

Title	Authors	Year	Methodology	Type of ICT	Usage setting	Condition	# participants	Min age	Max age	Mean age	SD age	Focus	Theoretical framework	Research strategy	Data generation methods	Geographic area	Notes	
Getting Grandma Online: Are Tablets the Answer for Increasing Digital Inclusion for Older Adults in the U.S.?	Tsai et al.	2015	Mixed method	Tablets	Not specified	Not specified	21	69	91	N/S	N/S	Technology adoption	Social cognitive theory	Not specified	Interview (Semi-structured)			
ICT and older people: Beyond usability	Hernández-Encuentra et al.	2009	Mixed method	ICT in general	Not specified	Not specified	7	65	70	N/S	N/S	Technology adoption	Not specified	Not specified	Focus group			
In-home monitoring of older adults with vision impairment: Exploring patients', caregivers' and professionals' views	Larizza et al.	2014	Mixed method	In-home monitoring system	In user's home	Vision impairment	78	60	N/S	N/S	N/S	User needs	Own theoretical framework	Design and creation	Co-design workshop	Questionnaire		
The acceptability of home monitoring technology among community-dwelling older adults and baby boomers	Mihailidis et al.	2008	Mixed method	In-home monitoring system	In user's home	Healthy	15	65	N/S	N/S	N/S	Technology acceptance in general	Not specified	Not specified	Interview (Structured)	Questionnaire		
The elderly and a remote home care: The case of Slovenia	Korblar	2013	Mixed method	Telecare	In user's home	Not specified	116	55	89	N/S	N/S	Technology adoption	Not specified	Survey	Interview			
The perceptions of cognitively impaired patients and their caregivers of a home telecare system	Mehrabian et al.	2015	Mixed method	Telecare	In user's home	Cognitively impaired	62	50	N/S	77.3	7.2	Technology adoption	Functionality	Not specified	Interview (Semi-structured)		Values for mean and SD of age is for the Alzheimers's subcategory.	
Usability study of a computer-based self-management system for older adults with chronic diseases	Or et al.	2012	Mixed method	Self-management system	In user's home	Chronic illness	50	55	N/S	71.6	9.7	Usability	Not specified	Design and creation	Questionnaire	Observations		
Acceptance of Swedish e-health services	Jung et al.	2011	Qualitative	Telehealth	Not specified	Not specified	6	65	N/S	N/S	N/S	Technology acceptance in general	Technology Acceptance Model	Not specified	Interview (Semi-structured)		Norrbottnen, Sweden	
Advocacy of home telehealth care among consumers with chronic conditions	Lu et al.	2014	Qualitative	Telehealth	In user's home	Diabetes	20	50	86	67	N/S	Technology acceptance in general	Not specified	Not specified	Interview (Semi-structured)	Focus group	Taipei, Taiwan	
An ethnographical study of the accessibility barriers in the everyday interactions of older people with the web	Sayago et al.	2011	Qualitative	Internet	Not specified	Not specified	388	65	80	72	2.4	Barriers	Not specified	Ethnography	Interview (Semi-structured)	Observations	Barcelona, Spain	
An extended view on benefits and barriers of ambient assisted living solutions	Jaschinski et al.	2015	Qualitative	AAL	In user's home	Not specified	28	55	86	71.36	9.45	Barriers	Technology acceptance in general	Design and creation	Interview (Semi-structured)	Focus group	Belgium + France + UK	
Assessing older adults' perceptions of sensor data and designing visual displays for ambient environments	Reeder et al.	2014	Qualitative	In-home monitoring system	In user's home	Not specified	8	79	86	N/S	N/S	Usefulness of technology	Not specified	Design and creation	Interview (Semi-structured)	Co-design workshop	Seattle, WA, USA	
Attitudes Toward Information and Communication Technology (ICT) in Residential Aged Care in Western Australia	Loh et al.	2009	Qualitative	Video conferencing software	Residential care u	Not specified	17	N/S	N/S	N/S	N/S	Technology acceptance in general	Not specified	Not specified	Focus group		Western Australia	
Bridging the digital divide in older adults: A study from an initiative to inform older adults about new technologies	Wu et al.	2015	Qualitative	ICT in general	Not specified	Not specified	23	63	88	77.1	N/S	Access to health information	Not specified	Not specified	Focus group		Paris, France	
