

Appendix 1

Table 1. Database: PubMed

Search No	Indexed and Keyword Terms
1	"Aged"[MeSH Terms] OR "Aged"[Title/Abstract] OR "older adults"[Title/Abstract] OR "seniors"[Title/Abstract] OR "Elderly"[Title/Abstract] OR "elder"[Title/Abstract] OR "Aging"[Title/Abstract] OR "geriatric"[Title/Abstract] OR "older generation"[Title/Abstract]
2	"Cognitive Dysfunction"[MeSH Terms] OR "Cognition Disorders"[MeSH Terms] OR "mild cognitive impairment"[Title/Abstract] OR "MCI"[Title/Abstract] OR "cognitive decline"[Title/Abstract] OR "cognitive impairment"[Title/Abstract] OR "cognition"[Title/Abstract] OR "mild neurocognitive disorder"[Title/Abstract] OR "neurocognitive disorder"[Title/Abstract] OR "early cognitive decline"[Title/Abstract] OR "early onset Alzheimer's disease"[Title/Abstract] OR "pre clinical Alzheimer's disease"[Title/Abstract] OR "Memory Disorders"
3	"Technology"[MeSH Terms] OR "Information Technology"[MeSH Terms] OR "Telemedicine"[MeSH Terms] OR "Internet"[MeSH Terms] OR "multimedia"[MeSH Terms] OR "Communications Media"[MeSH Terms] OR "Communication Aids for Disabled"[MeSH Terms] OR "Smartphone"[MeSH Terms] OR "Robotics"[MeSH Terms] OR "Reminder Systems"[MeSH Terms] OR "Technology"[Title/Abstract] OR "Internet"[Title/Abstract] OR "technology based"[Title/Abstract] OR "web based"[Title/Abstract] OR "ICT"[Title/Abstract] OR "information communication technology"[Title/Abstract] OR "Information Technology"[Title/Abstract] OR "telecare"[Title/Abstract] OR "telehealth"[Title/Abstract] OR "Telemedicine"[Title/Abstract] OR "assistive technology"[Title/Abstract] OR "technology based"[Title/Abstract] OR "Computer Assisted"[Title/Abstract] OR "Computer based"[Title/Abstract] OR "computer mediated"[Title/Abstract] OR "web based"[Title/Abstract] OR "smart"[Title/Abstract] OR "Digital"[Title/Abstract] OR "virtual"[Title/Abstract] OR "augmented"[Title/Abstract] OR "media"[Title/Abstract] OR "multimedia"[Title/Abstract] OR "Communication Aids for Disabled"[Title/Abstract] OR "application"[Title/Abstract] OR "app"[Title/Abstract] OR "touchscreen"[Title/Abstract] OR "device"[Title/Abstract] OR "iPad"[Title/Abstract] OR "mobile"[Title/Abstract] OR "tablet"[Title/Abstract] OR "tablets"[Title/Abstract] OR "wearable"[Title/Abstract] OR "wearables"[Title/Abstract] OR "monitoring"[Title/Abstract] OR "monitor"[Title/Abstract] OR "video"[Title/Abstract] OR "Cam"[Title/Abstract] OR "sensor"[Title/Abstract] OR "senser"[Title/Abstract] OR "Robot"[Title/Abstract] OR "Robotics"[Title/Abstract] OR

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- “mHealth”[Title/Abstract] OR “m-health”[Title/Abstract] OR
“eHealth”[Title/Abstract] OR “e-health”[Title/Abstract] OR
“electronic device”[Title/Abstract] OR “on-line”[Title/Abstract]
OR “online”[Title/Abstract] OR “electronic
learning”[Title/Abstract] OR “e-learning”[Title/Abstract] OR
“Internet-assisted”[Title/Abstract] OR “Internet-based
learning”[Title/Abstract] OR “short message
service”[Title/Abstract] OR “SMS”[Title/Abstract] OR
“reminder”[Title/Abstract] OR “device”[Title/Abstract] OR
“memory aid”[Title/Abstract]
- 4 "Self Administration"[MeSH Terms] OR "Drug
Monitoring"[MeSH Terms] OR "Treatment Adherence and
Compliance"[MeSH Terms] OR "Medication Adherence"[MeSH
Terms] OR "Patient compliance"[MeSH Terms] OR "Medication
Adherence"[Title/Abstract] OR "Medication
compliance"[Title/Abstract] OR "drug compliance"[Title/Abstract]
OR "dosage adherence"[Title/Abstract] OR "dosage
compliance"[Title/Abstract] OR "dose compliance"[Title/Abstract]
OR "dose adherence"[Title/Abstract] OR "dosing
compliance"[Title/Abstract] OR "dosing
adherence"[Title/Abstract] OR "drug adherence"[Title/Abstract]
OR "medication intake"[Title/Abstract] OR "medication taking
behavior"[Title/Abstract] OR "patient compliance"[Title/Abstract]
OR "adherence"[Title/Abstract] OR "medication
therapy"[Title/Abstract] OR "medication"[Title/Abstract] OR
"medication use"[Title/Abstract] OR "refill
adherence"[Title/Abstract] OR "medication sheet"[Title/Abstract]
- 5 #1 AND #2 AND #3 AND #4
- 6 #5 AND English[Language]
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Table 2. Database: CINAHL with Full Text (EBSCO host)

