

Ethics and DEI

Toward an Ethically Grounded Framework for Evaluating Technology-Assisted Transfers in Older Adults Nathalie Todam Nguenpang, Linda Manirambona, Sathya Karunanathan, Karine Toupin-April, Martin Bilodeau, Jeffrey Jutai. *Gerontechnology* 25(s)

Purpose Physical transfers are routine yet sensitive care activities for many older adults, often involving vulnerability and reliance on others (1). Technologies such as ceiling lifts, sit-to-stand devices, total lifts, and active-assist transfer systems are increasingly used to support these activities (2,3). While evidence shows that these devices reduce musculoskeletal injuries among healthcare professionals, far less is known about their ethical implications and their impact on dignity, autonomy, and comfort (1,4,5). Studies suggest that benefits include increased comfort, reduced anxiety, and improved perceptions of safety; however, definitions of comfort, dignity, and safety remain inconsistent (6–8). These inconsistencies hinder equitable, person-centered care that accounts for diversity in body size, mobility, cultural expectations, cognitive functioning, and communication abilities. This study aims to clarify how older adults and healthcare professionals understand these concepts and to establish an ethical and DEI-oriented foundation for a framework to evaluate technology-assisted transfers in a respectful, inclusive, and clinically actionable manner.

Methods This two-phase study integrates a scoping review with qualitative inquiry conducted across three healthcare settings in Ottawa, Canada. The scoping review followed Arksey and O'Malley's framework and PRISMA-ScR guidelines. It examined how comfort, dignity, and safety are defined, operationalized, and measured in studies involving mechanical and active-assist transfer devices. Searches were conducted in MEDLINE, Embase, CINAHL, and Scopus. Equity-related gaps were assessed, including representation of individuals with diverse communication capacities, cultural or linguistic backgrounds, and cognitive profiles. Qualitative data were collected through interviews with older adults who had recently experienced technology-assisted transfers (n = 15) and through focus groups with healthcare professionals (n = 14), including physiotherapists, nurses, and personal support workers. Thematic analysis using NVivo highlighted ethically relevant dimensions, including autonomy, comfort, dignity, emotional security, safety, and respect, and examined how transfer technologies support or undermine these principles.

Results and Discussion Scoping review findings indicate that mechanical transfer devices enhance physical comfort, reduce caregiver burden, and improve perceptions of dignity. Older adults frequently reported increased stability, respect, and security when devices were used appropriately. However, significant evidence gaps persist, particularly regarding community-dwelling older adults, persons with cognitive impairment, and those whose cultural backgrounds shape expectations of respectful care. Existing assessment tools rarely capture the lived experience of transfers, especially for individuals with communication challenges and from equity-deserving groups. Qualitative findings revealed variability in how comfort, dignity, and safety are understood. Comfort encompassed pain reduction, proper positioning, clear explanations, and emotional reassurance. Dignity was linked to privacy, autonomy, and respectful communication. Safety included physical protection and emotional security, influenced by staff skill, cultural sensitivity, attentiveness, and equipment reliability. Together, these findings underscore the need for an ethically grounded, equity-informed framework. The framework will clarify the concepts of comfort, dignity, and safety and organize them into subdimensions expressed as observable, person-centered indicators. These indicators will offer clinicians and gerontechnology practitioners concrete, actionable criteria for evaluating transfer practices through both technical and ethical lenses, ultimately promoting autonomy, inclusion, and respectful care across diverse settings.

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