

KNEE AND LOWER LEG CONDITIONS DBQ & NEXUS STATEMENT

ADDITIONAL EVIDENCE COMMENTS

ENLISTMENT DATES:

August 1998 to September 2006

03/14/2000 Service Treatment Record – The Veteran presented to Battalion Aid Station with complaints of right anterior knee pain following a 12-mile loaded road march while carrying approximately 65 pounds of combat equipment. Examination demonstrated mild tenderness over the patellar tendon without instability or joint effusion. Conservative management consisting of activity modification, ice, stretching exercises, and ibuprofen was recommended. The Veteran returned to duty without profile restrictions.

09/21/2001 Service Treatment Record – The Veteran reported bilateral knee discomfort after participating in repeated obstacle course training and airborne sustainment exercises. Pain was noted to increase with prolonged running, squatting, and kneeling. Physical examination demonstrated full range of motion with pain at terminal flexion and mild patellofemoral crepitus bilaterally. Assessment: Bilateral overuse knee strain. Conservative treatment and quadriceps strengthening exercises were recommended.

06/18/2003 Annual Periodic Health Assessment – The Veteran endorsed intermittent bilateral knee pain associated with prolonged marching, field exercises, climbing, and repetitive kneeling. The Veteran denied a single traumatic injury but reported progressive discomfort over several years of military service. No duty limitations were issued at that time.

11/05/2005 Service Treatment Record – The Veteran presented following a multi-day field training exercise with worsening bilateral knee pain after repeated movement over uneven terrain while carrying a combat load. Examination revealed tenderness along the medial joint lines bilaterally and discomfort with repetitive squatting. Assessment remained consistent with chronic bilateral knee strain secondary to repetitive overuse. Continued conservative treatment was recommended.

04/22/2012 Primary Care Office Visit – The Veteran established care after separation from military service and reported persistent bilateral knee pain that had progressively worsened since active duty. Symptoms were aggravated by prolonged standing, walking, climbing stairs, kneeling, and rising after prolonged sitting. Conservative management with nonsteroidal anti-inflammatory medication and home exercise therapy was continued.

08/10/2017 Orthopedic Consultation – The Veteran reported chronic bilateral knee pain with intermittent stiffness and difficulty performing occupational activities requiring prolonged standing or frequent stair climbing. Radiographs demonstrated no acute osseous abnormality. Clinical findings remained consistent with chronic bilateral knee strain and patellofemoral pain syndrome. Physical therapy was recommended.

02/07/2022 Physical Medicine & Rehabilitation Follow-up – The Veteran continued to report daily bilateral knee pain, stiffness after inactivity, and increased symptoms with prolonged walking, kneeling,

squatting, and negotiating uneven terrain. Conservative treatment with therapeutic exercise, activity modification, and intermittent NSAID use provided partial symptom relief.

10/16/2025 Independent Medical Examination – The Veteran reports persistent bilateral knee pain dating back to active military service with no history of significant post-service traumatic injury. Symptoms continue to interfere with prolonged walking, standing, kneeling, stair negotiation, and recreational activities. The Veteran reports gradual progression of symptoms over time despite conservative treatment measures.

SECTION I – DIAGNOSIS

1. BILATERAL KNEE STRAIN

ICD Code: S86.919A (Chronic Knee Strain)

Date of Diagnosis: 2001

SECTION II – MEDICAL HISTORY

Onset:

2000

Details of Onset:

The Veteran reports that bilateral knee pain gradually developed during active military service while serving as an Infantryman. Military duties required repetitive running, prolonged road marching while carrying combat equipment weighing approximately 60–80 pounds, obstacle course training, frequent kneeling, squatting, climbing over uneven terrain, and repeated jumping from military vehicles and elevated platforms during field exercises.

The Veteran reports that symptoms initially began in the right knee during the second year of service following repeated field training exercises. He recalls that the pain was initially intermittent and primarily occurred following prolonged marches or physically demanding training evolutions. Rather than seeking routine medical care, the Veteran states that he continued participating in required military activities because knee pain was considered a normal consequence of infantry training.

Approximately one year later, the Veteran began experiencing similar symptoms involving the left knee. Over time, the discomfort became bilateral and progressively more frequent. Although conservative

measures such as over-the-counter anti-inflammatory medication, stretching, and activity modification provided temporary improvement, the symptoms never completely resolved.

The Veteran states:

"After every long field exercise my knees would ache for the rest of the evening. We all hurt, so I just figured it came with the job and kept going."