Search No	Indexed and Keyword Terms
1	MH "Aged" OR "Aged" OR "older adults" OR "seniors" OR "Elderly" OR "elder" OR "Aging" OR "geriatric" OR "older generation"
2	MH "Mild Cognitive Impairment" OR MH "Cognition Disorders" OR "mild cognitive impairment" OR "Cognitive Dysfunction" OR "MCI" OR "cognitive decline" OR "cognitive impairment" OR "cognition" OR "mild neurocognitive disorder" OR "neurocognitive disorder" OR "early cognitive decline" OR "early onset Alzheimer's disease" OR "pre clinical Alzheimer's disease" OR "Memory Disorders"
3	MH "Technology" OR MH "Information Technology" OR MH "Communications Media" OR MH "Communication Aids for Disabled" OR MH "Computers and Computerization" OR "Technology" OR "Internet" OR "technology based" OR "web based" OR "ICT" OR "information communication technology" OR "Information Technology" OR "telecare" OR "telehealth" OR "Telemedicine" OR "assistive technology" OR "technology based" OR "Computer Assisted" OR "Computer based" OR "computer mediated" OR "web based" OR "smart" OR "Digital" OR "virtual" OR "augmented" OR "media" OR "multimedia" OR "Communication Aids for Disabled" OR "application" OR "app" OR "touchscreen" OR "device" OR "iPad" OR "mobile" OR "tablet" OR "tablets" OR "wearable" OR "wearables" OR "monitoring" OR "monitor" OR "video" OR "Cam" OR "sensor" OR "senser" OR "Robot" OR "Robotics" OR "mHealth" OR "m-health" OR "eHealth" OR "e-health" OR "Smartphone" OR "electronic device" OR "on-line" OR "online" OR "electronic learning" OR "e-learning" OR "Internet-assisted" OR "Internet-based learning" OR "memory aid"
4	MH "Medication Compliance" OR MH "Patient compliance" OR MH "Self Administration" OR MH "Drug Monitoring" OR "Medication Adherence" OR "medication compliance" OR "drug compliance" OR "dosage adherence" OR "dosage compliance" OR "dose compliance" OR "dose adherence" OR "dosing compliance" OR "dosing adherence" OR "drug adherence" OR "medication intake" OR "medication taking behavior" OR "patient compliance" OR "patient compliance" OR "adherence" OR "medication therapy" OR "medication" OR "medication use" OR "refill adherence" OR "medication sheet"
5	#1 AND #2 AND #3 AND #4
6	#5 AND LA English

