasty for treatment of proximal humeral fractures in older adults: a systematic review (Provisional abstract). *Journal of Shoulder and Elbow Surgery [Internet]*. 2013; 22(12):[1737-48 pp.]. Available from:

<http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12013067812/frame.html>.

Matar Hosam E, Ali Amjid A, Buckley S, Garlick Nicholas I, Atkinson Henry D. Surgical interventions for treating fractures of the olecranon in adults. *Cochrane Database of Systematic Reviews* [Internet]. 2014; (11). Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010144.pub2/abstract>.

Mather IRC, Wysocki RW, Mac KAIHJ, Pietrobon R, Nunley JA, Author A, et al. Effect of facility on the operative costs of distal radius fractures. *Journal of Hand Surgery*. 2011;36(7):1142-8.

Matziolis D, Kaeae M, Zandi SS, Perka C, Greiner S. Surgical treatment of two-part fractures of the proximal humerus: comparison of fixed-angle plate osteosynthesis and Zifko nails. *Injury*. 2010;41(10):1041-46.

McPhillamy A, Gurnea TP, Moody AE, Kurnik CG, Lu M. The Clinical and Economic Impact of Generic Locking Plate Utilization at a Level II Trauma Center. *Journal of orthopaedic trauma*. 2016;30 Suppl 5:S32-s6.

Mennen U, Labuschagne FJ. An alternative method of treating comminuted intra-articular fractures of the distal radius. *South African journal of surgery Suid-Afrikaanse tydskrif vir chirurgie*. 1993;31(2):81-4.

Moon CN, Lin CA, Rajae SS. Primary total elbow arthroplasty for distal humeral fractures in elderly patients: a nationwide analysis. *Journal of Shoulder and Elbow Surgery*. 2016;25(11):1854-60.

Mulders MA, Walenkamp MM, Goslings JC, Schep NW. Internal plate fixation versus plaster in displaced complete articular distal radius fractures, a randomised controlled trial. *BMC musculoskeletal disorders*. 2016;17:68.

Nwachukwu BU, Schairer WW, O'Dea E, McCormick F, Lane JM. The Quality of Cost-Utility Analyses in Orthopedic Trauma. *Orthopedics*. 2015;38(8):e673-80.

Obremskey WT, Bhandari M, Dirschl DR, Shemitsch E. Internal fixation versus arthroplasty of comminuted fractures of the distal humerus (Structured abstract). *Journal of orthopaedic trauma* [Internet]. 2003; 17(6):[463-5 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12003001446/frame.html>.

Olerud P, Ahrengart L, Ponzer S, Saving J, Tidermark J. Internal fixation versus nonoperative treatment of displaced 3-part proximal humeral fractures in elderly

patients: a randomized controlled trial. *Journal of shoulder and elbow surgery / American Shoulder and Elbow Surgeons* [et al]. 2011;20(5):747-55.

Parlato A, D'Arienzo A, Ferruzza M, Galvano N, D'Arienzo M. Indications and limitations of the fixator TGF "Gex-Fix" in proximal end humeral fractures. *Injury*. 2014;45 Suppl 6:S49-52.

Pearce PK, Handoll HH, Der T. Interventions for isolated diaphyseal fractures of the ulna in adults. *The Cochrane database of systematic reviews*. 2001(2):Cd000523.

Pidhorz L. Acute and chronic humeral shaft fractures in adults. *Orthopaedics & traumatology, surgery & research : OTSR*. 2015;101(1 Suppl):S41-9.

Rangan A, Brealey S, Torgerson D, Duarte A, Hewitt C, Handoll H, et al. Cost effectiveness of surgical versus non-surgical treatment of adults with displaced fractures of the proximal humerus: economic evaluation alongside the PROFHER trial. *The bone & joint journal*. 2016;98(2):152-9.

Raskin KB, Melone CP, Jr. Unstable articular fractures of the distal radius. Comparative techniques of ligamentotaxis. *The Orthopedic clinics of North America*. 1993;24(2):275-86.