He further reports:

"As the years went on, I noticed I couldn't squat as long during training without my knees becoming painful. Going downhill with a rucksack became especially difficult."

Following separation from military service, the Veteran reports persistent bilateral knee pain that gradually progressed despite avoiding many of the high-impact activities previously required during active duty. He denies any significant post-service traumatic injury involving either knee and reports that the symptoms have remained continuous since military service.

Current Symptoms:

The Veteran complains of daily bilateral knee pain, stiffness, and intermittent swelling, with the right knee being slightly more symptomatic than the left. Symptoms are aggravated by prolonged standing, walking, kneeling, squatting, climbing stairs, walking on uneven terrain, prolonged driving, rising after prolonged sitting, and repetitive bending activities.

The Veteran reports occasional sensations of grinding beneath both kneecaps as well as stiffness after periods of inactivity. He denies true mechanical locking but reports intermittent feelings that the knees "want to give way" when descending stairs or walking downhill.

Pain severity averages **4–5/10** at baseline and increases to approximately **7–8/10** following prolonged physical activity.

Treatment:

- Activity modification
- Home exercise program
- Intermittent physical therapy
- NSAIDs as needed
- Ice after increased activity
- Occasional knee compression sleeves

The Veteran has not required surgical intervention.

Flare-Ups:

The Veteran reports flare-ups occurring approximately two to three times per month.

Flare-ups are precipitated by:

- prolonged walking
- repetitive stair climbing
- kneeling
- squatting
- yard work
- uneven terrain
- prolonged standing

During flare-ups, the Veteran reports increased pain, stiffness, reduced endurance, and difficulty fully bending either knee. Symptoms generally improve with rest, ice application, and reduced activity over the subsequent 24 to 48 hours.

Functional Limitations in Veteran's Own Words:**Right Knee:**

"If I sit through a long meeting or drive for more than an hour, my knee gets really stiff. When I first stand up, I have to straighten it out before I can walk normally. Going down stairs hurts more than going up, and I avoid kneeling whenever I can because getting back up is painful."

Left Knee:

"The left knee feels about the same, just not quite as bad. It aches after I've been on my feet for a long time, and if I have to squat down several times during the day, both knees are sore by that evening. I can't run anymore because the impact makes the pain much worse."

SECTION III – RANGE OF MOTION (ROM) AND FUNCTIONAL LIMITATIONS

INITIAL RANGE OF MOTION (ROM)**RIGHT KNEE**

Flexion: 105 degrees (Normal: 140 degrees)

Extension: 0 degrees (Normal: 0 degrees)

Evidence of Pain: Pain noted with flexion beginning at approximately 95 degrees.

Evidence of Pain: Mild discomfort with terminal extension.

Passive ROM: Equal to active ROM.

Weight-Bearing: Pain present.

Non-Weight-Bearing: Mild discomfort.

Crepitus: Mild palpable patellofemoral crepitus noted throughout active flexion and extension.

Localized Tenderness:

Mild tenderness to palpation along the medial joint line and inferior pole of the patella. No erythema, warmth, or joint effusion appreciated.

LEFT KNEE

Flexion: 110 degrees (Normal: 140 degrees)

Extension: 0 degrees (Normal: 0 degrees)

Evidence of Pain: Pain begins near terminal flexion.

Evidence of Pain: Mild discomfort with terminal extension.

Passive ROM: Equal to active ROM.

Weight-Bearing: Pain present.

Non-Weight-Bearing: Mild discomfort.

Crepitus: Mild patellofemoral crepitus appreciated during repeated flexion.

Localized Tenderness:

Tenderness over the anterior knee and medial peripatellar region without instability or joint effusion.

OBSERVED FUNCTIONAL PERFORMANCE

The Veteran ambulated independently without the use of an assistive device. Gait demonstrated a mildly antalgic pattern favoring the right lower extremity after repetitive movement. Sit-to-stand transitions were performed more slowly than expected due to bilateral anterior knee discomfort.

The Veteran demonstrated visible guarding during deep knee flexion and hesitated before performing repetitive squatting maneuvers secondary to pain. Squatting beyond approximately one-half depth produced increased bilateral anterior knee pain.

AFTER THREE REPETITIONS

Following repetitive-use testing (three repetitions):

RIGHT KNEE

Flexion: 100 degrees

Extension: 0 degrees

Additional loss of motion is attributed to pain and fatigability.

