BEFORE THE IOWA WORKERS' COMPENSATION COMMISSIONER

RHONDA KETELSEN, Claimant, vs. DENISON COMMUNITY SCHOOL DISTRICT, Employer, and EMC INSURANCE, Insurance Carrier, Defendants.	File No. 1601726.01 ARBITRATION DECISION Head Note Nos.: 1106, 1107, 1803

STATEMENT OF THE CASE

Claimant Rhonda Ketelsen seeks workers' compensation benefits from the defendants, employer Denison Community School District (District) and insurance carrier EMC Insurance (EMC). The undersigned presided over an arbitration hearing on September 20, 2021. It was held by internet-based video under order of the Commissioner.

Ketelsen participated personally and through attorney James Byrne. Darlene Liveringhouse was the representative for EMC. Scott Larson served as the District's representative. The defendants both participated through attorney Paul Barta.

ISSUES

Under rule 876 IAC 4.149(3)(*f*), the parties jointly submitted a hearing report defining the claims, defenses, and issues submitted to the presiding deputy commissioner. The hearing report was approved and entered into the record via an order because it is a correct representation of the disputed issues and stipulations in this case. The parties identified the following disputed issues in the hearing report:

1) Did Ketelsen sustain an injury on April 28, 2015, arising out of and in the course of her employment with the District?

2) What is the nature and extent of permanent disability, if any, caused by the alleged injury?

3) Is Ketelsen entitled to taxation of the costs against the defendants?

STIPULATIONS

In the hearing report, the parties entered into the following stipulations:

1) An employer-employee relationship existed between Ketelsen and the District at the time of the alleged injury.

2) Ketelsen's entitlement to temporary disability or healing period benefits is no longer in dispute.

3) The commencement date for permanent partial disability (PPD) benefits, if any are awarded, is August 20, 2018.

4) At the time of the stipulated injury:

    a) Ketelsen's gross earnings were five hundred seventeen and 71/100 dollars ($517.71) per week.

    b) Ketelsen was married.

    c) Ketelsen was entitled to three exemptions.

5) Prior to hearing, the defendants paid to Ketelsen eighty-eight and 36/100 (88.36) weeks of compensation at the rate of three hundred fifty-eight and 65/100 dollars ($358.65) per week.

The parties' stipulations in the hearing report are accepted and incorporated into this arbitration decision. The parties are bound by their stipulations. This decision contains no discussion of any factual or legal issues relative to the parties' stipulations except as necessary for clarity with respect to disputed factual and legal issues.

FINDINGS OF FACTS

The evidentiary record in this case consists of the following:

- Joint Exhibits (Jt. Ex.) 1 through 14;
- Claimant's Exhibits (Cl. Ex.) 1 through 2 and 4 through 6;
- Defendants' Exhibits (Def. Ex.) C through Q; and
- Hearing testimony by Ketelsen and Larson.

After careful consideration of the evidence and the parties' post-hearing briefs, the undersigned enters the following findings of fact.

Ketelsen was 56 years of age at the time of hearing. (Hrg. Tr. p. 11) She achieved average grades in high school. (Hrg. Tr. p. 11) She earned her high school diploma. (Hrg. Tr. p. 11)

Ketelsen has not pursued postsecondary education outside of training through her job with the District. (Hrg. Tr. p. 11) In 2008, she obtained certification to be a teacher's associate. (Hrg. Tr. p. 12) She took classes relating to her work as a teacher's associate. (Hrg. Tr. p. 11–12)

Ketelsen worked as a server at a café while in high school. (Hrg. Tr. p. 13; Cl. Ex. 2, p. 31) It required her to carry trays to tables. She estimated the heaviest tray might weigh as much as 25 pounds. (Hrg. Tr. p. 13) Ketelsen had to stand and walk a lot while working as a server. (Hrg. Tr. p. 13–14) She credibly testified she is physically incapable of working as a server because the physical limitations she has from the work injury prevent her from standing for long periods on hard floors, carrying trays, and bending over to pick up objects. (Hrg. Tr. p. 14)

Ketelsen next worked at Farmland Foods (now Smithfield) on the line at a meatpacking plant. (Hrg. Tr. p. 14) In that job, she had to lift boxes weighing up to seventy-five pounds. (Hrg. Tr. p. 14) Ketelsen either stood on the line or was on the floor packing boxes. (Hrg. Tr. p. 14) She testified she could not perform the duties of the job today because she could not stand on concrete or lift seventy-five pounds as the job required. (Hrg. Tr. p. 15)

In 1998, the District hired Ketelsen. (Hrg. Tr. p. 15) Her first job was working in the kitchen, where she had to carry tubs of fruit, set up food on the line, and take out garbage. (Hrg. Tr. p. 16) It was a part-time job and she had to spend her shift standing and walking. (Hrg. Tr. p. 18) Ketelsen could not physically perform these job duties at the time of hearing due to her work restrictions. (Hrg. Tr. p. 16)

The District next hired Ketelsen to work as a teacher associate working one-on-one with a student on the autism spectrum. (Hrg. Tr. p. 17) One part of the job involved helping when the student had behavioral issues during the school day. (Hrg. Tr. p. 17) For example, Ketelsen was required to get down on the floor to help soothe the student or to give chase if the student eloped. (Hrg. Tr. 17) Because of Ketelsen's work restrictions, she would be unable to engage in the acts of bending, stooping, lifting, or running required when she worked one-on-one as a teacher associate assigned to a student with a disability. (Hrg. Tr. pp. 17–18)

Ketelsen next worked for the District as a teacher associate working for a teacher instead of one-on-one with a student. (Hrg. Tr. p. 18) Her job duties included making copies, leading group work with students, supervising the lunch room, recess duty, and supervising students arriving at and leaving school before and after the school day.

(Hrg. Tr. p. 18) Ketelsen credibly testified she could not do the job at the time of hearing because of her work restrictions and her inability to stand to supervise the lunch room and oversee students at recess, before school, and after school. (Hrg. Tr. p. 19) She also could not navigate the uneven terrain as required during recess duty. (Hrg. Tr. p. 19)

Dennis Crabb, M.D., was Ketelsen's primary care physician in Denison. (Hrg. Tr. p. 21) In or around the year 2000, Ketelsen sought care from Dr. Crabb for right-knee pain. (Jt. Ex. 1, p. 1; Hrg. Tr. p. 21) The medical records from that appointment reference an earlier x-ray of her knee but Ketelsen could not recall when that occurred. (Jt. Ex. 1, p. 1; Hrg. Tr. p. 21) Her symptoms resolved after conservative care. (Hrg. Tr. p. 21)

In 2002, Ketelsen experienced back pain and sought care. (Hrg. Tr. p. 23) Ketelsen tested negative for rheumatoid arthritis and positive for strep throat. (Hrg. Tr. pp. 23–24) After medication, Ketelsen's symptoms resolved. (Hrg. Tr. p. 24)

In 2006, Ketelsen fell while working for the District. (Hrg. Tr. p. 21) The District provided care. (Hrg. Tr. p. 22) Magnetic resonance imaging (MRI) showed:

> There is marked destruction of the anterior horn of the lateral meniscus which, in part, may reflect acute injury as well as significant degenerative change. There is severe loss of cartilage in the lateral joint space with large marginal osteophytes in all compartments. There is a moderate joint effusion.

(Jt. Ex. 2, p. 6) Ketelsen chose physical therapy over surgery and her symptoms resolved without an operation. (Hrg. Tr. p. 22)

Ketelsen sought care from Dr. Crabb in 2009, complaining of bilateral knee pain. (Jt. Ex. 1, p. 5; Hrg. Tr. pp. 22–23) Dr. Crabb noted she was "having a lot of knee pain problems." (Jt. Ex. 1, p. 5) X-rays of the right knee showed:

> There are moderately advanced tricompartmental degenerative changes demonstrated with joint space narrowing and marginal osteophyte formation identified. Findings are most pronounced in the lateral compartment where there is significant joint space loss. There is a small joint effusion demonstrated.