Rodriguez-Merchan EC. Plaster cast versus percutaneous pin fixation for comminuted fractures of the distal radius in patients between 46 and 65 years of age. *Journal of orthopaedic trauma*. 1997;11(3):212-7.

Roerdink WH, Vroemen JPAM, Vegt PA, Verhofstad MHJ, Van Lieshout EMM, Hagens T, et al. Functional recovery after treatment of extra-articular distal radius fractures in the elderly using the IlluminOss® System (IO-Wrist); A multicenter prospective observational study. *BMC musculoskeletal disorders*. 2016;17(1).

Ruschel PH, Albertoni WM. Treatment of unstable extra-articular distal radius fractures by modified intrafocal Kapandji method. *Techniques in hand & upper extremity surgery*. 2005;9(1):7-16.

Sabesan VJ, Valikodath T, Childs A, Sharma VK, Author A, Department o, et al. Economic and social impact of upper extremity fragility fractures in elderly patients. *Aging clinical and experimental research*. 2015;27(4):539-46.

Safdari M, Koohestani MM. Comparing the effect of volar plate fixators and external fixators on outcome of patients with intra-articular distal radius fractures: A clinical trial. *Electronic physician*. 2015;7(2):1085-91.

Sale JE, Beaton D, Posen J, Elliot-Gibson V, Bogoch E. Systematic review on interventions to improve osteoporosis investigation and treatment in fragility fracture patients. *Osteoporosis International*. 2011;22(7):2067-82.

Sanders RJ, Thissen LG, Teepen JC, van Kampen A, Jaarsma RL. Locking plate versus nonsurgical treatment for proximal humeral fractures: better midterm outcome with nonsurgical treatment. *Journal of shoulder and elbow surgery / American Shoulder and Elbow Surgeons [et al]*. 2011;20(7):1118-24.

Schliemann B, Raschke MJ, Groene P, Weimann A, Wahnert D, Lenschow S, et al. Comparison of tension band wiring and precontoured locking compression plate fixation in Mayo type IIA olecranon fractures. *Acta orthopaedica Belgica*. 2014;80(1):106-11.

Schmidt-Horlohe K, Wilde P, Bonk A, Becker L, Hoffmann R. One-third tubular-hook-plate osteosynthesis for olecranon osteotomies in distal humerus type-C fractures: a preliminary report of results and complications. *Injury*. 2012;43(3):295-300.

Seybold D, Citak M, Konigshausen M, Gessmann J, Schildhauer TA. Combining of small fragment screws and large fragment plates for open reduction and internal fixation of periprosthetic humeral fractures. *International journal of shoulder surgery*. 2011;5(4):105-7.

Shyamalan G, Theokli C, Pearse Y, Tennent D, Author A, Department of Orthopaedics SGsHBRL, et al. Volar locking plates versus Kirschner wires for distal radial fractures- A cost analysis study. *Injury*. 2009;40(12):1279-81.

Slobogean BL, Jackman H, Tennant S, Slobogean GP, Mulpuri K. Iatrogenic ulnar nerve injury after the surgical treatment of displaced supracondylar fractures of the humerus: number needed to harm, a systematic review (Structured abstract). *Journal of Pediatric Orthopaedics [Internet]*. 2010; 30(5):[430-6 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12010006309/frame.html>.

Sproul RC, Iyengar JJ, Devcic Z, Feeley BT. A systematic review of locking plate fixation of proximal humerus fractures (Provisional abstract). *Injury [Internet]*. 2011; 42(4):[408-13 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12011002202/frame.html>.

Sung JK, Levin R, Siegel J, Einhorn TA, Creevy WR, Tornetta P, 3rd. Reuse of external fixation components: a randomized trial. *Journal of orthopaedic trauma*. 2008;22(2):126-30; discussion 30-1.

