



FINAL MEDICAL REPORT

Medical Opinion Report

DE-IDENTIFIED VETERAN

CASE

PUBLIC SAMPLE

MEDICAL ISSUES

Obstructive Sleep Apnea

Lumbar Spine Condition

Cervical / Neck Condition

REPORT DATE

2026

This sample is derived from a completed Nexus Medical Opinions report. Direct identifiers and certain dates have been removed or generalized. The medical structure and analytical approach are preserved for demonstration.

NEXUS MEDICAL OPINIONS

MEDICAL EVIDENCE AND OPINION REPORT

PUBLIC SAMPLE

DE-IDENTIFIED VETERAN

Obstructive Sleep Apnea | Lumbar Spine | Cervical / Neck

CLAIM / MEDICAL QUESTIONS

Medical opinions concerning obstructive sleep apnea as secondary to service-connected PTSD, and cervical and low-back conditions under direct-service and PTSD-aggravation theories.

MEDICAL OPINION PATHWAY

The physician supports positive direct lumbar and cervical opinions at the at-least-as-likely-as-not threshold after weighing reported service loading and symptoms against partial records, conflicting onset histories, delayed documentation, congenital cervical anatomy, aging, and other lifetime mechanical contributors. The physician also gives positive causation and aggravation opinions for PTSD-related OSA; the two PTSD-spine aggravation conclusions are nondefinitive.

KEY EVIDENCE

- Documented shipboard electrician's-mate duties and reported physical training, ruck marching, and repetitive load-bearing
- Veteran lay statement, 2026
- Later witness observations of back symptoms and later neck symptoms
- 2022 cervical and lumbar imaging documenting current degenerative findings
- Severe OSA history, obesity and large neck circumference, substantial reported weight gain, and service-connected PTSD

PRIMARY LIMITATIONS

The STR set is PARTIAL, witness timing does not establish active-duty observations, and late 2023 histories materially conflict with the newer service-onset account. Cervical congenital anatomy, later documentation, OSA anatomical and weight-related factors, and missing longitudinal baselines limit attribution.

CONDITION SECTIONS

1. Obstructive Sleep Apnea | 2. Lumbar Spine Condition | 3. Cervical / Neck Condition

The VA evidentiary framework sections are provided for context only and do not constitute legal advice or determine entitlement to VA benefits.

SECTION 1

OBSTRUCTIVE SLEEP APNEA

Secondary causation and aggravation by service-connected PTSD

RELEVANT MEDICAL EVIDENCE

Obstructive sleep apnea was diagnosed in 2007 to 2008 and described as severe. The Veteran used CPAP for approximately nine months before uvulopalatopharyngoplasty and reported little improvement. A 2020 evaluation again documented severe obstructive sleep apnea, a body mass index of 37.7 kg/m², and a 19.5-inch neck circumference. He estimated gaining at least 40 pounds after the original sleep study and approximately 20 pounds during the year before the 2020 consultation. A 2024 medication profile listed PTSD as service connected, and a mental-health record documented middle insomnia associated with rumination.

PHYSICIAN MEDICAL ANALYSIS AND OPINION

The accepted medical pathway is indirect: PTSD-related symptoms or treatment may contribute to weight change, and weight gain is associated with greater sleep-disordered-breathing severity. Prospective evidence links PTSD symptom onset with later weight trajectory in women; a systematic review associates many antidepressant and several antipsychotic therapies with weight gain; and a prospective sleep cohort links a 10 percent weight gain with an approximate 32 percent increase in apnea-hypopnea index. These population findings do not prove this Veteran's pathway, identify a medication effect without medication-specific data, or establish direct PTSD-to-OSA causation.

Obesity, a large neck circumference, airway anatomy, prior upper-airway surgery, aging, activity, diet, and treatment factors remain competing contributors. The record also does not establish when medically attributable PTSD began relative to the original apnea diagnosis or provide a precise pre-aggravation baseline and serial respiratory indices. Even with those limits, the Veteran's substantial reported weight gain and PTSD-related sleep and functional effects remain clinically relevant to my indirect-pathway assessment.

