

Canadian Association of Occupational Therapists
Product Recognition Program

Report of the review of the Airgo Fusion line



Available online at www.caot.ca/prp



Report last updated May, 2016

Disclaimers

The information compiled in this report was designed for informational purposes and to communicate the final conclusions of a documented review process. The decision to award a seal of recognition **does not supersede or replace other codes, requirements or regulations** set by authoritative organizations of a specific jurisdiction. CAOT encourages health professionals to act in a responsible manner and according to best practices for the recommendation, assessment, installation and maintenance of this product. It is critical to **follow the recommendations set by the manufacturer and/or distributor** of this product and, when relevant, engage domain expert for training, use, installation, maintenance and repair.

Recognition of a product by the Canadian Association of Occupational Therapists through the Product Recognition Program is **not a guarantee** of any product, nor is it an endorsement of the company. The Canadian Association of Occupational Therapists assumes **no responsibility** for any product or corporation, nor for any damages caused by any product or company. It is recommended that you consult an occupational therapist about the appropriateness and the proper use of the product.

Specific questions related to this product(s) (including usage, availability, pricing, etc.) should be addressed directly to the manufacturer and/or distributor. Please visit airgomobility.com. Concerns or questions related to the content of this report should be addressed to Julie Lapointe, Director of Professional Practice, at jlapointe@caot.ca or at 1(800) 434-2268 ext. 260

The conclusions presented in the current report are derived from the best information available. In the case that new information becomes available and grants a modification to the conclusions, CAOT reserves the right to update and issue a new report of this product at any time.

Acknowledgement

The generation of this report would not have been possible without the contribution of occupational therapists and members of the Canadian Association of Occupational Therapists (CAOT).



© Canadian Association of Occupational Therapists 2016



Executive Summary

The Airgo Fusion line is a line of rolling walkers (or rollators) with four wheels and a seat that converts into a transport chair. It features a built-in seat, contoured backrest, and a pair of footrests. Reviewers were unanimous in their decision to recommend that the Airgo Fusion be accepted for the CAOT Product Recognition Program. Information and recommendations regarding the performance of the product in the walker and transport chair modes are provided in this report.



The Airgo Fusion Line is recognized by CAOT.





Review report

The purpose of this product

The Airgo Fusion line is a line of rolling walkers (or rollators) with four wheels and a seat that converts into a transport chair. It features a built-in seat, contoured backrest, and a pair of footrests. This product would support mobility for adults who need a rolling walker and, on certain occasions, to be pushed by a caregiver over smooth surfaces in a transport chair. The Airgo Fusion line might save or delay the purchase of both a walker and a transport chair. It might also be the perfect product to recommend in cases a client has a temporary mobility restriction or temporary need for a walker and transport chair. It can support clients ranging in height from 4 foot, 3 inches to 6 foot, 11 inches and weighting up to 300 pounds, which makes it suitable for a wide range of client body types.

Performance of the product (efficacy, usability, safety, reliability, durability)

The walker

- The walker wheels easily while walking.
- The brakes hold tight when locked, but while walking the braking action may be difficult to regulate (e.g., down slopes).
- The presence of footrests (a necessary feature for the wheelchair option) makes this walker slightly wider than a standard one, and this may have an impact in some living environments.
- The presence of a curb climber is important, but reviewers found it awkward to use in walker mode because the wheels are far apart. Abduction of the leg is required to reach and use the curb climber.
- The presence of a seat when used in the walker mode may allow the user to walk further, because s/he can sit to rest along the way, as needed.
- The style of hand grips was found to be very comfortable as they maintain the wrists in a neutral position when walking. This is important because some users may have arthritis.

The transport chair

- This product offers the option to be converted into a transport chair, and it is very easy to convert into this mode.
- The 3" elbow support instead of a full armrest allows for an easy one step conversion between the walker and the transport chair.
- The user would need to be accompanied, as there is no possibility to propel oneself from the seated position, due to the 8" wheel size.
- The transport chair is meant for use over short distances and even surfaces.
- The backrest is low and the seat depth is short, which would not be comfortable and/or appropriate for prolonged use as a transport chair. Also, because of the lack of seating support, the client would need reasonable sitting balance and judgement.
- This chair is easy to push on level paved surfaces, but it is difficult to climb ramped curbs.
- The folding basket has a solid top to protect items in inclement weather.