(Jt. Ex. 2, p. 8) Left-knee s-rays showed:

> There is moderate to moderately advanced tricompartmental degenerative change demonstrated. Findings are most pronounced in the patella femoral compartment where there is a lateral tilt of the patella and significant joint space along the articulation of the lateral facet, and lateral femoral condyle. Large condylar spur is demonstrated. Joint effusion is present.

(Jt. Ex. 2, p. 8)

Dr. Crabb observed she was walking "with an antalgic gait pattern." (Jt. Ex. 2, p. 10) He noted, "She's not really wanting to pursue getting knee replacement, although she's going to come to that sooner rather than later." (Jt. Ex. 1, p. 5) Ketelsen opted for conservative care in the form of physical therapy, which resolved her symptoms. (Hrg. Tr. p. 23; Jt. Ex. 1, p. 5) Ketelsen did not experience knee pain or walk with a limp again until after the knee injury she sustained on April 28, 2015, when she fell while leaving work. (Hrg. Tr. pp. 25, 98–99)

In 2015 and for several years prior, Ketelsen worked for the District at Broadway Elementary School. (Hrg. Tr. pp. 30, 85) The school is located on a street named Broadway in Denison. (Hrg. Tr. pp. 29, 85; Ex. K, p. 1) The District does not have a parking lot at Broadway Elementary School for staff to use. (Hrg. Tr. pp. 97–98)

Most District employees who drive to work at Broadway Elementary School park their vehicles in street parking spots. (Hrg. Tr. pp. 31, 109) Some of the street parking spots on Broadway are abutted to the District's property where the school is located but none were reserved for employees of the District. (Hrg. Tr. pp. 29, 94, 109, 110) The street parking spaces in front of Broadway Elementary School are not on District property. (Hrg. Tr. p. 85) Nonetheless, both the District and the City of Denison remove snow from the parking spaces. (Hrg. Tr. pp. 34, 95–97, 102, 111–13) The District is responsible for maintaining the green space between the sidewalk and parking spots, which includes grass and trees. (Hrg. Tr. p. 110)

On April 28, 2015, Ketelsen drove her vehicle to work. (Hrg. Tr. p. 28) She parked in a parking spot immediately in front of the school. (Hrg. Tr. p. 32) This location was where she usually parked during her several years working at Broadway Elementary School. (Hrg. Tr. p. 32) After Ketelsen clocked out that day, she exited the school through the main entrance to the building and walked about seventy-five feet down a walkway on school property to the parking spot where she had parked her vehicle. (Hrg. Tr. pp. 29–31)

Because of a tree and to avoid ruts in the ground, Ketelsen walked around the back of her vehicle to get to the driver's door. (Hrg. Tr. pp. 32, 86) Three to five seconds after leaving school property and six to eight feet from its edge, Ketelsen tripped on a stick that was on the ground near the rear of her vehicle. (Hrg. Tr. pp. 26, 33, 86) She fell forward and landed partly in the parking space and partly in the street. (Hrg. Tr. pp. 26, 88) Ketelsen's right knee was the first part of her body to strike the asphalt. (Hrg. Tr. p. 26) As a result she sustained a direct blow to her right knee, which took most of the impact when she hit the ground. (Hrg. Tr. p. 26)

When Ketelsen hit the asphalt, she immediately felt pain located primarily in her right knee. (Hrg. Tr. p. 27) Her pain was sharp and shooting in nature. (Hrg. Tr. p. 27) She got up, limped into the school, and reported her fall to a secretary in the office. (Hrg. Tr. p. 35)

Dr. Crabb ordered x-rays, which were performed on April 30, 2015, compared to her 2009 x-rays, and showed in her right knee:

> Severe lateral joint space narrowing is noted. Associated sclerosis is noted. Medial and lateral osteophyte formation is seen. Patellofemoral osteophyte formation is noted. There is a small joint effusion. No acute fracture dislocation or destruction is evident.

(Jt. Ex. 2, p. 12) An MRI of Ketelsen's right knee showed:

1) Moderately advanced tricompartmental degenerative changes. There is eburnation of articular cartilage in the medial and lateral compartments. There is full thickness fissuring of articular cartilage in the trochlea and on the lateral facet of the patella.

2) Chronic rupture of the anterior cruciate ligament with severe heterogeneous signal of the posterior cruciate ligament also likely related to sequela of prior injury. There may be a few intact PCL fibers.

3) Maceration of the lateral meniscus. There is vertical free edge tearing of the medial meniscus.

4) Laxity and thickening of the medial collateral ligament with tibial collateral pes anserine bursal fluid. Findings may be degenerative or may relate to sequela of prior injury.

5) Heterogeneous signal in the distal aspect of the iliotibial band and in the fibular collateral ligament likely related to sequela of prior sprain.

6) Lateral tilt of the patella. There is large joint effusion.

(Jt. Ex. 2, p. 13-14)

Ketelsen was off work for about two and one-half months during summer break. (Jt. Ex. 2, p. 15) She was in pain, but it was not as bad due to her ability to rest. (Jt. Ex. 2, p. 15) After Ketelsen returned to work at the start of the school year, her pain level increased due to the need to stand and walk on a hard surface to perform her job duties. (Jt. Ex. 2, p. 15)

Dr. Crabb referred Ketelsen to Steven Goebel, M.D. (Jt. Ex. 4, p. 95) Dr. Goebel examined Ketelsen on October 7, 2015, and noted her weight was a problem because it limits treatment options. (Jt. Ex. 4, p. 96) Dr. Goebel noted she would likely need a total knee replacement someday but did not recommend such a procedure, only aggressive physical therapy. (Jt. Ex. 4, p. 96)

Ketelsen participated in physical therapy as Dr. Goebel recommended. (Jt. Ex. 2, pp. 15–54) Ketelsen's lower back pain reemerged in early November of 2015, which

she attributed at the time to having more work to get ready for Veteran's Day. (Jt. Ex. 2, p. 18) Gail Schlueter, P.T., noted on November 17, 2015, "Her back pain has been an issue with increasing her exercise program although she has made some good improvements in strength and pain." (Jt. Ex. 2, pp. 19–20)

On November 18, 2015, Ketelsen followed up with Dr. Goebel. (Jt. Ex. 4, pp. 101–02) He stressed weight loss to her because she needed a total knee replacement but needed to lose seventy-five pounds before he could perform the surgery. (Jt. Ex. 4, p. 102) Dr. Goebel prescribed continued physical therapy. (Jt. Ex. 4, p. 102) He advised EMC in a letter dated the same day that Ketelsen required conservative treatment until appropriate weight loss before eventual total knee replacement surgery. (Jt. Ex. 4, p. 100)

On December 3, 2015, Jamie Gross, D.P.T., noted an antalgic gait. (Jt. Ex. 2, p. 22) Gross also recorded that Ketelsen complained of left knee pain while completing her standing exercises. (Jt. Ex. 2, p. 22) However, according to Gross's notes Ketelsen had no complaints of back pain during the exercise regimen she performed that day. (Jt. Ex. 2, p. 22)

Ketelsen next saw Dr. Goebel on December 21, 2015, who noted her work at physical therapy resulted in a loss of twenty-two pounds. (Jt. Ex. 4, p. 107) Dr. Ketelsen noted she was going to concentrate on weight loss and continue physical therapy. (Jt. Ex. 4, p. 107) He opined she will be a knee replacement candidate but the "arthritic aspect" of her knee condition "was not caused by the Work Comp injury." (Jt. Ex. 4, p. 107)

