Medical Alert Devices

Clinical Policy ID: CCP.1154

Recent review date: 2/2026

Next review date: 6/2027

Policy contains: Medical alert devices; and personal emergency response systems.

AmeriHealth Caritas Next has developed clinical policies to assist with making coverage determinations. AmeriHealth Caritas Next's clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of medically necessary, and the specific facts of the particular situation are considered, on a case by case basis, by AmeriHealth Caritas Next when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. AmeriHealth Caritas Next's clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. AmeriHealth Caritas Next's clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, AmeriHealth Caritas Next will update its clinical policies as necessary. AmeriHealth Caritas Next's clinical policies are not guarantees of payment.

Coverage policy

In-home medical alert devices are investigational/not clinically proven and, therefore, not medically necessary.

Limitations

No limitations were identified during the writing of this policy.

Alternative covered services

Safety interventions for vulnerable people in their own homes, including:

- Occupational and physical therapy assessment of individual and home for fall risk.
- Fall risk assessment by a network physician or in the home by a network home health agency.

Background

Falls are the primary cause of injury related deaths in the elderly population. One in three elderly persons will fall at least once a year and many of the deaths occur after months of medical treatment. The three top chronic

medical conditions that lead to falls are heart disease, diabetes, and arthritis (Bailey, 2023). As a natural consequence of aging, sensory impairments such as impaired hearing (presbycusis) and vision loss (cataracts, macular degeneration) are also risk factors for falls.

Falls with resulting injuries or death, as well as a fear of future falls represent a major concern to elderly persons. According to the Healthy Aging Falls database from National Council on Aging, 67% of falls prevention program participants reported having multiple chronic conditions, including 66% with arthritis, 27% with heart disease, and 24% with diabetes (Bailey, 2023). The inability to get up after a fall due to fracture or weakness and remaining on the ground for extended periods results in a condition called rhabdomyolysis, which poses an additional lethal threat to long-term health outcomes (Chaudhuri, 2014).

“Aging in place” is a term meaning remaining in one’s own home as one ages (National Institute on Aging, 2023). It is generally considered more desirable, as 76% of Americans over age 50 hope to age in place (Binette, 2019). Because of the high incidence of falls in the senior population, safety concerns associated with aging in place include the risk of falling while alone and not being able to call for help (Bergen, 2016).

Wearable communication technologies, known as medical alert devices, and personal safety and alarm systems, have been developed to allow an injured user to push a single button to communicate with an answering service that will then contact emergency providers or personal contacts. The user pays a monthly fee for remaining connected to the communication service, and some devices include a fall detection function (Castiello, 2023).

Personal Emergency Response Systems are typically necklaces or bracelets; a button-shaped radio transmitter is pressed by the subscriber when in distress. Immediately, a communicator attached to the user’s phone line acting as a speakerphone between the user and the emergency response center is activated. The center then dispatches an ambulance or contacts the responder identified by the user (McKenna, 2015).

Findings

Guidelines

No practice guidelines from professional medical societies supporting the use of medical alert devices for preventing falls exist as of this writing. A U.S. Preventive Services Task Force guideline that concluded there is adequate evidence that exercise has a moderate benefit in preventing falls among the elderly; the guideline does not include medical alerts or other emergency medical systems in its report (U.S. Preventive Services Task Force, 2024).

An international guideline addressed the prevention and management of falls in older adults residing in the community, care homes, and hospitals. The guideline states current evidence does not support the use of wearables for falls prevention, based on Grade 2C (low quality) evidence for which further research is very likely to change the estimate of effect and impact the confidence in the findings. However, emerging evidence suggests that using wearables in exercise programs to prevent falls may increase participation (Montero-Odasso, 2022).

Evidence review

Personal Emergency Response Systems have traditionally been used as fall alert systems for the elderly. Devices that are discrete and highly accurate in a real-world setting are desirable. Methods of alarm detection of falls and other adverse events in the elderly include devices worn by a person (e.g., a wristwatch or clothing attachment), and cameras, microphones, or pressure sensors (Chaudhuri, 2014). Intrinsic factors related to older adults' attitudes around control, independence, and perceived need/requirements for safety are important motivators to using these technologies, along with extrinsic factors such as usability, feedback gained, and costs (Hawley-Hague, 2014; Yamazaki, 2017).