Causation

I considered the indirect weight-related pathway, the timing uncertainty, and the substantial nonpsychiatric risk factors. The medical literature provides general support for the component associations but does not establish this Veteran's result by itself. In my opinion, the veteran's obstructive sleep apnea is at least as likely as not (50 percent or greater) caused by service-connected PTSD.

Aggravation

The record does not quantify a PTSD-attributable change in respiratory indices or establish a precise baseline. I considered the substantial reported weight gain, PTSD-related symptoms, the longitudinal weight-severity literature, and the other anatomical, demographic, and treatment-related contributors. In my opinion, the veteran's obstructive sleep apnea is at least as likely as not (50 percent or greater) aggravated by service-connected PTSD.

VA EVIDENTIARY FRAMEWORK AND RECORD ALIGNMENT

38 C.F.R. § 3.310 provides the framework for disability caused or aggravated by a service-connected condition. Causation and aggravation are distinct medical questions and are therefore addressed separately.

The record relevant to this framework includes an established diagnosis of obstructive sleep apnea, service-connected PTSD, physician opinions addressing both causation and aggravation, a medically explained proposed indirect pathway, case-specific consideration of substantial competing OSA risk factors, and supporting literature used as contextual support rather than proof of individual causation.

The physician's opinions therefore address the medical causation and aggravation questions presented under § 3.310. The medical conclusions remain confined to the physician-authored subsection above.

Authority: 38 C.F.R. § 3.310 (official govinfo source; verified Aug. 19, 2026).

SUPPORTING MEDICAL LITERATURE

The physician analysis uses population-level evidence concerning PTSD symptoms and weight trajectory, psychotropic treatment and weight gain, and the relationship between weight change and sleep-disordered-breathing severity. These sources support component associations; they do not establish this Veteran's pathway by themselves.

[1] Kubzansky et al. (2014) - PTSD symptoms and weight trajectory.

[2] Alonso-Pedrero et al. (2019) - psychotropic treatment and weight gain.

[3] Peppard et al. (2000) - weight change and sleep-disordered-breathing severity.

SECTION 2

LUMBAR SPINE CONDITION

Direct relationship to service and aggravation by service-connected PTSD

RELEVANT MEDICAL EVIDENCE

Private records document lumbar spondylosis. Imaging dated 2022 showed multilevel degenerative disc and facet changes with stenotic findings and no recent fracture. The late 2023 history included both a report of an unevaluated service injury and a report that back pain began after military service. The examiner gave an unfavorable direct-causation opinion based on the lack of contemporaneous evidence, delayed or conflicting onset, and insufficient evidence connecting current disease to military wear and tear. Lumbar pain varied with activity and improved temporarily after medial branch blocks, supporting a mechanical component to the pain.

The enlistment record described a normal spine and no recurrent back pain. Personnel records show shipboard work as an electrician's mate, including maintenance, electrical systems, steering gear, anchor windlass operation, fire watch, and damage control. The Veteran reports that active service also involved frequent physical training, prolonged ruck marches, and repetitive load-bearing activity. He reports cumulative low-back strain, symptoms beginning during service, limited reporting or evaluation, continued activity despite symptoms, and persistence and worsening after separation.

The complete service treatment records are not available for review. That limitation does not establish that an injury occurred, does not establish that no injury occurred, and does not permit an inference about what missing records would have shown. The available lumbar medical and lay evidence must still be evaluated on its own terms.

I also considered the Veteran's first-person statement dated 2026 which he approved and adopted as his own. He reports frequent physical training, prolonged ruck marches, repetitive load-bearing demands, low-back symptoms beginning during service, limited contemporaneous reporting because of perceived stigma and pressure, continued activity, and persistence and worsening after separation. I used this as reported history, not as objective proof of an in-service diagnosis, documented treatment, a specific lesion, or medical nexus.

PHYSICIAN MEDICAL ANALYSIS AND OPINION

The documented electrician's-mate duties and the Veteran's reported training and load-bearing activities are medically compatible with repetitive lumbar stress and provide a plausible exposure history. They do not, by themselves, identify a particular lumbar injury, establish onset of the degenerative disease, or apportion service loading from later lifetime exposures.