Physical therapy providers did not note complaints about back or left-knee pain in notes from Ketelsen's physical therapy in January and February of 2016. (Jt. Ex. 2, pp. 23–25) In a progress note dated February 15, 2016, Schlueter noted Ketelsen shared she continued to feel unsteady, fell on occasion due instability, and usually fell to her right. (Jt. Ex. 2, p. 25) However, she made no mention of Ketelsen experiencing left-knee or back pain. (Jt. Ex. 2, p. 25) Neither did Dr. Geobel in the notes from his February 1, 2016 examination of her. (Jt. Ex. 4, pp. 110)

Physical therapy notes from March 2016 also contain information about Ketelsen's physical limitations and pain in her right knee but do not mention any complaints of back or left-knee pain. (Jt. Ex. 2, pp. 26–27) Schlueter did not mention Ketelsen experiencing pain in her back or left knee in her March 25, 2016 progress note. (Jt. Ex. 2, p. 28)

Dr. Goebel saw Ketelsen on April 4, 2016. (Jt. Ex. 4, p. 112–13) He noted she was "gradually worsening again" after "doing great for three weeks." (Jt. Ex. 4, p. 112) Dr. Goebel continued physical therapy. (Jt. Ex. 2, p. 29)

Schlueter's note regarding the plan for this round of physical therapy made no mention of back or left-knee pain. (Jt. Ex. 2, pp. 29–30) It references issues regarding

her right knee. (Jt. Ex. 2, pp. 29–30) From then through September 8, 2016, none of Ketelsen's medical records reference her experiencing pain in her back or left knee while performing exercises or in her everyday life. (Jt. Ex. 2, pp. 31–36; Jt. Ex. 4, p. 116)

In a note from September 12, 2016, Schlueter noted Ketelsen "reports a little bit more discomfort with being up on her feet a lot over the weekend. She feels like the right knee is going to give out, but also feels that the left knee is more uncomfortable for her." (Jt. Ex. 2, p. 37) Two days later, Schlueter notes "the left knee is bothering some due to increased use and relying on that knee more." Jt. Ex. 2, p. 38)

On September 16, 2016, Dr. Goebel examined Ketelsen but did not note any issues with her left knee. (Jt. Ex. 4, pp. 119–20) But on September 19, 2016, he evaluated Ketelsen's left knee. (Jt. Ex. 4, p. 121) He noted increasing pain and that she was "compromised secondary to the right knee with the instability that she has." (Jt. Ex. 4, p. 121) Dr. Ketelsen noted x-rays showed "medial joint line bone-on-bone osteoarthritis as well as patellofemoral end stage osteoarthritis." (Jt. Ex. 4, p. 121) He diagnosed her with end stage osteoarthritis. (Jt. Ex. 4, p. 121) Ketelsen rejected an injection to treat her symptoms, opting instead to live with the pain. (Jt. Ex. 4, p. 121)

Ketelsen saw Dr. Goebel again on December 19, 2016. (Jt. Ex. 4, p. 125) Her right knee was still unstable and caused her pain. (Jt. Ex. 4, p. 125) Dr. Goebel noted she would have a choice to make in two months about whether to proceed with a total knee replacement or accept her functional limitations. (Jt. Ex. 4, p. 125) Ketelsen continued physical therapy. (Jt. Ex. 2, pp. _–_)

On February 20, 2017, Dr. Goebel recounted her case. (Jt. Ex. 4, pp. 129–32) He noted at that time she "ambulates with an antalgic gait." (Jt. Ex. 4, p. 129) Dr. Goebel also described her ongoing right-knee symptoms, including pain and instability, and made no reference to any back or left-knee complaints. (Jt. Ex. 4, p. 129–30) After a long discussion, Ketelsen decided to undergo right total knee replacement surgery pending approval by EMC. (Jt. Ex. 4, p. 130)

EMC did not approve the surgery. Instead, the defendants sent Ketelsen for an IME with Erik Otterberg, M.D. (Jt. Ex. 5, pp. 194–96) Dr. Otterberg agreed with Dr. Goebel's conclusion that Ketelsen required a right total knee replacement. (Jt. Ex. 5, p. 195) However, he felt Ketelsen needed to participate in a medical weight loss program before doing so to reduce her weight and the risk of post-knee-replacement complications with it. (Jt. Ex. 5, p. 195)

Ketelsen returned to Dr. Goebel on May 22, 2017. (Jt. Ex. 4, p. 134) He agreed that a medical weight loss program would be beneficial. (Jt. Ex. 4, p. 134) Dr. Goebel developed a plan for her lose to fifty pounds before surgery. (Jt. Ex. 4, p. 134) Ketelsen got her weight down to two hundred and ninety-four pounds on December 4, 2017, and Dr. Goebel decided to move forward with surgery because of her ongoing pain and instability in her right knee. (Jt. Ex. 4, p. 140–43)

On February 1, 2018, Dr. Goebel performed a total knee replacement surgery on Ketelsen's right leg. (Jt. Ex. 6, pp. 197–202) Dr. Goebel prescribed physical therapy for gait training, range of motion, and quad strengthening as part of her post-surgery rehabilitation. (Jt. Ex. 4, p. 144) Ketelsen followed up with Dr. Goebel and participated in physical therapy as directed. (Jt. Ex. 4, pp. 145–64; Jt. Ex. 6, p. 202)

On March 9, 2018, records from her physical therapy note she "tends to lean over to the left side with her body to take the weight off of the right leg as much as possible even though there isn't much pain." (Jt. Ex. 2, p. 44) On March 13, 2018, her physical therapy records note, "after last session, increase in back pain when going from sitting to standing. Does work itself out after she is up and moving for a while." (Jt. Ex. 2, p. 45) As of March 19, 2018, her back pain prevented her from being able to do a straight leg raise. (Jt. Ex. 2, p. 46) Ketelsen also had a "slight antalgic gait pattern during stance phase of gait cycle" and "use[d] a single point cane on left side for support" to prevent an "increased antalgic gait." (Jt. Ex. 2, p. 46)

Dr. Goebel's notes from Ketelsen's April 19, 2018 exam state:

> The patient states she is doing well and is noticing improvement on a daily basis. She is ambulating well without any assistive device. She admits her scar is still sensitive, specifically to the touch, as well as noticing an occasional clicking in the knee. She continues with therapy. She has no other concerns at this time.

(Jt. Ex. 4, p. 153) There is no mention of pain in her back or left knee. (Jt. Ex. 4, p. 153) Ketelsen felt ready to return to work but had concerns about working full days so Dr. Goebel released her to return to work to do full days and half-days as needed. (Jt. Ex. 4, pp. 153, 155)

On May 21, 2018, Dr. Goebel noted Ketelsen was "only getting better" and was "happy with the knee." (Jt. Ex. 4, p. 156) He felt she was "doing very well." (Jt. Ex. 4, p. 156) Consequently, Dr. Goebel scheduled Ketelsen for a follow-up in August at which time he anticipated finding her at maximum medical improvement (MMI). (Jt. Ex. 4, p. 156) He released her to work full duty. (Jt. Ex. 4, pp. 156, 161)

Ketelsen saw Dr. Goebel as planned on August 20, 2018. (Jt. Ex. 4, p. 162) He noted she had returned to work at the start of the school year and was experiencing some aching in her right knee but was doing much better overall. (Jt. Ex. 4, p. 162) Dr. Goebel found Ketelsen at MMI, released her from care, assigned no permanent work restrictions, and prescribed follow-up x-rays in February of 2019. (Jt. Ex. 4, p. 162)

After Dr. Goebel released Ketelsen from care for her right knee, she began having issues with pain that radiated from her buttock around to her groin and down the back side of her leg when driving and going from a sitting to standing position. (Jt. Ex. 4, p. 165) On examination, Dr. Goebel noted unequal hip heights with the right higher than the left. (Jt. Ex. 4, p. 165)

Leg x-rays showed no complicating factors in the right knee and left-knee arthritis. (Jt. Ex. 4, p. 165) X-rays of the lumbar spine showed degenerative disc disease. (Jt. Ex. 4, p. 165) Dr. Goebel noted:

> With having her total knee done and straightening and lengthening the leg greater than the left, which she is not used to, thus causing aggravated symptoms of her low back, we would like to try a 9/16 heel wedge in the left shoe to see if this can help realign and help relieve her symptoms.