A systematic review of 80 studies examined the diagnostic performance of wearable (43 studies), non-wearable (30 studies), and hybrid (seven studies) devices for fall detection in community living. Accelerometers (86% of studies) and gyroscopes (34.9% of studies) comprised wearable sensor technology in the majority of studies, with the majority located on the wrist or waist. Five fall detection performance parameters (accuracy, precision, sensitivity, specificity, F1-score) and two computation speed parameters (training and testing time) were extracted and categorized according to three sensor types. The overall performance of the three sensor categories was approximately 90%. The most frequently reported measures were accuracy (wearable: 67.4%; non-wearable: 80.0%; hybrid: 100% of included studies) and specificity (wearable: 74.4%; non-wearable: 60.0%; hybrid: 28.6% of included studies). The analysis of variance results showed that wearable sensors performed the worst in fall detection. The effectiveness of wearable devices depends heavily on their use and the threshold defined for fall detection (Gorce, 2025).

Early studies of Personal Emergency Response System users reported mixed results with respect to health care utilization and patient-reported outcomes. Positive outcomes included certainty of getting help, decreased hospital stays, and reduced fear of falling. Outcomes of concern included limited relief from anxiety or fear of falling, unexpected responder visits, and uncertainty about pushing the button (McKenna, 2015). A more recent review of 33 studies of Personal Emergency Response Systems noted improvements in safety and independent living for users, but also found changes in daily living and changes affecting user identities (Stokke, 2016).

A review (n = 2,643) assessed utilization trends in 2011-2015 among elderly Boston residents who were users of Personal Emergency Response Systems purchased through a home care service. There were 4,321 incident cases (average of three years), of which falls accounted for 43.2%. The proportion of encounters that were hospital admissions rose from 3.5% to 5.7% (n = 1,427) from 2011 to 2015. Hospital readmission rates among users increased significantly at 90 days (27.7% to 34.5%, *P* = .03) and 180 days (38.3% to 43.9%, *P* = .04). Admissions with a principal diagnosis indicating a potentially avoidable admission rose from 34.1% to 39.8% (Agboola, 2017).

Elderly women (n = 265) with at least one stroke factor were randomized into groups using a medical alert device and controls. No significant difference in health-related quality of life was observed between the two groups (Morgenstern, 2015). Elderly adults (n = 197) presenting to an emergency department were randomized to a home alert system or telephone contact. Significant reductions in emergency visits and admissions in the first six months of the trial were observed, with no between-group difference. Medical alert participants with one or more admissions had a significantly lower median stay (*P* = .045) and a significantly higher health score (*P* = .008) (Ong, 2018).

In 2025, we updated one guideline and found no newly published relevant literature to add to the policy.

In 2026, we added a guideline and updated the references with no policy changes warranted.

References

On January 9, 2026, we searched PubMed and the databases of the Cochrane Library, the U.K. National Health Services Centre for Reviews and Dissemination, the Agency for Healthcare Research and Quality, and the Centers for Medicare & Medicaid Services. Search terms were “Accidental Falls/prevention and control”[MAJR], “fall detection,” “personal emergency response system” and “medical alert device.” We included the best available evidence according to established evidence hierarchies (typically systematic reviews, meta-analyses, and full economic analyses, where available) and professional guidelines based on such evidence and clinical expertise.

Agboola S, Golas S, Fischer N, et al. Healthcare utilization in older patients using personal emergency response systems: An analysis of electronic health records and medical alert data: Brief Description: A

longitudinal retrospective analysis of healthcare utilization rates in older patients using Personal Emergency Response Systems from 2011 to 2015. *BMC Health Serv Res*. 2017;17(1):282. Doi: 10.1186/s12913-017-2196-1.

Bailey, E. Chronic conditions and fall risk: Cross-promoting programs across the continuum of care. National Council on Aging: National falls prevention resource center for professionals. https://www.ncoa.org/article/chronic-conditions-and-fall-risk-cross-promoting-programs-across-continuum-of-care. Published June 14, 2023.