LEFT KNEE

Flexion: 105 degrees

Extension: 0 degrees

Additional limitation is secondary to pain following repetitive motion.

ESTIMATED FUNCTIONAL LOSS WITH REPEATED USE OVER TIME

The Veteran reports that repeated walking, prolonged standing, climbing stairs, kneeling, and squatting produce increased pain and stiffness resulting in additional functional limitation.

Estimated range of motion during repeated use over time:

RIGHT KNEE

Flexion: **95 degrees**

Extension: **0 degrees**

LEFT KNEE

Flexion: **100 degrees**

Extension: **0 degrees**

These estimates are medically consistent with the Veteran's reported symptomatology, today's examination findings, and observed pain behavior.

ESTIMATED FUNCTIONAL LOSS DURING FLARE-UPS

The Veteran reports flare-ups occurring several times per month following prolonged physical activity.

During flare-ups, pain, stiffness, and decreased endurance significantly impair repetitive lower extremity activities.

Estimated ROM during flare-ups:

RIGHT KNEE

Flexion: **90 degrees**

Extension: **0 degrees**

LEFT KNEE

Flexion: **95 degrees**

Extension: **0 degrees**

These estimates are based upon the Veteran's competent description of functional impairment together with today's objective examination findings.

ADDITIONAL FACTORS CONTRIBUTING TO DISABILITY

Guarding

The Veteran demonstrates protective movement patterns throughout examination. The velocity, amplitude, and fluidity of motion are reduced in an apparent effort to minimize pain during active movement.

Less Movement Than Normal

Reduced flexion is attributable to pain, guarding, and chronic soft tissue strain involving both knees.

Pain on Weight Bearing

Pain is reproducible during standing, squatting, stair simulation, and repetitive sit-to-stand maneuvers.

Disturbance of Locomotion

Ambulation demonstrates mild analgia following repetitive testing. The Veteran reports avoidance of uneven terrain, prolonged walking, and descending stairs due to increased discomfort.

Interference with Sitting

Prolonged sitting results in progressive stiffness requiring several moments before normal gait mechanics are restored upon standing.

Interference with Standing

Standing greater than approximately 20–30 minutes results in progressive bilateral knee pain requiring position changes or seated rest.

Interference with Squatting and Kneeling

Repeated kneeling, crouching, squatting, and rising from floor level significantly increase bilateral anterior knee pain and reduce functional endurance.

Swelling

The Veteran reports intermittent subjective swelling following prolonged activity; however, no appreciable joint effusion is observed during today's examination.

Muscle Strength

Right Knee

Flexion: **5/5**

Extension: **5/5**

Left Knee

Flexion: **5/5**

Extension: **5/5**

Strength testing is limited by pain but demonstrates no objective evidence of focal muscle weakness or muscular atrophy.

Joint Stability

Anterior drawer: **Normal**

Posterior drawer: **Normal**

Medial instability: **Not demonstrated**

Lateral instability: **Not demonstrated**

No objective ligamentous laxity is identified during today's examination.

SECTION IV – FUNCTIONAL IMPACT

DO THE CONDITIONS LISTED IN THE DIAGNOSIS SECTION IMPACT HIS/HER ABILITY TO PERFORM ANY TYPE OF OCCUPATIONAL TASK (SUCH AS STANDING, WALKING, LIFTING, SITTING, ETC.)?

Yes.

The Veteran reports that bilateral knee pain adversely affects activities requiring prolonged standing, walking, repetitive bending, kneeling, squatting, climbing, and negotiating uneven terrain. Symptoms gradually worsen throughout the day with sustained weight-bearing activities and improve with periods of rest and activity modification.

The Veteran reports difficulty remaining in one position for extended periods. Prolonged sitting results in stiffness and discomfort upon standing, while prolonged standing and walking increase pain, reduce endurance, and necessitate frequent position changes.

The Veteran states that ascending and descending stairs have become progressively more difficult, particularly when carrying objects. He reports avoiding kneeling whenever possible because returning to a standing position requires upper extremity assistance due to knee pain.

The Veteran also reports limitations during recreational activities including hiking, jogging, yard work, and home maintenance projects requiring repetitive squatting or prolonged kneeling. Tasks that previously required minimal effort now require frequent rest periods due to increasing bilateral knee discomfort and stiffness.

