**Orthopedics\_Team3\_Report.docx**

# Documentation of Data Gathering Process for Team 4 (Orthopedics)

## 1. Sources Used

* Mayo Clinic ([https://www.mayoclinic.org](https://www.mayoclinic.org/))
* PubMed Central (PMC) — [https://pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov/)
* National Institutes of Health (NIH)
* Orthopedic journals and clinical guidelines (e.g., AAOS)
* Cleveland clinic
* Medscape

## 2. Methodology

* Used search engines and databases such as PubMed and Mayo Clinic’s website.
* Typed keywords related to orthopedic conditions such as “rotator cuff tear,” “Achilles tendon rupture,” “spinal stenosis,” “osteomyelitis,” “herniated disk,” and “septic arthritis.”etc.
* Selected recent review articles, clinical guidelines, and patient education materials.
* Cross-checked information across multiple sources for accuracy and comprehensiveness.

## 3. Challenges Faced

* Some conditions have overlapping symptoms making differential diagnosis complex.
* Limited access to full-text articles for certain recent studies.
* Variability in treatment protocols based on patient age, severity, and comorbidities.
* Data sometimes region-specific or based on small population studies.

## 4. Date Accessed

* Data gathered between June 20, 2025, and July 3, 2025.

## 5. Description of Contents

* Comprehensive overview of orthopedic conditions including causes, symptoms, differential diagnoses, treatment options, surgical procedures, and rehabilitation timelines.
* Included doctor-patient conversation examples for clear communication strategies.
* Summaries of recent advances in management and clinical guidelines.

## 6. File Format and Size

* Sources accessed were primarily in Microsoft document which was 8.7MB
* Downloaded PDF articles ranged from 1 MB to 5 MB in size.

## 7. Example of Data Gathering Statement

Team 3 (Orthopedics) sourced data from Mayo Clinic, Cleveland clinic, PubMed Central, Medscape and NIH databases using keywords such as “Achilles tendon rupture,” “rotator cuff tear,” “spinal stenosis,” and “osteomyelitis.” The focus was on current clinical guidelines, patient education, and recent review articles to ensure up-to-date and comprehensive information.

## 8. Disease List & Individual Contributions

| Specialty | Diseases/Conditions | Team Member Assigned |
| --- | --- | --- |
| Orthopedics | Osteoarthritis (OA), Rheumatoid arthritis (RA), Psoriatic arthritis, Ankylosing spondylitis (Spondyloarthritis), Gout, Bursitis, Joint hypermobility syndrome, Juvenile idiopathic arthritis, Other inflammatory arthropathies (e.g., systemic lupus erythematosus with joint involvement), Fragility fractures (e.g., hip, vertebral fractures), Traumatic fractures (e.g., long bone fractures, vertebral fractures), Bone tumors (benign and malignant), Muscular dystrophy (e.g., Duchenne muscular dystrophy), Myasthenia gravis (neuromuscular disorder), Myositis (inflammatory muscle disease), Tendinitis / Tendinopathy, Muscle strains and sprains, Myopathies (various muscle diseases), Chronic low back pain, Degenerative disc disease, Spondylolisthesis  Vertebral compression fractures, Ankylosing spondylitis (spinal involvement), Baker’s cyst (popliteal cyst), Fibromyalgia (widespread musculoskeletal pain), Ligament injuries (e.g., ACL tear, PCL TEAR, MCL TEAR, LCL TEAR, ), Tendon ruptures, Capsulitis (e.g., frozen shoulder), Clubfoot (talipes equinovarus), Developmental dysplasia of the hip (DDH), Scoliosis, Limb length discrepancy, Osteogenesis imperfecta, Amputation (due to trauma or disease), Complex regional pain syndrome (CRPS), Vasculitis with musculoskeletal involvement, Connective tissue diseases with musculoskeletal manifestations (e.g., systemic lupus erythematosus, scleroderma), Infectious arthritis , Tendonitis and bursitis, Overuse injuries (e.g., repetitive strain injuries, carpal tunnel syndrome), Transverse Fracture, Oblique Fracture, Spiral Fracture, Greenstick Fracture, Stress (Hairline) Fracture  Compression Fracture, Comminuted Fracture, Segmental Fracture, Impacted Fracture, Avulsion Fracture, Buckle (Torus) Fracture, Bowing Fracture, Open (Compound) Fracture, Closed (Simple) Fracture, Displaced Fracture, Non-displaced Fracture, Medial Collateral Ligament (MCL) Injury, Meniscal Tears, Tennis Elbow (Lateral Epicondylitis), Golfer’s Elbow (Medial Epicondylitis), Patellar Tendinitis (Jumper’s Knee), Shin Splints (Medial Tibial Stress Syndrome), Stress Fractures (common in lower limbs), Labral Tears (Hip and Shoulder), Avascular Necrosis (Osteonecrosis), Post-Traumatic Arthritis, Congenital or Developmental Joint Disorders, Inflammatory Arthritides Other Than Rheumatoid Arthritis, Joint Deformities, Failed Previous Joint Replacement (Revision Surgery), Bone Tumors Affecting Joints, Severe Joint Infection (Septic Arthritis) Leading to Joint Destruction, osteopenia,hurler syndrome, arthrogryposis, morquio syndrome, marfan syndrome, perthes diseases, achondroplasia,synovial chondromatosis, neurofibromatosis, polyarteritis nodosa, microscopic polyangiitis. COMPOUND FRACTURE, | LESLIE EL |
| Orthopedics | Achilles tendon rupture, JONES FRACTURE, TALUS FRACTURE, ACETABULAR FRACTURE, PATELLA FRACTURE, COLLES FRACTURE, SMITH FRACTURE, SCAPHOID FRACTURE, BARTON FRACTURE, CHAUFFEUR FRACTURE, METACARPAL FRACTURE, FEMORAL NECK FRACTURE, TIBIAL FRACTURE, ANKLE FRACTURE, RIB FRACTURE, FACIAL FRACTURE, CLAVICLE FRACTURE, LISFRANC INJURY, CALCANEUS FRACTURE, PELVIC FRACTURE | JENNIFER IMOGIE |
| Orthopedics | Spinal stenosis, OSTEOPOROSIS, OSTEOMALACIA, PAGET DISEASE OF THE BONE, POST TRAUMATIC ARTHRITIS, ROTATOR CUFF TEAR, HERNIATED INTERVERTEBRAL DISC, SARCOPENIA, SEPTIC ARTHRITIS, TENDON RUPTURE, OSTEOMYELITIS | BARAKAT |