- Twigt B, Bemelman M, Lansink K, Leenen L. Type C distal radial fractures treated with conventional AO plates: an easy and cost-saving solution in a locking plate era. *International orthopaedics*. 2013;37(3):483-8.
- Wallny T, Westermann K, Sagebiel C, Reimer M, Wagner UA. Functional treatment of humeral shaft fractures: indications and results. *Journal of orthopaedic trauma*. 1997;11(4):283-7.
- van Manen CJ, Dekker ML, van Eerten PV, Rhemrev SJ, van Olden GD, van der Elst M. Bio-resorbable versus metal implants in wrist fractures: a randomised trial. *Archives of orthopaedic and trauma surgery*. 2008;128(12):1413-7.
- van Middendorp JJ, Kazacsay F, Lichtenhahn P, Renner N, Babst R, Melcher G. Outcomes following operative and non-operative management of humeral midshaft fractures: a prospective, observational cohort study of 47 patients. *European journal of trauma and emergency surgery : official publication of the European Trauma Society*. 2011;37(3):287-96.
- Wang Y, Zhuo Q, Tang P, Yang W. Surgical interventions for treating distal humeral fractures in adults. *Cochrane Database of Systematic Reviews [Internet]*. 2013; (1). Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009890.pub2/abstract>.
- Ward MA, Xu Y, Viswanathan HN, Stolshek BS, Clay B, Adams JL, et al. Association between osteoporosis treatment change and adherence, incident fracture, and total healthcare costs in a Medicare Advantage Prescription Drug plan. *Osteoporosis International*. 2013;24(4):1195-206.
- Victoroff BN, Shishani Y, Gobezie R, Gillespie RJ, Joseph SM, Solomon JA, et al. Cost analysis of hemiarthroplasty versus reverse shoulder arthroplasty for fractures. *Orthopedics*. 2016;39(4):230-4.
- Wilson FC, Dirschl DR, Bynum DK. Fractures of the radius and ulna in adults: an analysis of factors affecting outcome. *The Iowa orthopaedic journal*. 1997;17:14-9.
- Vundelinckx BJ, Dierickx CA, Bruckers L, Dierickx CH. Functional and radiographic medium-term outcome evaluation of the Humerus Block, a minimally invasive operative technique for proximal humeral fractures. *Journal of shoulder and elbow surgery / American Shoulder and Elbow Surgeons [et al]*. 2012;21(9):1197-206.
- Zhao J, Wang X, Zhang Q. Surgical treatment of comminuted intra-articular fractures of the distal humerus with double tension band osteosynthesis. *Orthopedics*. 2000;23(5):449-52.

Zheng X, Liu M, Duan X, Shu T, Xiang Z. Antegrade locked intramedullary nailing versus dynamic compression plating for humeral shaft fractures in adults: a meta-analysis of randomized controlled trials (Provisional abstract). *European Journal of Orthopaedic Surgery and Traumatology* [Internet]. 2012; 22(6):[443-7 pp.]. Available from: <http://onlinelibrary.wiley.com/o/cochrane/cldare/articles/DARE-12012042903/frame.html>.

Zhong L, Mahmoudi E, Giladi AM, Shauver M, Chung KC, Waljee JF. Utilization of Post-Acute Care Following Distal Radius Fracture Among Medicare Beneficiaries. *The Journal of hand surgery*. 2015;40(12):2401-9.e8.

Artiklar som experterna bedömt inte uppfyller specificerade kvalitetskriterier

Lista över RCT-studier som inte uppfyller specificerade kvalitetskriterier (13 st)

Horne, J. G., P. Devane and G. Purdie (1990). "A prospective randomized trial of external fixation and plaster cast immobilization in the treatment of distal radial fractures." *J Orthop Trauma* 4(1): 30-34.

Ismatullah (2012). "Efficacy of plaster casting versus external fixation in comminuted distal radius fractures." *Journal of Postgraduate Medical Institute* 26(3): 311-316.