The Veteran reports low-back symptoms during service and explains limited reporting in terms of perceived stigma and pressure to continue duties. That explanation is relevant as his account of why contemporaneous documentation is limited. The partial STR record cannot confirm or refute the account, and I do not infer what missing records would have shown. The absence of complete documentation therefore remains a limitation rather than affirmative proof in either direction.

The available clinical record documents lumbar degenerative disease years after separation. Imaging in 2022 establishes current lumbar structural findings, not their date of onset. Later documentation does not exclude an earlier contribution, but it also does not establish continuous lumbar disease from service.

The 2026 statement reports in-service low-back onset with continuity. The late 2023 back history stated that pain began after military service, while also noting a reported unevaluated service injury. I do not assume that the adopted statement automatically overrides or resolves the earlier history. The discrepancy reduces certainty about onset and continuity and is material to the direct-service analysis.

Occupational-loading literature reports a modest, heterogeneous population association between greater loading and spinal degeneration on imaging. It does not establish that shipboard duties caused this Veteran's lumbar spondylosis or apportion service loading from aging, later employment, genetics, injury, and other lifetime mechanical exposure. Considering the lumbar exposure history, reported low-back symptoms, later observations, compatible lumbar degenerative findings, alternative contributors, and the literature's limits, the evidence is sufficient to reach the at-least-as-likely-as-not threshold for the direct lumbar relationship.

Direct relationship to service

I weighed the Veteran's adopted account of repeated training and load-bearing with reported low-back symptoms against the partial service record, the late 2023 post-service onset history, delayed documentation, the prior unfavorable opinion, and aging and other lifetime mechanical exposure. The current multilevel degenerative and facet findings are compatible with cumulative mechanical loading but are not specific to one exposure period. The occupational-loading literature provides general support without proving individual causation. In the context of the entire record, the favorable and adverse considerations are sufficient for the threshold below, but not for a conclusion that service was the sole cause. In my medical opinion, it is at least as likely as not (50 percent or greater probability) that the Veteran's current low-back/lumbar condition is medically related to the repetitive physical demands of active military service, including the reported physical training, prolonged ruck marching, repetitive load-bearing, and associated low-back symptoms.

Aggravation by PTSD

The verified chronic-pain review describes preliminary cross-sectional associations between PTSD, subjective pain severity, and physical interference, but it does not establish permanent structural progression or a PTSD-attributable increase beyond natural degeneration. The record lacks a defined lumbar baseline and objective longitudinal evidence that separates permanent PTSD-related worsening from natural degeneration and mechanical loading. I cannot determine whether PTSD permanently aggravated the lumbar condition beyond its expected course. A definitive positive or negative opinion would require unsupported inference.

VA EVIDENTIARY FRAMEWORK AND RECORD ALIGNMENT

38 C.F.R. § 3.303 frames the direct-service question around current disability, an in-service disease, injury, event, or duty, and a medical relationship between them. Section 3.303(d) permits consideration of a condition diagnosed after discharge when the complete evidence supports the relationship. Section 3.310 separately addresses aggravation by a service-connected condition.

The lumbar record relevant to that framework includes current multilevel lumbar pathology; documented shipboard duties; reported physical training, ruck marching, repetitive load-bearing, and service-onset symptoms; a PARTIAL STR record; witness-timing limitations; 2022 imaging; delayed documentation; a conflicting late 2023 post-service onset account; a prior unfavorable medical opinion; the current physician nexus opinion; and aging and other lifetime mechanical contributors.

Under 38 C.F.R. § 3.159(a)(2), lay evidence may establish matters observable without specialized education or training. Consistent with Jandreau and Kahana, the Veteran may report duties, physical activity, pain, perceived onset, treatment-seeking, symptom reporting, and his reasons for limited reporting. His statement attributes limited reporting to perceived stigma and pressure; this packet does not independently establish a military-wide practice. Medical diagnosis, lesion identification, causation, and permanent aggravation remain medical questions.