Defining the user requirements for wearable and optical fall prediction and fall detection devices for home use	Govercin et al.	2010	Qualitative	Fall sensors	Not specified	Risk of falling	5	60	76	68	N/S	Ergonomy	User needs	Design and creation	Focus group		Berlin, Germany	
Diabetes management assisted by telemedicine: Patient perspectives	Trief et al.	2008	Qualitative	Telemedicine	Not specified	Diabetes	40	N/S	N/S	67.93	6.05	Barriers	Not specified	Not specified	Interview (Structured)		New York, USA	
Elderly persons' perception and acceptance of using wireless sensor networks to assist healthcare	Steele et al.	2009	Qualitative	WSN	In user's home	Not specified	13	65	N/S	N/S	N/S	Technology adoption	UTAUT	Not specified	Focus group		Sydney, Australia	
Exploring an informed decision-making framework using in-home sensors: Older adults' perceptions	Chung et al.	2014	Qualitative	In-home monitoring system	In user's home	Not specified	N/S	79	86	N/S	N/S	User perceptions	Informed Decision Making	Not specified	Interview (Semi-structured)		Seattle, WA, USA	
Exploring barriers to participation and adoption of telehealth and telecare within the Whole System Demonstrator trial: A qualitative study	Sanders et al.	2012	Qualitative	Telecare	Not specified	Diabetes	22	23	92	71	16.4	Barriers	Technology adoption	Not specified	Interview (Semi-structured)	Observations	Cornwall + Kent + Newham, UK	
Findings from a participatory evaluation of a smart home application for older adults	Demiris et al.	2008	Qualitative	Smart home	In user's home	Not specified	300	19	85	50.6	15.4	Aging in place	Functionality	Own theoretical framework	Not specified	Interview (Semi-structured)	Observations	Columbia, MO, USA
Impact of monitoring technology in assisted living: Outcome pilot	Alwan et al.	2006	Qualitative	In-home monitoring system	In user's home	Not specified	22	49	93	83.78	N/S	Technology acceptance in general	Not specified	Survey	Questionnaire	Technology logs	St. Paul, MN, USA	
Implementing technology-based embedded assessment in the home and community life of individuals aging with disabilities: A participatory research and development	Chen et al.	2014	Qualitative	Location tracking	In user's home	Spinal cord injuries	5	46	80	65	12.0	Technology adoption	Functionality	Design and creation	Interview	Diaries	USA	
Indoor and outdoor social alarms: understanding users' perspectives	Spindler et al.	2014	Qualitative	Medical alarm	In user's home	Not specified	15	N/S	N/S	N/S	N/S	User needs	Not specified	Not specified	Interview (Semi-structured)	Focus group	Botkyka + Värmdö + Örnköldsvik+ Pajala	
Keeping silver surfers on the crest of a wave - Older people's ICT learning and support needs	Damodaran et al.	2013	Qualitative	ICT in general	Not specified	Not specified	>1000	50	N/S	N/S	N/S	User needs	Not specified	Not specified	Co-design workshop	Questionnaire	UK	
Making sense of mobile- and web-based wellness information technology: cross-generational study	Kutz et al.	2013	Qualitative	Telehealth	Not specified	Not specified	7	N/S	N/S	N/S	N/S	User perceptions	Not specified	Not specified	Interview (Semi-structured)		Indiana, US	
Meeting seniors' information needs: Using computer technology	Campbell	2008	Qualitative	PC use in general	Not specified	Not specified	N/S	N/S	N/S	73	N/S	Access to health information	Not specified	Not specified	Observations		Pittsburgh, PA, USA	
Older adults are mobile tool! Identifying the barriers and facilitators to older adults' use of mHealth for pain management	Parker et al.	2013	Qualitative	Mobile health	Not specified	Pain problems	41	60	N/S	76.2	9.3	Barriers	Technology adoption	Not specified	Not specified	Focus group	New York City, NY, USA	
Older adults' acceptance of a community-based telehealth wellness system	Demiris et al.	2013	Qualitative	Telehealth	In user's home	Not specified	12	N/S	N/S	79.3	N/S	Usability	Privacy	Not specified	Not specified	Focus group	Seattle, WA, USA	
Older adults' attitudes towards and perceptions of "smart home" technologies: a pilot study	Demiris et al.	2004	Qualitative	Smart home	In user's home	Not specified	15	65	N/S	N/S	N/S	Usefulness of technology	User perceptions	Aging in Place	Not specified	Focus group	Columbia, MO, USA	