Jakubietz, R. G., J. G. Gruenert, D. F. Kloss, S. Schindele and M. G. Jakubietz (2008). "A randomised clinical study comparing palmar and dorsal fixed-angle plates for the internal fixation of AO C-type fractures of the distal radius in the elderly." *J Hand Surg Eur Vol* 33(5): 600-604.

Jeudy, J., V. Steiger, P. Boyer, P. Cronier, P. Bizot and P. Massin (2012). "Treatment of complex fractures of the distal radius: a prospective randomised comparison of external fixation 'versus' locked volar plating." *Injury* 43(2): 174-179.

Kopylov, P., K. Runnqvist, K. Jonsson and P. Aspenberg (1999). "Norian SRS versus external fixation in redisplaced distal radial fractures. A randomized study in 40 patients." *Acta Orthop Scand* 70(1): 1-5.

Koshimune, M., M. Kamano, K. Takamatsu and H. Ohashi (2005). "A randomized comparison of locking and non-locking palmar plating for unstable Colles' fractures in the elderly." *J Hand Surg Br* 30(5): 499-503.

Ledingham, W. M., R. Wytch, C. C. Goring, A. B. Mathieson and D. Wardlaw (1991). "On immediate functional bracing of Colles' fracture." *Injury* 22(3): 197-201.

Ma, C., Q. Deng, H. Pu, X. Cheng, Y. Kan, J. Yang, A. Yusufu, L. Cao (2016). "External fixation is more suitable for intra-articular fractures of the distal radius in elderly patients." *Bone Research* 4 Article Number: 16017.

Mardani Kivi, M., K. Asadi, K. Hashemi Motlagh and M. Shakiba (2011) "Distal radius fracture, a comparison between closed reduction and long arm cast Vs. Closed reduction and percutaneous pinning and short arm cast." *Shiraz E Medical Journal* 12, 155-161.

Moroni, A., F. Vannini, C. Faldini, F. Pegreffì and S. Giannini (2004). "Cast vs external fixation: a comparative study in elderly osteoporotic distal radial fracture patients." *Scand J Surg* 93(1): 64-67.

Pritchett, J. W. (1995). "External fixation or closed medullary pinning for unstable Colles fractures?" *J Bone Joint Surg Br* 77(2): 267-269.

Rajan, G. P., J. Fornaro, O. Trentz and R. Zellweger (2006). "Cancellous allograft versus autologous bone grafting for repair of comminuted distal radius fractures: a prospective, randomized trial." *J Trauma* 60(6): 1322-1329.

Saddiki, R., X. Ohl, X. Hemery, F. Vitry, E. Dehoux and A. Harisboure (2012). "Dorsally displaced distal radius fractures: comparative study of Py's and Kapandji's techniques." *Orthop Traumatol Surg Res* 98(1): 61-67.

Lista över kontrollerade icke-randomiserade studier som inte uppfyller specificerade kvalitetskriterier (30 st)

Alm-Paulsen, P. S., O. Rod, K. Rod, B. Rajabi, H. Russwurm and V. Finsen (2012). "Percutaneous pinning of fractures of the distal radius." *J Plast Surg Hand Surg* 46(3-4): 195-199.

Arora, R., M. Gabl, M. Gschwentner, C. Deml, D. Krappinger and M. Lutz (2009). "A comparative study of clinical and radiologic outcomes of unstable colles type distal radius fractures in patients older than 70 years: nonoperative treatment versus volar locking plating." *J Orthop Trauma* 23(4): 237-242.

Bachelier, F., A. Pizanis, J. Schwitalla, T. Pohlemann, D. Kohn and R. Wirbel (2014). "Treatment for displaced proximal humerus fractures: comparison of interlocking plate fixation versus minimal invasive techniques." *Eur J Orthop Surg Traumatol* 24(5): 707-714.

Boileau, P., M. Winter, A. Cikes, Y. Han, M. Carles, G. Walch and D. G. Schwartz (2013). "Can surgeons predict what makes a good hemiarthroplasty for fracture?" *J Shoulder Elbow Surg* 22(11): 1495-1506.