The direct opinion addresses the medical nexus question at the at-least-as-likely-as-not threshold. The aggravation analysis remains nondefinitive because the record does not establish the baseline and longitudinal separation needed for a supported permanent-worsening opinion. The evidentiary balance remains an adjudicative question.

Authorities: 38 C.F.R. §§ 3.159(a)(2), 3.303, 3.310; Jandreau v. Nicholson; Kahana v. Shinseki; Acevedo v. Shinseki; Lynch v. McDonough.

SUPPORTING MEDICAL LITERATURE

The lumbar analysis uses occupational-loading literature as population-level support and a chronic-pain review to bound the PTSD-aggravation question. Neither source proves individual causation or permanent structural progression in this Veteran.

[4] Macedo and Battié (2019) - occupational loading and spinal degeneration on imaging.

[5] Ravyts et al. (2026) - PTSD and chronic pain mediation evidence.

SECTION 3

CERVICAL / NECK CONDITION

Direct relationship to service and aggravation by service-connected PTSD

RELEVANT MEDICAL EVIDENCE

Private records document cervical degenerative disc disease. The 2022 MRI showed degenerative changes superimposed on a congenitally narrow canal, moderate C3-4 stenosis, lesser stenoses at other levels, and congenital C2-C3 fusion. The late 2023 examination history placed neck-pain onset approximately eight years earlier, around 2015, while other lay histories report service onset. The late 2023 examiner gave an unfavorable direct-causation opinion, citing the absence of contemporaneous medical evidence and insufficient evidence connecting the current condition to military wear and tear.

The enlistment record described a normal spine. Personnel records show shipboard work as an electrician's mate, including maintenance, electrical systems, steering gear, anchor windlass operation, fire watch, and damage control. The Veteran reports that active service also involved frequent physical training, prolonged ruck marches, and repetitive load-bearing activity. He reports cumulative neck strain, symptoms beginning during service, limited reporting or evaluation, continued activity despite symptoms, and persistence and worsening after separation.

The complete service treatment records are not available for review. That limitation does not establish that an injury occurred, does not establish that no injury occurred, and does not permit an inference about what missing records would have shown. The available cervical medical and lay evidence must still be evaluated on its own terms.

I also considered the Veteran's first-person statement dated 2026 which he approved and adopted as his own. He reports frequent physical training, prolonged ruck marches, repetitive load-bearing demands, neck symptoms beginning during service, limited contemporaneous reporting because of perceived stigma and pressure, continued activity, and persistence and worsening after separation. I used this as reported history, not as objective proof of an in-service diagnosis, documented treatment, a specific lesion, or medical nexus.

PHYSICIAN MEDICAL ANALYSIS AND OPINION

The documented electrician's-mate duties and the Veteran's reported training and load-bearing activities are medically compatible with repetitive cervical stress and provide a plausible exposure history. They do not, by themselves, identify a particular cervical injury, establish onset of the degenerative disease, or apportion service loading from later lifetime exposures.

The Veteran reports neck symptoms during service and explains limited reporting in terms of perceived stigma and pressure to continue duties. That explanation is relevant as his account of why contemporaneous documentation is limited. The partial STR record cannot confirm or refute the account, and I do not infer what missing records would have shown. The absence of complete documentation therefore remains a limitation rather than affirmative proof in either direction.

The available clinical record documents cervical degenerative disease years after separation. Imaging in 2022 establishes current cervical structural findings, not their date of onset. Later documentation does not exclude an earlier contribution, but it also does not establish continuous cervical disease from service.

The 2026 statement reports in-service neck onset with continuity. The late 2023 cervical history placed neck onset approximately eight years before the examination, around 2015 and more than two decades after

service. I do not assume that the adopted statement automatically overrides or resolves the earlier history. The discrepancy reduces certainty about onset and continuity and is material to the direct-service analysis.

The congenital C2-C3 fusion and congenitally narrow canal are important alternative or contributing considerations. Literature supports possible adjacent-segment degeneration with congenital fusion and reduced reserve when a narrow canal is combined with acquired degeneration. It does not establish symptom onset, individual causation, or the relative contributions of congenital anatomy, aging, trauma, and occupational loading here. The supplied record does not medically classify the congenital findings for further legal application.