Older adults' perceptions of usefulness of personal health records	Price et al.	2013	Qualitative	PHR system	Not specified	Not specified	24	61	83	72	5.6	Usefulness of technology	Technology Acceptance Model	Experiment	Interview (Semi-structured)	Diaries	Clemson, SC, USA	
Older adults' privacy considerations for vision based recognition methods of eldercare applications	Demiris et al.	2009	Qualitative	Video surveillance	In user's home	Not specified	10	65	N/S	N/S	N/S	Privacy	The Bellotti and Sellen framework	Not specified	Interview (Semi-structured)	Observations	Columbia, MO, USA	
Passive sensor technology interface to assess elder activity in independent living	Alexander et al.	2011	Qualitative	User interface	In user's home	Chronic illness	5	70	N/S	N/S	N/S	Usability	Nurse-Patient Trajectory Framework	Not specified	Observations	Technology logs	Interview	Columbia, MO, USA
Privacy and senior willingness to adopt smart home information technology in residential care facilities	Courtney	2008	Qualitative	Smart home	Residential care u	Not specified	11	65	N/S	N/S	N/S	Privacy	Technology adoption	Not specified	Survey	Interview (Semi-structured)	Focus group	Midwestern United States
Senior residents' perceived need of and preferences for "smart home" sensor technologies	Demiris et al.	2008	Qualitative	Smart home	In user's home	Not specified	14	65	N/S	N/S	N/S	User perceptions	Aging in Place	Not specified	Focus group		Columbia, MO, USA	
Use of information and communication technology to provide health information: What do older migrants know, and what do they need to know?	Goodall et al.	2010	Qualitative	ICT in general	Not specified	Not specified	43	55	N/S	N/S	N/S	Access to health information	Not specified	Survey	Focus group		South Australia	
What matters to older people with assisted living needs? A phenomenological analysis of the use and non-use of telehealth and telecare	Greenhalgh et al.	2013	Qualitative	Telehealth	In user's home	Not specified	40	60	98	81	N/S	Technology adoption	Merleau-Ponty's phenomenological lens	Ethnography	Interview (Semi-structured)	Observations	Diaries	London + Manchester, UK
Willing but Unwilling: Attitudinal barriers to adoption of home-based health information technology among older adults	Young et al.	2014	Qualitative	ICT in general	In user's home	Not specified	35	46	72	N/S	N/S	Barriers	Technology adoption	Not specified	Not specified	Interview (Semi-structured)		USA
You get reminded you're a sick person: Personal data tracking and patients with multiple chronic conditions	Jackwerth et al.	2015	Qualitative	Health tracking	Not specified	Chronic illness	22	37	89	64.1	N/S	User perceptions	Own theoretical framework	Not specified	Interview (Semi-structured)		New York City, NY, USA	
A community-based exercise programme for older persons with knee pain using telemedicine	Wong et al.	2005	Quantitative	Video conferencing software	In user's home	Knee pain	20	60	N/S	75	7	User perceptions	Survey	Questionnaire				
A comparison of personal response systems in Canada and the UK	Risk et al.	1995	Quantitative	Medical alarm	In user's home	Risk of falling	38	19	95	73.4	N/S	Convergence	Integrated care	Not specified	Survey	Interview (Structured)		
An e-health system for the elderly (Butler Project): a pilot study on acceptance and satisfaction	Botella et al.	2009	Quantitative	Telehealth	Not specified	Not specified	4	66	74	70	4.08	User perceptions	Not specified	Survey	Questionnaire			
An exploratory study of the personal health records adoption model in the older adult with chronic illness	Logue et al.	2013	Quantitative	PHR system	Not specified	Chronic illness	38	65	93	77	N/S	Technology adoption	Technology literacy	Own theoretical framework	Survey	Questionnaire		
Application of grey system theory in telecare	Huang et al.	2011	Quantitative	Telecare	Not specified	Not specified	76	N/S	N/S	N/S	N/S	Quality of life	WHO QoL	Survey	Interview (Structured)	Questionnaire		Unclear whether they have used the questionnaire directly or as part of a structured interview.