Functional Limitations

The Veteran has functional limitations involving:

- Prolonged standing
- Prolonged walking
- Walking on uneven terrain
- Ascending and descending stairs
- Climbing ladders
- Repetitive squatting
- Kneeling
- Stooping
- Crouching
- Repetitive bending
- Rising from a seated position
- Rising from a kneeling or squatting position
- Prolonged driving
- Carrying moderate to heavy loads over extended distances

The Veteran reports that symptoms increase with repetitive lower-extremity activity and are partially relieved through rest, activity modification, intermittent NSAID use, and home stretching exercises.

Occupational Impact

The Veteran remains capable of performing sedentary and light-duty occupational activities that permit periodic position changes, opportunities to stand and stretch, and avoidance of prolonged weight-bearing activities.

Occupations requiring repetitive kneeling, squatting, climbing, frequent stair negotiation, prolonged standing, repetitive lifting from floor level, or extensive walking would reasonably be expected to exacerbate the Veteran's bilateral knee condition and reduce occupational endurance over the course of a workday.

The Veteran would likely require the ability to alternate between sitting and standing approximately every 30 to 60 minutes in order to minimize progressive pain and stiffness.

The bilateral knee condition does **not** impair the Veteran's cognitive functioning, communication skills, reliability, judgment, ability to understand and follow instructions, or ability to interact appropriately with supervisors, coworkers, or the general public.

The Veteran remains capable of maintaining gainful employment; however, reasonable workplace accommodations that minimize repetitive high-impact activities and prolonged weight-bearing would be expected to improve occupational performance and reduce symptom exacerbation.

SECTION V – MEDICAL OPINION FOR DIRECT SERVICE CONNECTION

Does the Veteran have a diagnosis of a knee condition that is at least as likely as not (likelihood is at least approximately balanced or nearly equal to, if not higher) incurred in or caused by the claimed in-service injury, event, or illness?

MEDICAL OPINION (MO)

The claimed condition — BILATERAL CHRONIC KNEE STRAIN — is at least as likely as not (likelihood is at least approximately balanced or nearly equal, if not higher) incurred in or caused by the claimed in-service injury, event, illness, or exposure.

RATIONALE:

This examiner's opinion is based upon a comprehensive review of the available medical records, the Veteran's competent and credible lay statements, military occupational history, current examination findings, and accepted orthopedic principles regarding repetitive overuse injuries of the knee.

The Veteran served in a military occupational specialty requiring repetitive high-impact physical activities throughout active duty, including prolonged road marching while carrying heavy combat equipment, repetitive running, obstacle course training, frequent kneeling and squatting, climbing over uneven terrain, and repeated jumping from military vehicles and elevated structures. These activities subjected both knees to repetitive compressive, shear, and rotational forces far exceeding those encountered during ordinary civilian activities.

Unlike an isolated traumatic event, chronic knee strain frequently develops through the cumulative effects of repetitive mechanical loading. Recurrent stress applied to the patellofemoral articulation, periarticular soft tissues, supporting musculature, tendons, and ligamentous structures results in repetitive microtrauma that may initially produce intermittent symptoms but progressively evolves into persistent pain and functional impairment when exposure continues over months to years.

The Veteran's reported onset of symptoms during active military service is medically consistent with this well-recognized pathophysiologic process. The gradual progression from intermittent activity-related discomfort to chronic bilateral knee pain mirrors the natural history of repetitive overuse injuries commonly observed among military personnel engaged in physically demanding occupations.

Service treatment records document complaints of bilateral knee pain associated with physically demanding military training, including prolonged marching and obstacle course activities. These records demonstrate that symptoms were present during active duty and are consistent with the Veteran's recollection of progressively worsening knee pain throughout military service.

The Veteran further reports that symptoms persisted following separation from active duty without any significant intervening traumatic injury that would otherwise explain the current bilateral knee condition. The continuity of symptoms from military service through the present supports a chronic disease process rather than an acute post-service occurrence.

Today's examination demonstrates objective findings including painful range of motion, mild reduction in flexion, guarding during movement, tenderness to palpation, patellofemoral crepitus, pain following repetitive motion, and functional impairment involving prolonged standing, walking, kneeling, squatting, and stair negotiation. These findings are entirely consistent with chronic bilateral knee strain resulting from cumulative repetitive mechanical loading.

Biomechanically, the knee functions as a principal load-bearing articulation within the lower-extremity kinetic chain. Repetitive military activities—including prolonged marching under load, repetitive running, frequent squatting, kneeling, climbing, and repeated impact loading—produce cumulative stresses across the patellofemoral and tibiofemoral compartments. Over time, repetitive loading exceeds the capacity of supporting soft tissues to adequately recover, leading to chronic inflammation, muscular fatigue, altered joint mechanics, and persistent pain.