(Jt. Ex. 4, p. 166)

Dr. Goebel opined in a letter to EMC on October 12, 2018, that Ketelsen had reached MMI for the work injury to her right knee. (Jt. Ex. 4, p. 171) She required no work restrictions from the injury in his view. (Jt. Ex. 4, p. 171) On permanent impairment, Dr. Goebel used Table 17-33 of the Fifth Edition of American Medical Association (AMA) Guides to the Evaluation of Permanent Impairment (Guides) to find Ketelsen had sustained a forty percent impairment to her right lower extremity. (Jt. Ex. 4, p. 171)

Twelve days later, Ketelsen returned for follow-up care to address her newly developed right-leg pain. (Jt. Ex. 4, p. 172) The left-heel lift had helped reduce her pain but she still had some lateral pain, including when driving. (Jt. Ex. 4, p. 172) Dr. Goebel recommended a custom 9/16 of an inch heel life with arch support. (Jt. Ex. 4, p. 172)

Ketelsen continued to have radicular symptoms in her right leg when she saw Dr. Goebel on January 3, 2019. (Jt. Ex. 4, p. 176) Dr. Goebel noted her x-rays showed degenerative scoliosis with a curve present. (Jt. Ex. 4, p. 176) He opined:

> I think all of her symptoms that she is having down the right lower extremity are really related to her back. Since surgical intervention, she does have a longer right lower extremity than left lower extremity, and this is possibly causing little accentuated curvature in her spine that could push on the nerve root with underlying stenosis and giving her radicular symptoms down the right lower extremity. We did fit her at her last visit with a heel lift, and this has only been in after an adjustment over the course of the last week. I would like to see what happens with this and see if this helps resolve some of her back pain and radicular pain.
>
> ****
>
> Whether this is work comp related or not is difficult to assess. Obviously, the scoliosis is not workers comp related, but with straightening of her leg and bringing her back out to length of what she was years ago, this has caused a longer right lower extremity than the left. With the underlying changes she has on her left knee, this may contribute a little to the

> increased curvature in her spine, which could cause some radicular symptoms, especially with underlying stenosis.

(Jt. Ex. 4, p. 176)

On March 26, 2019, Kelly Blessen, R.N., noted Ketelsen called Dr. Goebel's clinic to express frustration with the heel lift because she did not feel it holds up well and only works with one pair of shoes. (Jt. Ex. 4, p. 170) Ketelsen wanted to know if a total left-knee replacement would correct her leg-length discrepancy and help alleviate her back pain. (Jt. Ex. 4, p. 179) Blessen spoke with Dr. Goebel, who stated he was hesitant to perform a total left-knee replacement because she was not experiencing any pain in her left knee. (Jt. Ex. 4, p. 179)

On May 6, 2019, Ketelsen saw Dr. Goebel, who noted:

> She is here to talk about a left total knee [replacement]. She is currently being treated for a workmen's comp injury for her right knee. She is concerned as her back continues to hurt and she has shortening of the left lower extremity that this will cause more problems. She states that she has neck pain and lumbar pain and multiple areas of pain but her left knee does hurt a lot and it limits her ambulation and safety.

(Jt. Ex. 4, p. 180)

Two days later, Ketelsen called Dr. Goebel's clinic and spoke with Blessen. (Jt. Ex. 4, p. 186) Blessen noted Ketelsen wanted to try a heel lift that builds up her shoe on the outside instead of surgery. (Jt. Ex. 4, p. 186) According to Blessen's nurse note, "She is not in a position to do the left total knee surgery this summer and she isn't necessarily having much in the way of left knee pain." (Jt. Ex. 4, p. 186) Dr. Goebel concluded Ketelsen only needed to follow up with him on an as-needed basis moving forward. (Jt. Ex. 4, p. 186)

On November 2, 2018, Ketelsen had a physical therapy appointment with Alexander Smith, P.T., D.P.T., who noted muscle weakness, pain in both feet, unequal limb length, and other abnormalities of gait and mobility. (Jt. Ex. 7, p. 204) Smith assessed Ketelsen as presenting "with signs and symptoms consistent with left foot pain caused by gait deficits resulting after right knee replacement." (Jt. Ex. 7, p. 204)

On November 19, 2018, Smith fitted Ketelsen with a sole support orthotic that corrected her gait and advised her to ease into its use. (Jt. Ex. 7, p. 206) Ketelsen returned on December 26, 2018, when Smith noted her "gait improved with orthotics but still significant lean over left stance leg when weight bearing suggesting major hip weakness and potential compensation at the low back level that has the potential to increase low back pain." (Jt. Ex. 7, p. 208)

Dr. Goebel referred Ketelsen to Nebraska Spine and Pain Center, where J.P. Ladd, M.D., saw her on January 24, 2019. (Jt. Ex. 8, pp. 209–15) Dr. Ladd noted

Ketelsen was experiencing "low back pain that radiates to both buttocks and down the right leg. (Jt. Ex. 8, p. 210) She informed Dr. Ladd she "noticed trouble with low back and right leg pain when she would drive to and from her doctor's visits, causing her to get our and walk around frequently." (Jt. Ex. 8, p. 210) Ketelsen associated returning to full-duty work with "an increase in her back and lower extremity pain over this time, particularly with learning over desks to help children with their schoolwork." (Jt. Ex. 8, p. 210) She also told Dr. Ladd she "felt her gait never really normalized." (Jt. Ex. 8, p. 210) In September of 2018, Ketelsen began to experience symptoms even when sitting. (Jt. Ex. 8, p. 210) An MRI showed multilevel degenerative changes with focal moderate spinal stenosis at L3-L4, so Dr. Ladd recommended conservative treatment starting with physical therapy. (Jt. Ex. 8, p. 218; Jt. Ex. 9, pp. 263–65)

On March 21, 2019, Ketelsen reported minimal change from physical therapy. (Jt. Ex. 8, p. 222) Dr. Ladd noted her physical therapist felt she would not experience improvement through physical therapy until her leg length discrepancy was addressed. (Jt. Ex. 8, p. 222) He agreed that her leg length discrepancy was "playing a reasonably big role in the patient's ongoing symptoms with the low back," discontinued physical therapy for the time being, and agreed with her seeking a second opinion on her heel insert or shoe build-up. (Jt. Ex. 8, p. 225) Ketelsen went to the Hanger Clinic for an evaluation regarding her left-shoe lift on May 17, 2019, and received a new lift. (Jt. Ex. 8, pp. 228–33)

On September 23, 2019, Ketelsen followed up with Dr. Ladd, who noted, "Her distribution of pain does match spine pathology and stenosis." (Jt. Ex. 8, p. 238) He informed Ketelsen that he did not have any additional conservative treatment to offer other than epidural steroid injections. (Jt. Ex. 8, p. 238) Dr. Ladd opined he would consider Ketelsen to have reached MMI for her back if she refused injections. (Jt. Ex. 8, p. 238) Ketelsen underwent an injection on December 5, 2019. (Jt. Ex. 8, p. 247–49) It provided pain relief for a short period of time and then her symptoms returned. (Jt. Ex. 8, p. 251) During Ketelsen's follow-up examination post-injection, Dr. Ladd opined she was at MMI and he had no additional conservative treatment to recommend for her back symptoms. (Jt. Ex. 8, pp. 257, 259–60)

Ketelsen saw Daniel Nelson, M.D., regarding her leg length discrepancy and left-knee arthritis on October 24, 2019. (Jt. Ex. 10, p. 268) Dr. Nelson noted:

> I do believe that with a left total knee arthroplasty I would correct some of her limb length discrepancy because we would correct her valgus deformity and also make up for lost cartilage. However, just correcting her limb length discrepancy would not necessarily significantly improve her other symptoms. If that were the case, the shoe lift should provide significant benefit and it does not seem to be providing as much as she would hope. We did discuss that the major reason you would want to perform a left total knee arthroplasty is for primary pain and functional limitation in the knee itself. She does not have this at this point, so I am not recommending surgery. I did discuss that physical therapists often

> place more emphasis on limb length discrepancy than orthopedic surgeons do, and I do not necessarily think that a surgery to correct her limb length discrepancy primarily would improve her symptoms.