Bonnevialle, N., C. Tournier, P. Clavert, X. Ohl, F. Sirveaux and D. Saragaglia (2016). "Hemiarthroplasty versus reverse shoulder arthroplasty in 4-part displaced fractures of the proximal humerus: Multicenter retrospective study." *Orthop Traumatol Surg Res*.

Carbone, S., M. Tangari, S. Gumina, R. Postacchini, A. Campi and F. Postacchini (2012). "Percutaneous pinning of three- or four-part fractures of the proximal humerus in elderly patients in poor general condition: MIROS(R) versus traditional pinning." *Int Orthop* 36(6): 1267-1273.

Chan, Y. H., T. L. Foo, C. J. Yeo and W. Y. Chew (2014). "Comparison between cast immobilization versus volar locking plate fixation of distal radius fractures in active elderly patients, the Asian perspective." *Hand Surg* 19(1): 19-23.

Gumina, S., V. Candela, P. Baudi and G. Campochiaro (2016). "Hertel 7 fracture of the humeral head. Can two different fixation systems (Diphos/PHP) lead to different outcomes? A retrospective study." *Injury* 47: S59-s63.

Gunay, C., O. F. Oken, O. Y. Yavuz, S. H. Gunay and H. Atalar (2015). "Which modality is the best choice in distal radius fractures treated with two different Kirschner wire fixation and immobilization techniques?" *Ulus Travma Acil Cerrahi Derg* 21(2): 119-126.

Haddad, M., B. Jacoby, L. Snerum, J. Hede and S. Overgaard (2000). "External fixation of distal radial fractures: 3 or 5 weeks of external fixation." *Int Orthop* 24(4): 224-226.

Handschin, A. E., M. Cardell, C. Contaldo, O. Trentz and G. A. Wanner (2008). "Functional results of angular-stable plate fixation in displaced proximal humeral fractures." *Injury* 39(3): 306-313.

Hepp, P., J. Theopold, C. Voigt, T. Engel, C. Josten and H. Lill (2008). "The surgical approach for locking plate osteosynthesis of displaced proximal humeral fractures influences the functional outcome." *J Shoulder Elbow Surg* 17(1): 21-28.

Hung, L. P., Y. F. Leung, W. Y. Ip and Y. L. Lee (2015). "Is locking plate fixation a better option than casting for distal radius fracture in elderly people?" *Hong Kong Med J* 21(5): 407-410.

Jaura, G., J. Sikdar and S. Singh (2014). "Long Term Results of PHILOS Plating and Percutaneous K-Wire Fixation in Proximal Humerus Fractures in The Elderly." *Malays Orthop J* 8(1): 4-7.

Jawa, A., P. McCarty, J. Doornberg, M. Harris and D. Ring (2006). "Extra-articular distal-third diaphyseal fractures of the humerus. A comparison of functional bracing and plate fixation." *J Bone Joint Surg Am* 88(11): 2343-2347.

Krause, F. G., L. Huebschle and R. Hertel (2007). "Reattachment of the tuberosities with cable wires and bone graft in hemiarthroplasties done for proximal humeral fractures with cable wire and bone graft: 58 patients with a 22-month minimum follow-up." *J Orthop Trauma* 21(10): 682-686.

Krishnan, S. G., J. R. Reineck, P. D. Bennion, L. Feher and W. Z. Burkhead, Jr. (2011). "Shoulder arthroplasty for fracture: does a fracture-specific stem make a difference?" *Clin Orthop Relat Res* 469(12): 3317-3323.

Ledingham, W. M., R. Wytch, C. C. Goring, A. B. Mathieson and D. Wardlaw (1991). "On immediate functional bracing of Colles' fracture." *Injury* 22(3): 197-201.