Assessing dysphagia via telerehabilitation: Patient perceptions and satisfaction	Sharma et al.	2013	Quantitative	Telerehabilitation	Not specified	Dysphagia	40	25	94	66	16.2	User perceptions	User satisfaction	Not specified	Survey	Questionnaire		
Comparison of the middle-aged and older users' adoption of mobile health services in China	Deng et al.	2014	Quantitative	Mobile health	Not specified	Not specified	206	N/S	N/S	N/S	N/S	Technology adoption	Own theoretical framework	Survey	Questionnaire			
Determinants of the intention to use e-Health by community dwelling older people	de Veer et al.	2015	Quantitative	Telehealth	Not specified	Not specified	1014	57	77	N/S	N/S	Technology adoption	Technology Acceptance Model	Survey	Questionnaire			
Do community alarm users want telecare?	Brownsell et al.	2000	Quantitative	Medical alarm	Residential care u	Not specified	176	56	91	76	N/S	Functionality	Not specified	Survey	Interview (Structured)			
Effects of an eHealth literacy intervention for older adults	Xie	2011	Quantitative	Telehealth	Not specified	Not specified	146	56	91	69.99	8.12	Access to health information	Technology literacy	Not specified	Survey	Questionnaire		
Factors affecting provision of successful monitoring in home telehealth	Wade et al.	2012	Quantitative	Telehealth	In user's home	Frailty	43	63	99	81	N/S	Technology adoption	Not specified	Survey	Questionnaire	Technology logs		
Factors influencing the adoption of home telecare by elderly or chronically ill people: A national survey	Peeters et al.	2012	Quantitative	Telecare	In user's home	Chronic illness	254	36	97	77.8	N/S	Technology adoption	Not specified	Survey	Questionnaire			
Factors influencing trust in ambient assisted living technology: A scenario-based analysis	Steinke et al.	2014	Quantitative	AAL	In user's home	Not specified	292	50	93	74.4	10	User perceptions	Not specified	Survey	Questionnaire			
Factors influencing use of an e-health website in a community sample of older adults	Cajal et al.	2013	Quantitative	Internet	In user's home	Not specified	61	47	92	70.38	10.5	Technology adoption	Technology Acceptance Model	Not specified	Questionnaire	Observations		
Feasibility and impact of telemonitor-based depression care management for geriatric homecare patients	Sheeran et al.	2011	Quantitative	In-home monitoring system	In user's home	Depression	48	66	98	76.2	7.7	User perceptions	Not specified	Not specified	Interview (Structured)			
How user diversity and country of origin impact the readiness to adopt E-health technologies: An intercultural comparison	Wilkowski et al.	2012	Quantitative	Telehealth	In user's home	Not specified	300	19	85	50.6	15.4	Technology adoption	Not specified	Survey	Questionnaire			
ICT Learning by Older Adults and Their Attitudes toward Computer Use	González et al.	2015	Quantitative	PC use in general	Not specified	Not specified	191	60	89	68.65	6.25	Technology adoption	Not specified	Survey	Questionnaire			
Improving older adults' e-health literacy through computer training using NH online resources	Xie	2012	Quantitative	ICT in general	Not specified	Not specified	218	60	89	70	8.7	Technology literacy	Not specified	Survey	Questionnaire			
Improving older adults' experience with interactive voice response systems	Miller et al.	2011	Quantitative	IVR	Not specified	Not specified	26	65	84	71.2	5.8	Barriers	Not specified	Not specified	Focus group			
Incorporating UTAUT predictors for understanding home care patients' and clinician's acceptance of healthcare telemedicine equipment	Kohlke et al.	2014	Quantitative	Telemedicine	In user's home	Heart disease	20	41	N/S	N/S	N/S	Technology adoption	Usability	UTAUT	Survey	Questionnaire		
Information Technologies as Health Management Tools: Urban Elders' Interest and Ability in Using the Internet	Cresci et al.	2012	Quantitative	Internet	Not specified	Not specified	18	56	95	72	11	User needs	User perceptions	Not specified	Not specified	Focus group		
Is telemonitoring an option against shortage of physicians in rural regions? attitude towards telemedical devices in the North Rhine-Westphalian health survey, Germany	Terschüren et al.	2012	Quantitative	Telemedicine	In user's home	Not specified	2006	18	93	48.8	17.0	User perceptions	Not specified	Survey	Questionnaire			
Multimodal sensor-based fall detection within the domestic environment of elderly people	Feldwieser et al.	2014	Quantitative	Fall sensors	In user's home	Risk of falling	28	66	89	74.3	6.3	Technology adoption	Not specified	Not specified	Technology logs	Diaries	Questionnaire	
Not 2 old 2 TXT: there is potential to use email and SMS text message healthcare reminders for rheumatology patients up to 65 years old	Hughes et al.	2011	Quantitative	Text communication	Not specified	Chronic illness	112	18	N/S	N/S	N/S	Technology adoption	Not specified	Survey	Questionnaire			