Bergen G, Stevens MR, Burns ER. Falls and fall injuries among adults aged ≥ 65 years — United States, 2014. *MMWR Morb Mortal Wkly Rep.* 2016;65:993-998. Doi: 10.15585/mmwr.mm6537a2.

Binette J, Vasold K. 2018 Home and community preferences: A national survey of adults age 18-plus. AARP Research. https://www.aarp.org/research/topics/community/info-2018/2018-home-community-preference.html. Published July 31, 2019.

Castiello L, Ames H. What to know about medical alert systems. *MedicalNewsToday*. https://www.medicalnewstoday.com/articles/medical-alert-systems. Last reviewed January 27, 2023.

Chaudhuri S, Thompson H, Demiris G. Fall detection devices and their use with older adults: A systematic review. *Geriatr Phys Ther*. 2014;37(4):178-196. Doi: 10.1519/JPT.0b013e3182abe779.

Gorce P, Jacquier-Bret J. Fall detection in elderly people: A systematic review of ambient assisted living and smart home-related technology performance. *Sensors (Basel)*. 2025;25(21). Doi: 10.3390/s25216540.

Hawley-Hague H, Boulton E, et al. Older adults' perception of technologies aimed at falls prevention, detection, or monitoring: A systematic review. *Int J Med Inform*. 2014;83(6):416-426. Doi: 10.1016/j.ijmedinf.2014.03.002.

McKenna AC, Kloseck M, Crilly R, Polgar J. Purchasing and using personal emergency response systems (PERS): How decisions are made by community-dwelling seniors in Canada. *BMC Geriatr*. 2015;15:81. Doi: 10.1186/s12877-015-0079-z.

Montero-Odasso M, van der Velde N, Martin FC, et al. World guidelines for falls prevention and management for older adults: A global initiative. *Age Ageing*. 2022;51(9). Doi: 10.1093/ageing/afac205.

Morgenstern LB, Adelman EE, Hughes R, Wing JJ, Lisabeth LD. The women independently living alone with a medical alert device (WILMA) trial. *Transl Stroke Res.* 2015;6(5):355-360. Doi: 10.1007/s12975-015-0411-0.

National Institute on Aging. Aging in place: Growing old at home. https://www.nia.nih.gov/health/aging-place-growing-old-home. Reviewed October 12, 2023.

Ong NWR, Ho AFW, Chakraborty B, et al. Utility of a medical alert protection system compared to telephone follow-up only for home-alone elderly presenting to the ED – A randomized controlled trial. *Am J Emerg Med*. 2018;36(4):594-601. Doi: 10.1016/j.ajem.2017.09.027.

Stokke R. The personal emergency response system as a technology innovation in primary health care services: An integrative review. *J Med Internet Res*. 2016;18(7):e187. Doi: 10.2196/jmir.5727.

U.S. Preventive Services Task Force, Nicholson WK, Silverstein M, et al. Interventions to prevent falls in community-dwelling older adults: US Preventive Services Task Force recommendation statement. *JAMA*. 2024;332(1):51-57. Doi: 10.1001/jama.2024.8481.

Yamazaki Y, Hayashida CT, Yontz V. Insights about fall prevention of older adults in the state of Hawaii. *Hawaii J Med Public Health*. 2017;76(1):3-8. https://pmc.ncbi.nlm.nih.gov/articles/PMC5226015/ .

Policy updates

1/2015: initial review date and clinical policy effective date: 2/2015

12/2015: Policy references updated.

12/2016: Policy references updated.

12/2017: Policy references updated.

12/2018: Policy references updated. The policy ID changed from 17.021.02 to CCP.1154.

11/2019: Policy references updated.

2/2021: Policy references updated.

2/2022: Policy references updated.

2/2023: Policy references updated.

2/2024: Policy references updated.

2/2025: Policy references updated.

2/2026: Policy references updated.

Related Codes

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy CCP.1154. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill accordingly.

Code	Code Description
A9280	Alert or alarm device, not otherwise classified