Lee, Y. S., T. Y. Wei, Y. C. Cheng, T. L. Hsu and C. R. Huang (2012). "A comparative study of Colles' fractures in patients between fifty and seventy years of age: percutaneous K-wiring versus volar locking plating." *Int Orthop* 36(4): 789-794.

Li, F., Y. Zhu, Y. Lu, X. Liu, G. Wu and C. Jiang (2014). "Hemiarthroplasty for the treatment of complex proximal humeral fractures: does a trabecular metal prosthesis make a difference? A prospective, comparative study with a minimum 3-year follow-up." *J Shoulder Elbow Surg* 23(10): 1437-1443.

Lin, T., B. Xiao, X. Ma, D. Fu and S. Yang (2014). "Minimally invasive plate osteosynthesis with a locking compression plate is superior to open reduction and internal fixation in the management of the proximal humerus fractures." *BMC Musculoskelet Disord* 15: 206.

Liu, K., P. C. Liu, R. Liu and X. Wu (2015). "Advantage of minimally invasive lateral approach relative to conventional deltopectoral approach for treatment of proximal humerus fractures." *Medical Science Monitor* 21: 496-504.

Liu, R., P. Liu, H. Shu, J. Gong, Q. Sun, J. Wu, X. Nie, Y. Yang and M. Cai (2015). "Comparison of primary radial head replacement and ORIF (open reduction and internal fixation) in Mason type III fractures: a retrospective evaluation in 72 elderly patients." *Med Sci Monit* 21: 90-93.

- Lutz, K., K. M. Yeoh, J. C. MacDermid, C. Symonette and R. Grewal (2014). "Complications associated with operative versus nonsurgical treatment of distal radius fractures in patients aged 65 years and older." *J Hand Surg Am* 39(7): 1280-1286.
- Maire, N., F. Lebailly, A. Zemirline, A. Hariri, S. Facca and P. Liverneaux (2013). "Prospective continuous study comparing intrafocal cross-pinning HK2((R)) with a locking plate in distal radius fracture fixation." *Chir Main* 32(1): 17-24.
- Okike, K., O. C. Lee, H. Makanji, J. H. Morgan, M. B. Harris and M. S. Vrahas (2015). "Comparison of locked plate fixation and nonoperative management for displaced proximal humerus fractures in elderly patients." *Am J Orthop (Belle Mead NJ)* 44(4): E106-112.
- Robinson, C. M. and J. Christie (1993). "The two-part proximal humeral fracture: a review of operative treatment using two techniques." *Injury* 24(2): 123-125.
- Solarino, G., G. Vicenti, A. Abate, M. Carrozzo, G. Picca, A. Colella and B. Moretti (2016). "Volar locking plate vs epibloc system for distal radius fractures in the elderly." *Injury*.
- Synn, A. J., E. C. Makhni, M. C. Makhni, T. D. Rozental and C. S. Day (2009). "Distal radius fractures in older patients: is anatomic reduction necessary?" *Clin Orthop Relat Res* 467(6): 1612-1620.
- Tamimi, I., G. Montesa, F. Collado, D. Gonzalez, P. Carnero, F. Rojas, M. Nagib, V. Perez, M. Alvarez and F. Tamimi (2015). "Displaced proximal humeral fractures: when is surgery necessary?" *Injury* 46(10): 1921-1929.

Lista över kvalitativa studier som inte uppfyller specificerade kvalitetskriterier (5 st)

- Iversen, M. D., R. R. Vora, A. Servi and D. H. Solomon (2011). "Factors affecting adherence to osteoporosis medications: a focus group approach examining viewpoints of patients and providers." *J Geriatr Phys Ther* 34(2): 72-81.
- Otmar, R., M. A. Kotowicz, G. C. Nicholson and J. A. Pasco (2011). "Methodological reflections on using pilot data from fracture patients to develop a qualitative study." *BMC Res Notes* 4: 508.
- Quantock, C. and J. Beynon (1997). "Evaluating an osteoporosis service using a focus group." *Nurs Stand* 11(42): 45-47.