- The cable brakes need regular adjustments. There are at least two warnings in the written manual to check and adjust the brakes regularly. Adjusting the brake cable tension would be the most critical required maintenance but the service interval is not given.
- As with any assistive device, the user needs assessment to determine the most appropriate device, instruction in safe use and follow-up after device provision. Further, it must be adjusted to the user in both walker (handle height) and transport chair (leg rest length) modes.
- There is a concern that brake cables may catch on things, as they are not enclosed within the metal tubing of the walker.
- Another safety concern relates to the passenger's trunk stability while using the transport chair mode. If the user lacks an adequate trunk stability, he or she might be propelled out of the chair in descending steep slopes (e.g., a ramped curb), which could potentially lead to a fall. If this is a concern, the company offers a safety belt accessory. Reviewers have mentioned that research on the stability of pushing someone when the device is in transport chair mode would be great to have in the future.
- The instructions are clear and comprehensive. However, many users may not read them. The instructions mentioned several safety issues which include: mechanical failure if the weight limit of 300lbs is exceeded, danger of tipping if the user reaches or leans when seated, warning not to move the device independently when seated, warning not to sit on the seat if the brakes are not locked, warning against falls if the backrest is not in the proper position when the user sits down and warning not to pick items up off the floor when seated because of a risk of tipping. Reviewers suggest that it would be beneficial to provide a shorter version of the instructions that only includes use of product.
- The Airgo Fusion line appears very sturdy and can be folded for carrying it in a car or storing it away. Reviewers particularly appreciated the presence of a clip to keep this product folded.

Important recommendations

The transport chair option should be used for short distances and not be used to replace a standard wheelchair. Users need to have good trunk stability to safely use the transport chair mode.

Economic considerations

This product might offer an economical alternative for clients who need a walker and, on some occasions, a transport chair.



Scientific evidence

- The use of rollators have been reported to contribute to increasing walking distance (Vaes et al., 2015), confidence in motor ability (Vogt, Lucki, Bach, & Banzer, 2010) and participation in activities (Salminen, Brandt, Samuelsson, Toytari, & Malmivaara, 2009). However, as with any mobility devices, non-optimal use of walkers can lead to injury (Charron, Kirby, & MacLeod, 1995).
- To our knowledge there is no published research on the Airgo Fusion line. A quick search in PubMed and Google Scholar yielded no result.

Review committee

Three occupational therapists with over 25 years of work experience reviewed this product. All of them were involved in seating clinic teams and became official authorizers of mobility aids in their own province.

Final recommendation

The Airgo Fusion line is most appropriate for adults who need a walker and the option of having a transport chair. The increased width of this walker warrant for a consideration of the space available in clients' particular living situation. Because of the lack of seating support when used as a transport chair, the client would need reasonable sitting balance and judgement. Many clients with mobility limitations have limited tolerance for ambulation and so the option to use the same product safely as a transport chair meets a significant need in this population. This product would only be suitable if someone else is present and able to push the person with mobility limitations in the transport chair mode. Reviewers recommended that the Airgo Fusion line be accepted for the CAOT Product Recognition Program.

References

- Charron, P. M., Kirby, R. L., & MacLeod, D. A. (1995). Epidemiology of walker-related injuries and deaths in the United States: A Commentary. *American Journal of Physical Medicine & Rehabilitation*, 74(3), 237-239.
- Salminen, A. L., Brandt, A., Samuelsson, K., Toytari, O., & Malmivaara, A. (2009). Mobility devices to promote activity and participation: a systematic review. *J Rehabil Med*, 41(9), 697-706. doi:10.2340/16501977-0427
- Vaes, A. W., Meijer, K., Delbressine, J. M., Wiechert, J., Willems, P., Wouters, E. F., . . . Spruit, M. A. (2015). Efficacy of walking aids on self-paced outdoor walking in individuals with COPD: A randomized cross-over trial. *Respirology*, 20(6), 932-939. doi:10.1111/resp.12570
- Vogt, L., Lucki, K., Bach, M., & Banzer, W. (2010). Rollator use and functional outcome of geriatric rehabilitation. *J Rehabil Res Dev*, 47(2), 151-156.