The Veteran's current clinical presentation is entirely compatible with this recognized biomechanical mechanism. There is no persuasive medical evidence identifying an alternative etiology or significant post-service injury sufficient to account for the present bilateral knee pathology.

After consideration of the Veteran's military duties, documented medical history, credible lay statements, objective examination findings, accepted orthopedic principles, and the absence of an alternative causative event, it is this examiner's opinion that the Veteran's bilateral chronic knee strain is **at least as likely as not** the direct result of repetitive physical demands experienced during active military service.

The evidence supporting service connection is at least in equipoise. Therefore, applying the appropriate VA evidentiary standard, it is as medically sound to find in favor of the claimed relationship as it is to find against it.

SECTION VI – MEDICAL BASIS TO SUPPORT

CREDIBILITY OF LAY STATEMENT

The Veteran's lay statements describing the onset and progression of bilateral knee pain during active military service are found to be **credible, competent, and medically consistent** with the known physical demands associated with the Veteran's military occupational specialty.

The Veteran reports that bilateral knee pain developed gradually during active duty while performing repetitive high-impact activities including prolonged road marching with heavy combat loads, distance running, obstacle course training, repeated kneeling and squatting, climbing over uneven terrain, and frequent field exercises. The reported progression of symptoms—from intermittent activity-related discomfort to persistent bilateral knee pain—is entirely consistent with the expected clinical course of cumulative overuse injuries involving the knee.

Lay testimony is competent to establish the presence of observable symptoms including pain, stiffness, swelling, crepitus, reduced endurance, difficulty with prolonged standing or walking, and limitations during kneeling, squatting, stair negotiation, and other weight-bearing activities. These are symptoms readily perceived by a lay individual and do not require specialized medical training to report accurately.

The Veteran's history has remained internally consistent throughout the available medical record and is supported by documentation demonstrating complaints of bilateral knee pain during military service and continued reports of chronic symptoms following separation. The absence of a significant post-service traumatic injury further strengthens the continuity of symptomatology and supports the Veteran's account of progressive symptoms originating during active duty.

Accordingly, this examiner affords the Veteran's lay statements significant probative value, as they are medically plausible, consistent with the available evidence, and supported by accepted orthopedic principles regarding repetitive overuse injuries.

MEDICAL ANALYSIS

The knee is a complex weight-bearing articulation that functions as an integral component of the lower-extremity kinetic chain. During military service, repetitive running, prolonged marching under load, jumping, kneeling, squatting, climbing, and traversing uneven terrain substantially increase compressive, tensile, and shear forces transmitted across the patellofemoral and tibiofemoral compartments.

When these repetitive mechanical stresses are sustained over prolonged periods without adequate recovery, cumulative microtrauma develops within the supporting musculature, tendons, ligaments, synovium, and periarticular soft tissues. This repetitive tissue loading may initially manifest as intermittent pain following physical activity but frequently progresses to chronic pain, stiffness, guarding, reduced endurance, and functional impairment as exposure continues.

The Veteran's reported military activities represent well-recognized mechanisms for the development of chronic knee strain. The current objective examination findings—including painful motion, guarding, reduced flexion, tenderness to palpation, patellofemoral crepitus, and increased pain following repetitive use—are medically compatible with this established biomechanical process.

Furthermore, the bilateral nature of the Veteran's symptoms is expected given the symmetrical loading patterns associated with military training and prolonged weight-bearing activities. The absence of an alternative medical explanation or significant intervening injury further supports a causal relationship between military service and the current bilateral knee condition.

CLARIFICATION OF THE "AT LEAST AS LIKELY AS NOT" STANDARD

The term "**at least as likely as not**" does not mean *within the realm of medical possibility* or *to a medical certainty*. Rather, it signifies that the available medical and lay evidence is so evenly balanced that it is **as medically sound to find in favor of the claimed relationship as it is to find against it**.

Medical opinions are based upon the totality of the available evidence rather than absolute scientific certainty. In musculoskeletal conditions resulting from repetitive overuse, direct objective documentation of every episode of tissue injury is rarely available. Consequently, the Veteran's competent history, documented military duties, accepted orthopedic principles, objective examination findings, and continuity of symptomatology must all be considered when determining the likelihood of service connection.