The loading literature is supportive at the population level, not determinative in this individual case. Jackson and colleagues report associations between physical occupational exposures and surgically treated cervical spondylosis. The congenital-anatomy literature identifies additional cervical susceptibility and limits apportionment. Considering the cervical exposure history, reported neck symptoms, later observations, compatible cervical degenerative findings, alternative contributors, and the literature's limits, the evidence is sufficient to reach the at-least-as-likely-as-not threshold for the direct cervical relationship.

Direct relationship to service

I weighed the Veteran's adopted account of repeated training and load-bearing with reported neck symptoms against the partial service record, the late 2023 approximately 2015 onset history, delayed documentation, the prior unfavorable opinion, aging and other lifetime mechanical exposure, and the congenital C2-C3 fusion and narrow canal. The congenital anatomy and acquired degeneration are important contributors, and the occupational literature cannot apportion them. Even so, the combined service-loading history, reported symptoms, later observations, current compatible degeneration, and general loading literature are sufficient for the threshold below, but not for certainty or a conclusion that service was the sole cause. In my medical opinion, it is at least as likely as not (50 percent or greater probability) that the Veteran's current cervical/neck condition is medically related to the repetitive physical demands of active military service, including the reported physical training, prolonged ruck marching, repetitive load-bearing, and associated neck symptoms.

Aggravation by PTSD

The verified chronic-pain review describes preliminary cross-sectional associations between PTSD, subjective pain severity, and physical interference, but it does not establish permanent structural progression or a PTSD-attributable increase beyond natural degeneration. The record lacks a defined cervical baseline and objective serial findings that identify permanent PTSD-attributable worsening. Congenital anatomy and acquired degeneration remain medically supported competing explanations. I cannot determine whether PTSD permanently aggravated the cervical condition beyond its expected congenital and acquired course. A definitive positive or negative opinion would require unsupported inference.

VA EVIDENTIARY FRAMEWORK AND RECORD ALIGNMENT

38 C.F.R. § 3.303 supplies the direct-service framework, including post-service diagnosis under § 3.303(d). Section 3.310 separately supplies the aggravation framework. Competent lay evidence may address observable duties, activity, symptoms, and timing under § 3.159(a)(2), while diagnosis, lesion identification, causation, and permanent aggravation remain medical questions.

The cervical record relevant to those questions includes current cervical degeneration and stenosis; documented and reported physical demands; reported service-onset symptoms; a PARTIAL STR record; witness-timing limitations; 2022 MRI findings; delayed documentation; a late 2023 history placing onset around 2015; a prior unfavorable medical opinion; aging and lifetime mechanical exposure; congenital C2-C3 fusion; a congenitally narrow canal; and the current physician nexus opinion.

The congenital findings remain in the record as medically relevant alternative or contributing anatomy. They are not treated as proof of service causation, and the record does not supply a medical classification for further application of 38 C.F.R. § 4.9. The physician's direct opinion addresses the medical nexus question at the at-least-as-likely-as-not threshold; the aggravation analysis remains nondefinitive.

Authorities: 38 C.F.R. §§ 3.159(a)(2), 3.303, 3.310, 4.9; Jandreau v. Nicholson; Kahana v. Shinseki; Acevedo v. Shinseki; Lynch v. McDonough.

SUPPORTING MEDICAL LITERATURE

The cervical analysis uses occupational-exposure data, congenital-fusion literature, and degenerative-cervical-myelopathy literature as contextual support. The cited evidence does not establish individual onset, apportion congenital and acquired contributors, or prove service causation by itself.

- [5] Ravyts et al. (2026) - PTSD and chronic pain mediation evidence.
- [6] Jackson et al. (2023) - occupational exposures and cervical spondylosis.
- [7] Moon et al. (2014) - congenital cervical fusion and adjacent mobile segments.
- [8] Badhiwala et al. (2020) - degenerative cervical myelopathy and canal reserve.