(Jt. Ex. 10, p. 269)

On February 4, 2020, Ketelsen telephoned Nebraska Spine and Pain Center and spoke to Sheila Woitaszewski, who noted she was having trouble sleeping due to right-side pain in her back. (Jt. Ex. 8, p. 261) According to Woitaszewski's note, Ketelsen said she was trying to use one foot to push the shoe off her other foot when she felt a pop in her back and shooting pain down her left side. (Jt. Ex. 8, p. 261) She called seeking treatment recommendations. (Jt. Ex. 8, p. 261)

On February 14, 2020, Ketelsen was in a car crash. Another vehicle rear-ended the vehicle Ketelsen was driving. (Hrg. Tr. pp. 61–62) The crash caused Ketelsen pain in her left ribs, neck, and back. (Hrg. Tr. p. 62) But the back pain differed from the back pain she experienced following her 2015 fall. (Hrg. Tr. p. 62) The pain following the crash felt like a sore muscle and resolved with time. (Hrg. Tr. p. 62)

Claimant's counsel arranged for Ketelsen to undergo an IME with Sunil Bansal, M.D., on June 29, 2020. (Cl. Ex. 1) As part of the IME, Dr. Bansal reviewed medical records from 2006 through March 17, 2020. (Cl. Ex. 1, pp. 2–13) He also performed a physical examination. (Cl. Ex. 1, pp. 14–16) He then issued an IME report. (Cl. Ex. 1)

In Dr. Bansal's report, he notes tenderness to palpation over her entire right knee with it worse over the medial joint line. (Cl. Ex. 1, p. 14) He tested range of motion and flexion of one hundred twenty-six degrees and no lag on extension. (Cl. Ex. 1, p. 15) Manual muscle testing was uniformly five out of five. (Cl. Ex. 1, p. 15)

Dr. Bansal diagnosed Ketelsen with an aggravation of right-knee arthritis. (Cl. Ex. 1, p. 16) In his opinion, the aggravating event was Ketelsen falling and striking her knee on asphalt while leaving work. (Cl. Ex. 1, p. 16–17) Dr. Bansal agreed with Dr. Goebel's conclusion that she had reached MMI for her right-knee injury on August 20, 2018. (Cl. Ex. 1, p. 16) He opined on permanent disability, "With reference to the [Guides], specifically Table 17-33, she is assigned a 37% lower extremity impairment for her right knee replacement." (Cl. Ex. 1, p. 20)

Dr. Bansal also examined Ketelsen's left knee and noted positive valgus stressing, positive varus stressing, pes anserine bursal swelling, +2 creptius, and tenderness on the medial joint line. (Cl. Ex. 1, p. 15) He measured her flexion at one hundred eight degrees and manual muscle testing of five out of five. (Cl. Ex. 1, p. 15) On extension, Dr. Bansal noted no lag and four out of five manual muscle testing. (Cl. Ex. 1, p. 15) His range-of-motion measurements showed: flexion, seventy-five degrees; extension, twenty-four degrees; left lateral flexion, thirty-five degrees; and right lateral flexion, thirty-two degrees. (Cl. Ex. 1, p. 15)

Based on his review of the records and examination, Dr. Bansal diagnosed Ketelsen with an aggravation of osteoarthritis. (Cl. Ex. 1, p. 16) He placed her at MMI for the condition as of June 29, 2020, the date of his examination. (Cl. Ex. 1, p. 16) On the question of causation, Dr. Bansal opined:

> It is my medical opinion that Ms. Ketelsen's left knee pain is a sequela of her right knee injury, causing her to overcompensate with her left knee and aggravating her left knee degenerative changes.
>
> Walking, especially from overcompensating with a limp, further aggravated by her leg length discrepancy, would increase the ground reaction force as more pressure is exerted against the surface, accelerating the left knee degenerative changes.
>
> From a biophysical standpoint, this awkward mechanical loading would increase the ground reaction force, accelerating her knee degenerative changes.

(Cl. Ex. 1, p. 18)

Dr. Bansal issued the following impairment rating for Ketelsen's left knee:

> Ms. Ketelsen has developed a gait derangement secondary to her longstanding right knee pathology. Consistent with that, she has developed left knee pathology from overcompensation. She now requires the use of a cane for ambulation. This is not her main functional deficit. Per the [Guides], Section 17.2C, Table 17-5 is most appropriate for rating, and is bolded as being reserved for persons who are dependent on assistive devices. This impairment is all inclusive in regard to other impairments for her back or knee, as that table appreciates the proximal and distal sequelae related to gait derangement.
>
> Reviewing Table 17-5, we find that she meets the criteria for mild c., as she requires the use of a cane. Therefore, she is assigned a 15% impairment of the body as a whole.

(Cl. Ex. 1, p. 20)

Dr. Bansal states Ketelsen "requires the use of a cane" but she testified at hearing she stopped using a cane for the most part while still keeping it with her if she ever needs it. This incorrect understanding of Ketelsen's cane use and the fact that Dr. Crabb informed her she would need a left-knee replacement before her work injury,= combine to prevent Ketelsen from proving by a preponderance of the evidence her left-knee issues are a sequela to her 2015 work injury.

With respect to Ketelsen's back complaints, Dr. Bansal opined:

> In regard to her back pain, my diagnosis is sacroiliitis that has progressively worsened in intensity from the altered gait secondary to her right knee pathology. Dr. Cohen from John Hopkins University Medical School states that risk factors for sacroiliitis included leg length discrepancy or altered gaits. It is logical that the back pain manifested months after her right knee injury, as this is a cumulative process. As her right knee pathology and pain is permanent, it follows that her back pathology is permanent, as it is being aggravated by her antalgic gait resulting from her knee condition.

(Cl. Ex. 1, p. 19–20)

Dr. Bansal assigned Ketelsen the following work restrictions: No lifting more than 20 pounds. Limit stairs, standing, sitting, twisting, and bending. Ketelsen had not given the work restrictions prescribed by Dr. Bansal to the District. She testified credibly at hearing that the District's attorney got the restriction and the library associate position she was working when Dr. Bansal assigned them was within those restrictions.

Ketelsen saw Michael Luft, D.O., for what he diagnosed as lumbar radiculopathy on October 6, 2020, and prescribed a Medrol Dosepak. (Jt. Ex. 11, pp. 270–72) On November 30, 2020, Ketelsen had a routine follow-up exam for her surgically repaired right knee. (Jt. Ex. 4, pp. 189–92) Ketelsen shared her right knee was doing well. (Jt. Ex. 4, pp. 189, 191) However, she had other complaints, including back pain. (Jt. Ex. 4, p. 189)

Ric Jensen, M.D., examined Ketelsen on December 23, 2020, for back pain radiating into her legs. (Jt. Ex. 12, pp. 273–75) He prescribed Soma and Lyrica. (Jt. Ex. 12, p. 274) Dr. Jensen ruled out surgery to address the right lateral recess narrowing she had at her L3-4 lumbar segment because it would add mechanical instability. (Jt. Ex. 12, p. 274–75) He recommended maintaining a conservative approach to care. (Jt. Ex. 12, p. 275)

The District has one certified librarian who travels from school to school to work in the libraries. Each school also has a librarian associate, who helps the librarian. Ketelsen knew that her ability to perform the duties of her associate job was hindered by her physical limitations. Consequently, she applied to work in the library, for a job with less demanding job duties. The District hired her to fill the position.