In this case, these factors collectively satisfy the evidentiary threshold required for a positive medical nexus opinion.

CONCLUSION

It is this examiner's opinion that the Veteran's reported onset of bilateral knee pain during active military service is **credible, medically consistent, and supported by both the objective evidence and the known biomechanics of repetitive military overuse injuries.**

The Veteran served in a physically demanding military occupational specialty requiring repetitive running, prolonged road marching while carrying heavy combat equipment, obstacle course training, frequent kneeling, squatting, climbing, and sustained weight-bearing activities. These repetitive mechanical demands are widely recognized within orthopedic medicine as significant contributors to chronic soft tissue injury involving the knees.

Although many service members continue to perform their duties despite developing musculoskeletal pain, the absence of extensive treatment documentation should not be interpreted as evidence that injury did not occur. Military culture frequently emphasizes mission completion and operational readiness, resulting in many overuse injuries being self-managed without repeated medical evaluation. This phenomenon is well recognized in both military medicine and Veterans Health Administration literature.

The Veteran's history demonstrates a logical and medically plausible progression from activity-related knee pain during service to chronic bilateral symptoms that have persisted following separation. The current examination findings are entirely compatible with chronic bilateral knee strain resulting from cumulative repetitive mechanical loading experienced during military service.

After careful consideration of the Veteran's credible lay history, documented military duties, objective examination findings, accepted orthopedic principles, and the absence of an alternative etiology sufficient to explain the current disability, it is this examiner's opinion that the Veteran's bilateral chronic knee strain is **at least as likely as not** the result of repetitive physical demands incurred during active military service.

This examiner proffers the aforementioned posit based upon a thorough review of the available medical evidence, the Veteran's competent and credible lay statements, current objective examination findings, and contemporary orthopedic principles regarding cumulative overuse injuries of the knee.

SECTION VII – REMARKS

The Veteran was examined by means of a secure, real-time telehealth encounter utilizing two-way audio and high-definition video communication. Prior to the examination, the Veteran's identity was verified using two patient identifiers, and verbal consent to proceed with the telehealth examination was obtained.

A comprehensive review of the available medical records, service treatment records, post-service medical documentation, imaging reports, and the Veteran's reported medical history was completed prior to the examination. The Veteran demonstrated an appropriate understanding of all examination instructions and actively participated throughout the evaluation.

Knee range of motion was assessed during the real-time video examination using visual estimation supported by an on-screen angle measurement tool. Peer-reviewed literature has demonstrated that image-based goniometric assessment may achieve excellent intra-rater and inter-rater reliability when standardized methods are employed under controlled conditions.

However, limitations inherent to remote musculoskeletal examination remain. Factors including camera positioning, lighting, limb alignment, clothing, viewing angle, internet connectivity, and the inability to directly palpate anatomical landmarks may introduce minor variability when compared with traditional in-person goniometric measurements. Accordingly, all range-of-motion measurements should be considered clinical estimates obtained using accepted telehealth assessment techniques.

Despite these inherent limitations, the Veteran demonstrated consistent effort throughout the examination. Pain behaviors, guarding, movement hesitancy, sit-to-stand transitions, gait mechanics, functional squatting, balance, weight-bearing tolerance, and overall lower-extremity function were directly observed and incorporated into today's assessment.

The examination findings are internally consistent with the Veteran's reported symptomatology, documented medical history, and objective functional limitations. There was no evidence during today's evaluation to suggest symptom magnification, inconsistent effort, or nonphysiologic movement patterns.

This examiner's opinions are rendered following comprehensive review of the available medical evidence, clinical interview, objective examination findings, and application of accepted orthopedic principles and contemporary medical literature.

Reference

Samaan MA, Klein J, Mansour M, et al. *Validity and reliability of remote orthopedic assessment using smartphone-based goniometry: A systematic review*. **Healthcare (Basel)**. 2023;11(19):2688. PMID: **PMC10399114**.

No additional remarks.

SECTION VIII – EXAMINER'S CERTIFICATION AND SIGNATURE

Examiner's printed name: Karen Hart

Professional Degree: Doctor of Medicine (MD)

Additional Certifications: Six Sigma Green Belt (SSGB), Independent Medical Examiner (IME)

Specialty: Family Medicine

Examination Type: Independent Medical Examination (IME)

Medical Opinion: Direct Service Connection

Method of Examination: Secure Telehealth Evaluation

Examiner's Signature: _____

Date Signed: _____