Roberto, K. A. and S. G. Reynolds (2001). "The meaning of osteoporosis in the lives of rural older women." *Health Care Women Int* 22(6): 599-611.

Sale, J. E., G. Hawker, C. Cameron, E. Bogoch, R. Jain, D. Beaton, S. Jaglal and L. Funnell (2015). "Perceived messages about bone health after a fracture are not consistent across healthcare providers." *Rheumatol Int* 35(1): 97-103.

Lista över hälsoekonomiska studier som inte uppfyller specificerade kvalitetskriterier (12 st)

Chalmers PN, Slikker W, 3rd, Mall NA, Gupta AK, Rahman Z, Enriquez D, et al. Reverse total shoulder arthroplasty for acute proximal humeral fracture: comparison to open reduction-internal fixation and hemiarthroplasty. *Journal of shoulder and elbow surgery / American Shoulder and Elbow Surgeons* [et al]. 2014;23(2):197-204.

Dean BJF, Jones LD, Palmer AJR, Macnair RD, Brewer PE, Jayadev C, et al. A review of current surgical practice in the operative treatment of proximal humeral fractures: Does the proffer trial demonstrate a need for change? *Bone and Joint Research*. 2016;5(5):178-84.

Farner S, Malkani A, Lau E, Day J, Ochoa J, Ong K. Outcomes and cost of care for patients with distal radius fractures. *Orthopedics*. 2014;37(10):e866-78.

Handschin AE, Cardell M, Contaldo C, Trentz O, Wanner GA. Functional results of angular-stable plate fixation in displaced proximal humeral fractures. *Injury*. 2008;39(3):306-13.

Koenig KM, Davis GC, Grove MR, Tosteson ANA, Koval KJ, Author A, et al. Is early internal fixation preferred to cast treatment for well-reduced unstable distal radial fractures? *Journal of Bone and Joint Surgery - Series A*. 2009;91(9):2086-93.

Manoli A, Capriccioso CE, Konda SR, Egol KA, Author A, Nyu hospital for joint diseases US, et al. Total shoulder arthroplasty for proximal humerus fracture is associated with increased hospital charges despite a shorter length of stay. *Orthopaedics and Traumatology: Surgery and Research*. 2016;102(1):19-24.

Moon CN, Lin CA, Rajae SS. Primary total elbow arthroplasty for distal humeral fractures in elderly patients: a nationwide analysis. *Journal of Shoulder and Elbow Surgery*. 2016;25(11):1854-60.

Pritchett JW, Author A, Department of Orthopaedic Surgery Uo, Washington tASSWAUS, Correspondence A, J.W. Pritchett DoOSUoW, et al. External fixation or

closed medullary pinning for unstable Colles fractures? *Journal of Bone and Joint Surgery - Series B*. 1995;77(2):267-9.

Sabharwal S, Carter AW, Rashid A, Darzi A, Reilly P, Gupte CM. Cost analysis of the surgical treatment of fractures of the proximal humerus: an evaluation of the determinants of cost and comparison of the institutional cost of treatment with the national tariff. *The bone & joint journal*. 2016;98-b(2):249-59.

Schonnemann JO, Hansen TB, Soballe K. Randomised study of non-bridging external fixation compared with intramedullary fixation of unstable distal radial fractures. *Journal of plastic surgery and hand surgery*. 2011;45(4-5):232-7.

Shauver MJ, Clapham PJ, Chung KC, Author A, Department o, Surgery UoMHSAAAMIUS, et al. An economic analysis of outcomes and complications of treating distal radius fractures in the elderly. *Journal of Hand Surgery*. 2011;36(12):1912-8.e3.

Solomon JA, Joseph SM, Shishani Y, Victoroff BN, Wilber JH, Gobezie R, et al. Cost Analysis of Hemiarthroplasty Versus Reverse Shoulder Arthroplasty for Fractures. *Orthopedics*. 2016:1-6.