APPENDIX A

CONSOLIDATED MEDICAL BIBLIOGRAPHY

Verified medical literature cited in the physician analysis

1. Kubzansky LD, Bordelois P, Jun HJ, Roberts AL, Cerdá M, Bluestone N, Koenen KC. The weight of traumatic stress: a prospective study of posttraumatic stress disorder symptoms and weight status in women. *JAMA Psychiatry*. 2014;71(1):44-51. doi:10.1001/jamapsychiatry.2013.2798. PMID:24258147.
2. Alonso-Pedrero L, Bes-Rastrollo M, Marti A. Effects of antidepressant and antipsychotic use on weight gain: A systematic review. *Obes Rev*. 2019;20(12):1680-1690. doi:10.1111/obr.12934. PMID:31524318.
3. Peppard PE, Young T, Palta M, Dempsey J, Skatrud J. Longitudinal study of moderate weight change and sleep-disordered breathing. *JAMA*. 2000;284(23):3015-3021. doi:10.1001/jama.284.23.3015. PMID:11122588.
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5. Ravyts SG, Hall R, Vandine D, Woods O, Harris R, Dudeney J, Aaron RV. PTSD and chronic pain: A systematic review and meta-analysis of mediation studies. *J Pain*. 2026;38:105589. doi:10.1016/j.jpain.2025.105589. PMID:41207404.
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7. Moon MS, Kim SS, Yoon MG, Seo YH, Lee BJ, Moon H, Kim SS. Radiographic Assessment of Effect of Congenital Monosegment Synostosis of Lower Cervical Spine between C2-C6 on Adjacent Mobile Segments. *Asian Spine J*. 2014;8(5):615-623. doi:10.4184/asj.2014.8.5.615. PMID:25346814.
8. Badhiwala JH, Ahuja CS, Akbar MA, et al. Degenerative cervical myelopathy - update and future directions. *Nat Rev Neurol*. 2020;16(2):108-124. doi:10.1038/s41582-019-0303-0. PMID:31974455.

APPENDIX B

VERIFIED AUTHORITIES

Authorities used in the Nexus-authored evidentiary framework sections

- 38 C.F.R. § 3.102 — Reasonable doubt (official eCFR snapshot Aug. 27, 2026; verified Aug. 29, 2026).
- 38 C.F.R. § 3.159(a)(2) — Competent lay evidence (official eCFR snapshot Aug. 27, 2026; verified Aug. 29, 2026).
- 38 C.F.R. § 3.303 — Principles relating to service connection (official eCFR snapshot Aug. 27, 2026; verified Aug. 29, 2026).
- 38 C.F.R. § 3.310 — Proximate causation and aggravation by a service-connected condition (official govinfo source; verified Aug. 19, 2026).
- 38 C.F.R. § 4.9 — Congenital or developmental defects (official govinfo source; verified Aug. 19, 2026).
- *Jandreau v. Nicholson*, 492 F.3d 1372 (Fed. Cir. 2007) (official court source; verified Aug. 29, 2026).
- *Kahana v. Shinseki*, 24 Vet. App. 428 (2011) (official court source; verified Aug. 29, 2026).
- *Acevedo v. Shinseki*, 25 Vet. App. 286 (2012) (official court source; verified Aug. 29, 2026).
- *Lynch v. McDonough*, 21 F.4th 776 (Fed. Cir. 2021) (en banc in part) (official court source; verified Aug. 29, 2026).

PHYSICIAN CERTIFICATION

I have reviewed the medical evidence relevant to the opinions presented in this report and the sections identified as PHYSICIAN MEDICAL ANALYSIS AND OPINION. The medical reasoning and opinions stated in those sections reflect my independent professional medical judgment.

The separately identified VA EVIDENTIARY FRAMEWORK AND RECORD ALIGNMENT sections are provided by Nexus Medical Opinions for evidentiary context and are not adopted by me as legal advice, a legal opinion, or a determination of entitlement to VA benefits.

Physician Name: Reviewing Physician

Signature: [signature removed]

Date: 2026

Signature: Signed in completed client version; signature removed from public sample.

Email: [contact removed]