Claimant's counsel sent Dr. Jensen a check-box letter dated March 26, 2021, that contained a summary of Ketelsen's care to date followed by a series of assertions with space for Dr. Jansen to indicate whether he agrees or disagrees. (Jt. Ex. 12, pp. 276–87) In response, Dr. Jensen indicated Ketelsen's work injury and right total knee replacement were a substantial factor in causing her altered gait which in turn caused in substantial part Ketelsen to have mechanical back pain secondary to sagittal and coronal lumbopelvic spinal imbalance. (Jt. Ex. 12, p. 285) Dr. Jensen also indicated Ketelsen may have additional injuries and that she would be a candidate for surgery if

she lost weight. (Jt. Ex,. 12, p. 286) Moreover, he indicated Dr. Bansal's opinions regarding permanent work restrictions, diagnosis of Ketelsen's left-knee injury, and the cause of her left-knee injury. (Jt. Ex. 12, p. 286) Dr. Jensen signed and dated his responses April 16, 2021. (Jt. Ex. 12, p. 286)

Ian Crabb, M.D., reviewed medical records, examined Ketelsen, and issued an IME report dated April 20, 2021. (Ex. Q) He also answered a series of questions from defense counsel. (Ex. Q, pp. 7–10) With respect to Ketelsen's right-knee injury, Dr. Crabb found her to have reached MMI and adopted Dr. Goebel's permanent impairment rating. (Ex. Q, p. 9)

Defense counsel asked Dr. Crabb one question on whether Ketelsen's right-knee injury and the surgery to repair it caused her back pain or left-leg pain. (Ex. Q, p. 8) On whether Ketelsen's right-knee injury substantially contributed to her left knee injury, Dr. Crabb opined:

> With regards to the left knee, the patient has x-ray evidence of moderately advanced arthritis involving the left knee which is preexisting. Certainly, the patient's obesity and significant valgus deformity contribute to her arthritic progression on the left. There is no evidence to suggest that having a contralateral knee replacement should somehow increase the forces on the left knee. It is my opinion that the patient's left knee arthritis is entirely unrelated to her workplace accident of April 28, 2015.

(Ex. Q , p. 8)

In response to the question of whether her right-knee injury substantially contributed to her back pain, Dr. Crabb stated:

> Ms. Ketelsen complained of back pain in the fall of 2018. Evaluation at that time showed that the patient had a congenital scoliosis as well as moderately advanced changes consistent with degenerative arthritis of the spine. It is more likely than not that the patient's underlying degenerative arthritis of the spine is a personal medical condition contributed to by her scoliosis and obesity.
>
> The idea that the patient's leg length has been altered substantially by her total knee replacement exists throughout the chart and in the patient's understanding. This is almost certainly not the case. Although the patient does have a moderately thick spacer on the right knee, she is still in valgus alignment, very similar to her other knee. It is unlikely this altered her leg length by very much. The patient is currently using a 9/16-inch shoe life on her left. This is 14 mm in height.
>
> There is a medical literature on leg length and back pain. Dr. Sheha, M.D., et al published a review in the Journal of Bone & Joint Surgery entitled

> "Leg Length Discrepancy, Functional Scoliosis, and Low Back Pain." In this article, they review the evidence for leg-length discrepancy and back pain, and they conclude, "Given the equivocal nature of the results at this point, we conclude that the correlation between low back pain and leg-length discrepancy is weak at best." They note that patients with childhood leg-length discrepancy and particularly severe leg-length discrepancy can over time develop degenerative changes. They further go on to say that leg-length discrepancy of less than 20 mm does not result in back pain, regardless of prolonged or repetitive loading.
>
> Accordingly, based on the medical literature, and the short period of time in which the patient was subjected to a small amount of leg-length discrepancy, it is my opinion that more likely than not this did not aggravate or alter the patient's underlying degenerative spondylosis. Furthermore, if this were actually the case, this would have been adequately and completely corrected by her shoe lift on the left side.
>
> It is therefore my opinion that the patient has a personal medical condition of scoliosis and degenerative spondylosis of the lumbar spine that has not been aggravated or altered by her right total knee replacement.

(Ex. Q, p. 7–8)

Claimant's counsel shared additional medical records with Dr. Bansal, who reviewed them, and provided a supplement to his original IME report. (Cl. Ex. 1, pp. 22–26) Dr. Bansal signed and dated his supplemental report July 26, 2021. (Cl. Ex. 1, p. 26) He opined that he stands by the opinions in his first report. (Cl. Ex. 1, p. 26) With respect to Dr. Jensen's check-box-letter responses, Dr. Bansal opined, "I concur with Dr. Jensen's opinion that Ms. Ketelsen's altered gait secondary to her right knee pathology is an aggravating factor toward her lumbar spine condition." (Cl. Ex. 1, p. 26)

In response to Dr. Crabb's report, Dr. Bansal stated:

> I also reviewed Dr. Crabb's report, and respectfully disagree with his conclusion that Ms. Ketelsen does not have a significant leg length discrepancy, and therefore it is not contributory toward her lumbar spine condition. There are several issues with his analysis. For one, he was not able to measure the length of Ms. Ketelsen's leg length discrepancy. I did measure it, and found a difference of 19 mm. Second, he cites an article that states that it never found back issues in patients with less than 20 mm of length discrepancy. It should be noted that he cites to a review article that summarized numerous studies. He selectively references a finding from only one of the studies. The other studies had markedly different conclusions:

> *'Friberg, in a study of 653 Finnish military recruits with chronic low back pain and 359 asymptomatic controls, reported an LLD >5 mm in 75% of the low back pain group, compared with 44% of the control group (p , 0.001)6. He further noted that symptomatic patients were 5.32 times more likely than asymptomatic patients to have an LLD >15 mm.'*
>
> As stated above, I measured Ms. Ketelsen's leg length discrepancy which was 19 mm, markedly greater than the 5 mm or 15 mm quoted in the above study, and almost the 20 mm quoted by Dr. Crabb.
>
> Furthermore, a leg length discrepancy is not the only contributor to an altered gait. Other factors include an antalgic gait that is caused by the knee pathology itself, as an individual will shift weight to the other leg and in turn aggravating that leg (knee) as well.

(Cl. Ex. 1, p. 26)

The defendants submitted as Exhibit L, "Leg-Length Discrepancy, Functional Scoliosis, and Low Back Pain," JBJS Reviews 2018;6(8):e6, by Evan D. Sheha, M.D., et al. Dr. Crabb relied on the article to support his opinion on whether Ketelsen's right-knee injury was a substantial factor in causing her back pain. The authors surveyed forty-seven articles on the subject—among them is the Friberg study, part of the article's summary of which Dr. Bansal quotes in his response to Dr. Crabb's report. The final sentence of the paragraph from the article which Dr. Bansal quotes states that Friberg "reported that, among symptomatic patients treated conservatively with a shoe lift and followed for at least 6 months, 91% reported either decreased or resolved symptoms. Active patients who spent substantial time standing and those with spondylolysis and spondylolisthesis experienced a particular positive response." (Ex. L, p. 4)

Friberg's findings regarding the highly successful use of heel lifts to resolve symptoms undermines Dr. Bansal's theory on causation. Accepting *arguendo* Friburg's findings of correlation between leg length discrepancy and back pain, conservative treatment with a heel lift should have resolved the pain. Dr. Nelson opined as much, noting that "just correcting her limb length discrepancy would not necessarily significantly improve her other symptoms. If that were the case, the shoe lift should provide significant benefit and it does not seem to be providing as much as she would hope." (Jt. Ex. 10, p. 269)

Further undermining Dr. Bansal's opinion on causation with respect to Ketelsen's back pain is the conclusion Sheha, et al., reach after surveying the literature on leg-length discrepancy (LLD):

> Much effort has been devoted to understanding the association between low back pain and LLD, but many of the existing studies are small and there have been few randomized controlled trials. Given the equivocal nature of the results at this point, we conclude that the correlation between

> low back pain and LLD is weak at best. It is likely that a certain magnitude of LLD plays a role in low back pain, although it is unclear at this time what degree of LLD is required to cause symptoms. Furthermore, given changes in multiple parameters that tend to occur with LLD (e.g., sacral or pelvic tilt and lumbar scoliosis), it is likely that confounders are at play. Therefore, the true drivers of low back pain in these patients have yet to be fully elucidated.

