Is there a type of noise-cancellation earmuff that might help someone wearing hearing aids and working in noise??

Noise cancellation headsets are not the solution to this problem. More often called ANR (for active noise reduction), these devices can provide benefits in situations with substantial low-frequency noise present, but are only occasionally of value in typical occupational settings and provide no obvious benefits for the hearing aid wearer. For more on the applicability of ANR in occupational noise see *Active noise reduction (ANR) in hearing protection: Does it make sense for industrial applications?*

Options for hearing-aid users are to wear an active sound-transmission earmuff which, via use of a mic and internal speaker, acts like a generic hearing aid at low sound levels, but gradually shuts down as the ambient noise increases, limiting transmitted sounds to the equivalent of 82-85 dBA. Another option is to turn the gain down on the hearing aids and wear them under earmuffs with as large a cup size as possible to reduce the feedback (squeal) problems. For those with hearing aids that fit completely in the earcanal E•A•R Ultra9000® earmuff also may be of value due to its external orifice that communicates directly to the concha via an acoustical duct.

Additionally in select situations one may also consider wearing the aids as hearing protectors (see EARLog 18).

Conducting sound field tests with simulations of the actual ambient noise levels in which the patient typically works is also helpful to validate whatever approach is decided upon.