



Design Requirements for a Pelvic-Floor eHealth Solution: Findings From Multinational Focus Groups

Greta Būtėnaitė¹, Oscar Aguila-Gimeno^{1,2,3} , Andrea Fuente-Vidal² , Marius Brazaitis¹ , Rima Solianik¹ , Erika Karkauskienė¹ , Milda Šarkūnė¹, Emma Stanmore⁴ , Javier Jerez-Roig^{1,2} 

¹ Lithuanian Sports University, Kaunas, Lithuania; ² University of Vic – Central University of Catalonia (UVic-UCC), Vic, Spain;

³ University Hospital Santa Maria of Lleida, Lleida, Spain; ⁴ The University of Manchester, Manchester, United Kingdom

Background and Aim. Urinary incontinence (UI) affects up to one in three adults over 50 and is closely associated with stigma, embarrassment, and delayed help-seeking. Its impact includes psychological distress, social withdrawal, and reduced daily functioning. Although pelvic floor muscle training is an effective conservative treatment, many older adults face barriers related to awareness, guidance, and motivation. Digital health tools may help address these challenges by offering anonymity, structured support, reducing waiting lists and lowering healthcare costs. Evidence from mobile and web-based UI interventions shows improvements in symptoms and engagement. This study, part of the multinational KOKU Bladder project, explored the needs, expectations, and preferences of a pelvic-floor digital intervention.

Methods. Focus groups were conducted in Spain, the United Kingdom, and Lithuania with adults aged ≥ 50 (both men and women). Participants completed sociodemographic and ICIQ-SF questionnaires via REDCap during face-to-face interviews. Qualitative data were analysed using Reflexive Thematic Analysis.

Results. Thirty-one potential end users (mean age 62.3 years; 71% women) contributed to the focus groups. UI severity varied widely (ICIQ-SF 0–16, with a mean of 8.3), and many reported multiple comorbidities. Across countries, Spanish participants emphasised very simple navigation and strong anonymity needs, UK participants showed higher digital confidence and greater openness to optional engagement features, while Lithuanian participants expressed mixed digital skills but a pronounced preference for privacy and clear guidance to ensure exercises were performed correctly. Participants supported reminders and personalised feedback, while views on gamification and virtual communities were mixed.

Conclusions. Older adults view a pelvic-floor digital intervention as acceptable when it is simple, evidence-based, personalised, and integrated with professional guidance to ensure long-term adherence and effectiveness. Findings directly informed the co-creation of the KOKU Bladder platform, shaping its educational content, exercise library, and motivational features.

Keywords: Urinary incontinence; digital health; eHealth solutions; pelvic floor exercises

Funding and Disclosures: The project received funding from the Research Council of Lithuania (code S-MIP-24-112), the Catalan Board of Physiotherapists (code 004_2024), and AGAUR (Agència de Gestió d'Ajuts Universitaris i de Recerca) through an Industry PhD (2024 DI 00058).

Informed Consent Statement: The study was approved by the Research Ethics Committee of IRIS-CC (code 24/095, dated 09 01 2025), the Research Ethics Committee of Hospital Universitari Arnau de Vilanova of Lleida (CEIC-3201, dated 27 01 2025), the Committee for Social Sciences Research Ethics of the Lithuanian Sports University (SMTEK-31, dated 03 03 2025), and the Research Ethics Committee 3 of the University of Manchester (2025-23619-43258, dated 13 08 2025).