(Ex. L, p. 5) Thus, while Friburg found a high correlation in his study, the larger survey of studies showed "the correlation between low back pain and LLD is weak at best." (Ex. L, p. 5) Consequently, Dr. Crabb's opinion, which is based in part on the conclusions from the overall survey as opposed to one of the articles surveyed, on whether Ketelsen's leg length discrepancy is a significant factor in causing her back pain is most persuasive.

With respect to causation regarding Ketelsen's left-leg pain as it relates to her right-knee injury, surgery, and resultant leg length discrepancy, Dr. Bansal's opinion is unpersuasive due to the timeline of events. Ketelsen developed left-knee pain after she received a heel lift, which would have mitigated the effects of the leg-length discrepancy. Further, Dr. Bansal's causation opinion and impairment rating are based on gait derangement, which he appears to have had an incorrect understanding of because he rated her disability based on requiring routine use of a cane using Table 17-5 on page 529 of the Guides when Ketelsen did not require routine use of a cane at the time of hearing. For these reasons, it is more likely than not her right-knee injury is not a substantial factor causing her pain. Ketelsen has failed to prove a sequela to her left knee.

Lastly, there is the question of permanent impairment to Ketelsen's right leg due to her injury. Dr. Goebel is a specialist with experience performing total knee replacements. He treated Ketelsen for an extended period of time, which allowed him to develop familiarity with her condition. For these reasons, Dr. Goebel's permanent impairment rating is most credible. It is adopted.

CONCLUSIONS OF LAW

In 2017, the Iowa legislature amended the Iowa Workers' Compensation Act. See 2017 Iowa Acts, ch. 23. The 2017 amendments apply to cases in which the date of an alleged injury is on or after July 1, 2017. Id. at § 24(1); see also Iowa Code § 3.7(1). Because the injury at issue in this case occurred after July 1, 2017, the Iowa Workers' Compensation Act, as amended in 2017, applies. Smidt v. JKB Restaurants, LC, File No. 5067766 (App. December 11, 2020).

1. Zone of Protection.

The defendants initially admitted Ketelsen's injury arose out of and in the course of her employment. Before hearing, they moved to withdraw their admission. The undersigned granted leave to withdraw this admission over Ketelsen's resistance.

The parties' dispute now stems from when and where Ketelsen sustained her injury. The defendants argue that because Ketelsen fell after she clocked out for the workday and in a parking spot on the street that is maintained by the City of Denison and not the District, the injuries that resulted from her fall did not arise out of and in the course of her employment. Ketelsen contends that the circumstances of her injuries have a sufficient nexus with her employment for the District to fall within the purview of chapter 85.

Under the Iowa Workers' Compensation Act, covered employers must generally pay workers' compensation "for any and all personal injuries sustained by an employee arising out of and in the course of employment." Iowa Code § 85.3(1). The legislature codified definitions for purposes of the Act in Iowa Code section 85.61. Subsection 7 provides in pertinent part:

> The words 'personal injury arising out of and in the course of the employment' shall include injuries to employees whose services are being performed on, in, or about the premises which are occupied, used, or controlled by the employer, and also injuries to those who are engaged elsewhere in places where their employer's business requires their presence and subjects them to dangers incident to the business.

The Iowa Supreme Court considered the scope of this definition in Frost v. S.S. Kresege Co., 299 N.W.2d 646 (Iowa 1980). In post-hearing briefing, both parties discuss Frost, a case in which the claimant slipped and fell while walking in wintry conditions on a sidewalk from the employee parking lot to employer's building, where she worked. Id. The agency determined Frost's injury did not arise out of and in the course of her employment because it did not occur on the employer's premises and certain recognized exceptions to the "going and coming" rule did not apply. Id. at 648.

In this case, the defendants argue the "zone of protection" test is part of the formalized "extension of premises" exception to the "going and coming" rule under the Iowa Workers' Compensation Act. (Def. Post-Hearing Brief, pp. 7–12) But this reading incorrectly conflates the two distinct reasons the Iowa Supreme Court found the agency's decision in Frost to be erroneous under the Iowa Workers' Compensation Act. The Frost court held: (1) The injury arose out of and in the course of the claimant's employment independent of any formalized exception to the "going and coming" rule under a "zone of protection" test; and (2) The "extension of premises" exception to the "going and coming" rule also applied to make injury compensable under the Act. Id. at 649–50; see also id. at 650–51 (Schultz, J. concurring in part and dissenting in part)

(concurring with application the "extension of premises" exception to the "going and coming" rule and dissenting with the majority's adoption of the "zone of protection" test).

Thus, independent of the "going and coming" rule, the court held that the claimant's injury arose out of and in the course of her employment under what are now codified as Iowa Code sections 85.3(1) and 85.61(7) because "the site of the injury was so closely related in time, location, and employee usage to the work premises to bring the claimant within the zone of protection" under the Iowa Workers' Compensation Act. Id. at 649. The court ruled the risk did not have to be unique or special to employees to arise out of and in the course of employment. Id. The court concluded, "The nexus of the work relationship [was] so strong that protection under chapter 85 is appropriate without regard to any formalistic exception to the going and coming rule." Id. "[C]hapter 85 provides coverage since this fall was closely connected in time, location, and employee usage to the work premises itself." Id. at 649–50.

Under Frost, the "zone of protection" test is used to determine whether there is a nexus strong enough to bring an injury within the coverage of the Iowa Workers' Compensation Act. The strength of the nexus is evaluated by determining how closely connected the injury was to the work premises with respect to:

1) Time;

2) Location; and

3) Employee usage. 299 N.W.2d at 248.

If these factors combine to establish a strong nexus between the injury and employment, the injury is compensable under the Act without consideration of the "going and coming rule" or its formalized exceptions. Id. at 649. Employer control of the area where the injury occurred is not a factor considered under the "zone of protection" test. See id.

In Frost, the claimant sustained an injury arising out of and in the course of her employment under the Act when she fell on her way to attend an 8:00 a.m. birthday breakfast before an 8:30 a.m. work meeting. Id. at 647. The court concluded the time at which this injury occurred sufficed to create to a strong nexus in the court's view. Id.

In the current case, the time of Ketelsen's injury is after the end of her workday as opposed to before its start, as in Frost, but this is a distinction without a difference in the analysis. Ketelsen's injury occurred less than ten minutes after she clocked out, which is closer in time to the end of her workday than the claimant's injury in Frost was to the beginning of hers. Therefore, the time of Ketelsen's injury relative to her working hours is close enough to support finding of a strong nexus between her employment at the District and the injury under the "zone of protection" test.

In Frost, the claimant fell while walking on a public sidewalk when she slipped on ice as far as twenty feet from her work site. Id. The court found twenty feet to be in close enough proximity to establish a strong nexus between the claimant's employment and the injury. Id. at 647–50. In this case, Ketelsen fell about eight feet from the District's property where she worked, less than half the distance in feet from the distance in Frost. Consequently, the location where Ketelsen's injury occurred relative to her work site supports a finding of a strong nexus between it and her employment with the District.

The final factor of the "zone of protection" test is employee usage of the area where the claimant's injury took place. The claimant in Frost fell on a public sidewalk used by all employees to enter the work site. Id. at 647. The court found this high rate of employee usage weighed in favor of finding a strong nexus between the claimant's injury and her employment. Id. at 647–50.