Older adults: Are they ready to adopt health-related ICT?	Heart et al.	2013	Quantitative	Telehealth	Not specified	Not specified	123	60	N/S	80.2	8.58	Technology adoption	Not specified	Survey	Interview (Structured)	Questionnaire		
Older adults' satisfaction with a medication dispensing device in home care	Reeder et al.	2013	Quantitative	Medication Dispensing Device	In user's home	Frailty	98	60	N/S	80	7.93	User perceptions	Not specified	Survey	Questionnaire			
Older people's attitudes toward interactive voice response systems	Miller et al.	2014	Quantitative	IVR	Not specified	Not specified	185	65	92	73.32	6.44	User perceptions	Usability	Not specified	Survey	Questionnaire		
Patients' satisfaction of healthcare services and perception with in-home telerehabilitation and physiotherapists' satisfaction toward technology for post-knee arthroplasty: An embedded study in a randomis	Toussignant et al.	2011	Quantitative	Telerehabilitation	In user's home	Not specified	42	N/S	N/S	66.4	11.6	User satisfaction	Not specified	Survey	Questionnaire			
People's perceptions and expectations of assistive health-enabling technologies: An empirical study in Germany	Marschollek et al.	2009	Quantitative	ICT in general	Not specified	Not specified	147	N/S	N/S	57.3	N/S	Usefulness of technology	Technology adoption	Not specified	Survey	Interview (Semi-structured)	Questionnaire	
RAISE (Rapid Access Integrating Safer Entry) for the Elderly: Readiness of Older Adults to Adopt a Universal Serial Bus Personal Health Record for Medication Reconciliation	Heise et al.	2011	Quantitative	PHR system	Not specified	Chronic illness	15	55	85	N/S	N/S	Usability	Not specified	Not specified	Focus group			
Senior citizens' acceptance of information systems: A study in the context of e-Government services	Phang et al.	2006	Quantitative	ICT in general	Not specified	Not specified	139	50	90	N/S	N/S	Technology acceptance in general	Not specified	Survey	Questionnaire			
Specific health status has an impact on the willingness to use telemonitoring: data from a 2009 health survey in north rhine-westphalia, Germany	Burmans Genannt Stiggemann et al.	2013	Quantitative	Telemedicine	In user's home	Not specified	13993	18	93	49	18.9	Technology adoption	Not specified	Survey	Interview (Structured)			
Support for e-health services among elderly primary care patients	Bujnowska-Fedak et al.	2014	Quantitative	Telehealth	In user's home	Not specified	286	60	90	73.8	7.7	User needs	Not specified	Survey	Questionnaire			
Switching attitudes of Taiwanese middle-aged and elderly patients toward cloud healthcare services: An exploratory study	Lai et al.	2014	Quantitative	Telecare	Not specified	Not specified	206	45	75	N/S	N/S	User perceptions	Push-pull-mooring-habit	Survey	Questionnaire			
Technological approaches to remote monitoring of elderly people in cardiology: A usability perspective	Spinante et al.	2012	Quantitative	Telecare	In user's home	Heart disease	N/S	65	N/S	N/S	N/S	Usability	Not specified	Experiment	Technology logs			
Technology acceptance for an intelligent comprehensive interactive care (ICIC) system for care of the elderly: A survey-questionnaire study	Wong et al.	2012	Quantitative	Telemedicine	Not specified	Not specified	121	65	91	79.3	6.3	Technology acceptance in general	Technology Acceptance Model	Survey	Questionnaire		Values for mean and SD of age is for the Medication Reminder subcategory.	
Telehealth problem-solving therapy for depressed low-income homebound older adults	Choi et al.	2014	Quantitative	Telehealth	In user's home	Not specified	121	50	89	65.21	9.22	Technology adoption	Not specified	Not specified	Interview (Structured)			
Telemedicine applications in primary care: A geriatric patient pilot project	Bratton et al.	2000	Quantitative	Telemedicine	In user's home	Healthy	20	68	87	77.3	N/S	User satisfaction	Not specified	Survey	Questionnaire			
The attitudes, expectations and needs of elderly people in relation to e-health applications: results from a European survey	Stroetmann et al.	2002	Quantitative	ICT in general	In user's home	Not specified	9661	N/S	N/S	N/S	N/S	Technology adoption	Not specified	Survey	Interview (Structured)			
The Digital Health Divide: Evaluating Online Health Information Access and Use Among Older Adults	Hall et al.	2015	Quantitative	Internet	In user's home	Not specified	225	50	92	68.9	10.4	Access to health information	Digital divide	Survey	Interview (Structured)			
The effect of age on the use of health and self-care information: Confronting the stereotype	Wagner et al.	2003	Quantitative	ICT in general	In user's home	Not specified	5909	18	N/S	51	16	User perceptions	Not specified	Survey	Questionnaire			
The technology acceptance puzzle: Results of a representative survey in Lower Saxony	Künemund et al.	2014	Quantitative	ICT in														