



# The Value of Audiological Services in a Diabetes Care Schedule




Hearing Loss (HL) and Balance Disorders Are Common Among Individuals with Diabetes Mellitus (DM). Referral to an Audiologist Is Key for Prevention, Early Identification, and Management.



**136 million**

people in the United States live with diabetes or prediabetes.<sup>1</sup>



Patient characteristics—like race, educational attainment, and income-to-poverty ratio—may **increase the likelihood** of having DM.<sup>1</sup>




Individuals with DM are **2 times** more likely to experience HL and falls.<sup>2-5</sup>

## The prevalence of HL and balance problems is higher in individuals with DM.


- HL is more prevalent among adults with DM (**21.5%–71.3%**) than in adults without DM (**8.9%–39.1%**).<sup>2,6-13</sup>
- In children with DM, the prevalence of HL ranges from **21% to 33%**—compared with **< 1%** of children without DM.<sup>14-18</sup>
- The odds of vestibular dysfunction are **70%** higher among individuals with DM, with **54.0%–56.7%** of people experiencing some form of vestibular dysfunction.<sup>5,19,20</sup>
- The annual fall incidence rate of adults over age 65 years with DM is **39%**.<sup>21</sup>
- Benign paroxysmal positional vertigo (BPPV) is seen more frequently among those with DM (**46%**) than among those without DM (**37%**)—and those with DM have a higher rate of BPPV recurrence.<sup>22-24</sup>

## Audiologist involvement in a diabetes care schedule may include:



### Prevention and Education

- Counseling on the increased susceptibility to HL (e.g., noise-induced, ototoxic)
- Providing hearing protective devices
- Screening for HL and balance disturbances
- Educating on the increased likelihood of falls
- Referring to Diabetes Self-Management Education and Support services



### Assessment and Monitoring

- Conducting baseline hearing, tinnitus, and vestibular assessments
- Administering periodic re-evaluations to provide timely identification of any audiological changes
- Providing a differential diagnosis when a hearing or balance disorder is suspected
- Referring to other medical providers as needed



### Treatment and Management

- Aural rehabilitation such as strategies and modifications
- Hearing aid services
- Providing Hearing Assistive Technology Systems (HATS)
- Cochlear implant services
- Tinnitus management
- Balance treatments

Patient benefits of audiological care include:



Improved Quality of Life<sup>25-27</sup>



Reduced Anxiety, Depression, and Stress<sup>28, 29</sup>



Decreased Risk of Falls<sup>30</sup>



Enhanced Communication<sup>25, 31, 32</sup>

## References

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