Here, the school where Ketelsen worked does not have a parking lot. All District employees park on the street, like Ketelsen did on the date she fell and injured her leg, in street parking spots, like the one in which Ketelsen fell and sustained the injury in question. While every District employee did not use the particular parking where Ketelsen fell, every District employee who drives to work uses a similar parking spot on the street. The facts in this case cause the employee usage factor to weigh in favor of finding a strong nexus between Ketelsen's injury and her employment with the District.

For these reasons, Ketelsen has met her burden of proof on whether she sustained an injury to her right knee that arose out of and in the course of her employment with the District on April 28, 2015. Under the Frost "zone of protection" test, the evidence establishes a strong nexus between Ketelsen's injury and her employment. Because Ketelsen's injury satisfies the Frost "zone of protection" test, this decision does not address whether an exception to the "going and coming" rule applies.

2. Causation of Sequelae.

The parties dispute whether Ketelsen's right-knee injury and the surgery to treat it caused sequelae to her left knee and back. The defendants contend neither her leg-length discrepancy nor her altered gait after right total knee replacement caused either injury. Ketelsen contends her leg-length discrepancy and altered gait caused both.

Under the Iowa Workers' Compensation Act, "where an accident occurs to an employee in the usual course of his employment, the employer is liable for all consequences that naturally and proximately flow from the accident." Oldham v. Scofield & Welch, 266 N.W. 480, 482, opinion modified on denial of reh'g, 269 N.W. 925 (Iowa 1936). "[T]he burden of proof is on the claimant to prove some employment incident or activity was a proximate cause of the health impairment on which he bases his claim." Anderson v. Oscar Mayer & Co., 217 N.W.2d 531, 535 (Iowa 1974). "[A] possibility is insufficient; a probability is necessary." Id. The claimant must prove causation by a preponderance of the evidence. See, e.g., St. Luke's Hosp. v. Gray, 604

N.W.2d 646, 652 (Iowa 2000) (citing Quaker Oats Co. v. Ciha, 552 N.W.2d 143, 150 (Iowa 1996)).

"'Whether an injury has a direct causal connection with the employment or arose independently thereof is essentially within the domain of expert testimony.'" IBP, Inc. v. Harpole, 621 N.W.2d 410, (Iowa 2001) (quoting Dunlavey v. Econ. Fire & Cas. Co., 526 N.W.2d 845, 853 (Iowa 1995)). The agency, "as the fact finder, determines the weight to be given to any expert testimony." Sherman v. Pella Corp., 576 N.W.2d 312, 321 (Iowa 1998). The agency must weigh the evidence in a case and accept or reject an expert opinion based on the entire record. Dunlavey, 526 N.W.2d at 853. In doing so, it may accept or reject an expert opinion in whole or in part. Sherman, 576 N.W.2d at 321.

As found above, Ketelsen has not satisfied the burden of proof with respect to medical causation of the sequelae she alleges to her left knee or back. The evidence establishes it is more likely than not that neither the work injury to her right knee or the surgery to treat it were a substantial factor in causing the injuries Ketelsen alleges to her left knee or back. Neither alleged sequela is compensable under the Iowa Workers' Compensation Act.

3. Permanent Disability.

In 2017, the legislature amended the Iowa Workers' Compensation Act. See 2017 Iowa Acts ch. 23. Before the 2017 amendments, the agency could use all evidence in the administrative record, as well as agency expertise, when determining the permanent disability of an injured worker. See, e.g., Miller v. Lauridsen Foods, Inc., 525 N.W.2d 417, 421 (Iowa 1994). Under agency rules before the 2017 amendments, the Guides were considered a "useful tool in evaluating disability." Seaman v. City of Des Moines, File Nos. 5053418, 5057973, 5057974 (App. Oct. 11, 2019) (quoting Bisenius v. Mercy Med. Ctr., File No. 5036055 (App. Apr. 1, 2013)); see also Westling, 810 N.W.2d at 252. However, in cases involving injuries on or after July 1, 2017, the Guides are now more than a tool; they are dispositive.

> [W]hen determining functional disability and not loss of earning capacity, the extent of loss or percentage of permanent impairment shall be determined solely by utilizing the guides to the evaluation of permanent impairment, published by the American medical association, as adopted by the workers' compensation commissioner by rule pursuant to chapter 17A. Lay testimony or agency expertise shall not be utilized in determining loss or percentage of permanent impairment pursuant to paragraphs "*a*" through "*u*", or paragraph "*v*" when determining functional disability and not loss of earning capacity.

Iowa Code § 85.34(2)(*x*).

Thus, the Iowa Workers' Compensation Act now limits the determination of what, if any, permanent disability an injured employee has sustained to only the employee's

functional impairment. In making that determination, the agency is prohibited from using lay testimony or agency expertise by Iowa Code section 85.34(2)(*x*). Under the statute, that determination must be made "solely by utilizing" the Fifth Edition of the Guides.

As found above, Dr. Goebel's opinion on the permanent disability to Ketelsen's right knee is most persuasive. It is adopted by this decision. It is more likely than not Ketelsen sustained a permanent partial disability following total right knee replacement of forty percent to her lower extremity.

Under Iowa Code section 85.34(2)(*p*), entitlement to benefits is based on multiplying the percentage impairment by two hundred twenty weeks. Forty multiplied by two hundred twenty equals eighty-eight. Therefore, Ketelsen is entitled to eighty-eight weeks of compensation for the permanent partial disability to her right leg caused by the work injury to her knee.

4. Rate.

The parties stipulated Ketelsen's gross earnings on the stipulated injury date were five hundred seventeen and 71/100 dollars ($517.71) per week. They also stipulated she was married and entitled to three exemptions at the time in question. Based on the parties' stipulations, Ketelsen's workers' compensation rate is three hundred fifty-eight and 65/100 dollars ($358.65) per week.

ORDER

Based on the above findings of fact and conclusions of law, it is ordered:

1) The defendants shall pay to Ketelsen eighty-eight (88) weeks of permanent partial disability benefits at the rate of three hundred fifty-eight and 65/100 dollars ($358.65) per week from the stipulated commencement date.

2) The defendants shall pay accrued weekly benefits in a lump sum.

3) The defendants shall pay interest on unpaid weekly benefits awarded herein as set forth in Iowa Code section 85.30.

4) The defendants shall be given the credit for benefits previously paid for the stipulated amount of eighty-eight and 36/100 (88.36) weeks at the rate of three hundred fifty-eight and 65/100 dollars ($358.65) per week.

5) The defendants shall file subsequent reports of injury as required by Rule 876 IAC 3.1(2).

6) The defendants shall pay to Ketelsen the following amounts for the following costs:

    a. One hundred three dollars and 00/100 ($103.00) for the filing fee; and

b. Fourteen and 10/100 dollars ($14.10) for the cost of the service of original notice.

7) The parties shall be responsible for paying their own hearing costs. Each party shall pay an equal share of the cost of the transcript.

Signed and filed this 29th day of April, 2022.

BEN HUMPHREY
Deputy Workers' Compensation Commissioner

The parties have been served, as follows:

James Byrne (via WCES)

Paul Barta (via WCES)

Right to Appeal: This decision shall become final unless you or another interested party appeals within 20 days from the date above, pursuant to rule 876-4.27 (17A, 86) of the Iowa Administrative Code. The notice of appeal must be filed via Workers' Compensation Electronic System (WCES) unless the filing party has been granted permission by the Division of Workers' Compensation to file documents in paper form. If such permission has been granted, the notice of appeal must be filed at the following address: Workers' Compensation Commissioner, Iowa Division of Workers' Compensation, 150 Des Moines Street, Des Moines, Iowa 50309-1836. The notice of appeal must be received by the Division of Workers' Compensation within 20 days from the date of the decision. The appeal period will be extended to the next business day if the last day to appeal falls on a weekend or legal holiday.