

# Fall Detection & Alerts

Fall monitoring feature



Fall Detection & Alerts is a Thrive Hearing Control app-based feature that leverages embedded sensors in Livio Edge AI hearing aids to detect when a wearer falls, then can send an alert message to selected friends, family members or caregivers.

#### Who will benefit

Fall Detection & Alerts is for any patient who has balance concerns and/or finds themself falling frequently. Loved ones, too, will benefit from this feature as it can provide peace of mind when they are not with the hearing aid wearer.

### Why patients will want it

Accidental falls are a significant health risk for older adults, can often lead to a loss of independence, and frequently shape the course of a person's later years of life. Having this feature available in a device the patient already wears will help them feel more reassured and independent, while also giving their loved ones added peace of mind.

#### How it works

Once enabled within the Thrive app, Livio Edge AI hearing aid wearers select up to three contacts, within the app, to be notified if they fall.

Once a fall has been detected, an auto alert automatically sends a message to the pre-selected contacts, informing them that a fall has occurred.

The hearing professional can also assign a manual alert option that allows the hearing aid wearer to press and hold their hearing aid to send the message — to their pre-selected contacts — for a fall or non-fall related event.

#### Where to find it

Fall Detection & Alerts is only available in our Livio Edge AI hearing aids.

Livio Edge Al	Livio Al				Livio				
2400	2400	2000	1600	1200	2400	2000	1600	1200	1000
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#### How it helps you

**Problem** — Falls are a concern for both older adults and for those looking out for them. The serious consequences of falls are a big reason why the market for fall detection and personal emergency response systems (PERS) is predicted to reach \$5 billion by 2025. Still:

- Most systems require the user to wear a pendant around the neck, which many don't want to do or forget to do.
- Most systems require the user to manually activate the alert, which many forget or are unable to do.

**Solution** — You can now offer patients a fall monitoring feature that can detect falls and alert caregivers automatically — all in a discreet device that hearing aid wearers already use every day. It's an additional benefit to help motivate new patients and a reason for current patients to upgrade.

### **Proof points**

- People with even a mild hearing loss are three times more likely to have a history of falling.<sup>2</sup>
- Falls are the second leading cause of accidental or unintentional injury deaths worldwide.<sup>3</sup>
- In tests, Livio Edge AI was able to detect more falls than the Philips Lifeline AutoAlert pendant and was an overall more accurate fall detection device.<sup>4</sup>
- Relatively few caregivers reported using the commonly available monitoring technologies; even in spite of their apparent benefits, particularly when activated after a fall.<sup>5</sup>
- For some individuals, a hearing instrumentbased fall detection system may be more convenient or carry less stigma than traditional PERS devices; this may alleviate some of the psychosocial barriers to using fall detection devices and the problem of not having an alerting system available when a fall occurs.<sup>4,6</sup>

#### Set up



Professionals — Download this QuickTIP to see how to set up Fall Alerts in Inspire X.



Patients — Watch our Fall Alert video to see how to use it.

#### To learn more

- Visit StarkeyPro.com/Livio-Al
- Read our Fall Detection white paper
- Read our <u>peer-reviewed publication</u>
- Check out <u>training opportunities</u>
- Contact your Starkey representative today

#### REFERENCES



¹ https://www.marketdataforecast.com/market-reports/personal-emergency-response-systems-market

<sup>&</sup>lt;sup>2</sup> Lin, F. R., & Ferrucci, L. (2012). Hearing Loss and Falls Among Older Adults in the United States. Archives of Internal Medicine, 172(4), 369. https://doi.org/10.1001/archinternmed.2011.728

<sup>&</sup>lt;sup>3</sup> WHO Global Report on Falls Prevention in Older Age. (2007). World Health Organization.

<sup>&</sup>lt;sup>4</sup> Burwinkel, J. R., Xu, B., & Crukley, J. (2020). Preliminary Examination of the Accuracy of a Fall Detection Device Embedded into Hearing Instruments. *Journal of the American Academy of Audiology*, 31(06), 393–403. https://doi.org/10.3766/jaaa.19056

<sup>&</sup>lt;sup>5</sup> Fleming, J., Brayne, C., & The Cambridge City over-75s Cohort (CC75C) study collaboration. (2008). Inability to get up after falling, subsequent time on floor, and summoning help: Prospective cohort study in people over 90. BMJ, 337(nov17 1), a2227–a2227. https://doi.org/10.1136/bmj.a2227

<sup>&</sup>lt;sup>6</sup> Chaudhuri, S., Kneale, L., Le, T., Phelan, E., Rosenberg, D., Thompson, H., & Demiris, G. (2017). Older Adults' Perceptions of Fall Detection Devices. Journal of Applied Gerontology, 36(8), 915–930. https://doi.org/10.1177/0733464815591211