Table 3. Database: PsycINFO

Search No	Indexed and Keyword Terms
1	MAINSUBJECT.EXACT("Aging") OR MAINSUBJECT.EXACT("Geriatric Patients") OR MAINSUBJECT.EXACT("Older Adulthood") OR AB, TI("Aged" OR "older adults" OR "seniors" OR "Elderly" OR "elder" OR "Aging" OR "geriatric" OR "older generation")
2	MAINSUBJECT.EXACT("mild cognitive impairment") OR MAINSUBJECT.EXACT("Cognitive Impairment") OR MAINSUBJECT.EXACT("Neurocognitive Disorders") OR MAINSUBJECT.EXACT("Memory Disorders") OR AB, TI("mild cognitive impairment" OR "Cognitive Dysfunction" OR "MCI" OR "cognitive decline" OR "cognitive impairment" OR "cognition" OR "mild neurocognitive disorder" OR "neurocognitive disorder" OR "early cognitive decline" OR "early onset Alzheimer's disease" OR "pre clinical Alzheimer's disease" OR "Cognition Disorders")
3	MAINSUBJECT.EXACT("Assistive Technology") OR MAINSUBJECT.EXACT("Communications Media") OR MAINSUBJECT.EXACT("computers") OR MAINSUBJECT.EXACT("Monitoring") OR MAINSUBJECT.EXACT("Communications Media") OR MAINSUBJECT.EXACT("Internet") OR AB, TI("Technology" OR "Internet" OR "technology based" OR "web based" OR "ICT" OR "information communication technology" OR "Information Technology" OR "telecare" OR "telehealth" OR "Telemedicine" OR "assistive technology" OR "technology based" OR "Computer Assisted" OR "Computer based" OR "computer mediated" OR "web based" OR "Digital" OR "virtual" OR "augmented" OR "media" OR "multimedia" OR "Communication Aids for Disabled" OR "application" OR "app" OR "touchscreen" OR "device" OR "iPad" OR "mobile" OR "wearable" OR "wearables" OR "monitor" OR "monitoring" OR "video" OR "Cam" OR "sensor" OR "senser" OR "Robot" OR "Robotics" OR "mHealth" OR "eHealth" OR "Smartphone" OR "electronic device" OR "online" OR "electronic learning" OR "e-learning" OR "Internet-assisted" OR "Internet- based learning" OR "short message service" OR "SMS" OR "reminder" OR "device" OR "Memory Aid")
4	MAINSUBJECT.EXACT("Drug Self Administration") OR AB, TI("Medication Compliance" OR "Patient compliance" OR "Self Administration" OR "Drug Monitoring" OR "Medication Adherence" OR "drug compliance" OR "dosage adherence" OR "dosage compliance" OR "dose compliance" OR "dose adherence" OR "dosing compliance" OR "dosing adherence" OR "drug adherence" OR "medication intake" OR "medication taking behavior" OR "patient compliance" OR "adherence" OR "medication therapy" OR "medication" OR "medication use" OR "refill adherence" OR "medication sheet")

5	#1 AND #2 AND #3 AND #4
6	#5 AND LA English

Table 4. Database: Embase

Search No	Indexed and Keyword Terms
1	'aging'/exp OR 'aged'/exp OR 'elderly'/exp OR 'aged':ab,ti OR 'older adults':ab,ti OR 'seniors':ab,ti OR 'elderly':ab,ti OR 'elder':ab,ti OR 'aging':ab,ti OR 'geriatric':ab,ti OR 'older generation':ab,ti
2	'mild cognitive impairment'/exp OR 'cognitive defect'/exp OR 'mild cognitive impairment':ab,ti OR 'cognitive dysfunction':ab,ti OR 'mci':ab,ti OR 'cognitive decline':ab,ti OR 'cognitive impairment':ab,ti OR 'cognition':ab,ti OR 'mild neurocognitive disorder':ab,ti OR 'neurocognitive disorder':ab,ti OR 'early cognitive decline':ab,ti OR 'early onset alzheimers disease':ab,ti OR 'preclinical alzheimers disease':ab,ti OR 'memory disorders':ab,ti OR 'cognition disorders':ab,ti
3	'technology'/exp OR 'telehealth'/exp OR 'information technology'/exp OR 'information processing'/exp OR 'audiovisual equipment'/exp OR 'sensor'/exp OR 'electronic device'/exp OR 'e-learning'/exp OR 'communication aid'/exp OR 'general medical device'/exp OR 'technology':ab,ti OR 'internet':ab,ti OR 'ICT':ab,ti OR 'information communication technology':ab,ti OR 'information technology':ab,ti OR 'telecare':ab,ti OR 'telehealth':ab,ti OR 'telemedicine':ab,ti OR 'assistive technology':ab,ti OR 'technology based':ab,ti OR 'computer assisted':ab,ti OR 'computer based':ab,ti OR 'computer mediated':ab,ti OR 'web based':ab,ti OR 'smart':ab,ti OR 'digital':ab,ti OR 'virtual':ab,ti OR 'augmented':ab,ti OR 'media':ab,ti OR 'multimedia':ab,ti OR 'communication aids for disabled':ab,ti OR 'application':ab,ti OR 'app':ab,ti OR 'touchscreen':ab,ti OR 'iPad':ab,ti OR 'mobile':ab,ti OR 'tablet':ab,ti OR 'tablets':ab,ti OR 'wearable':ab,ti OR 'wearables':ab,ti OR 'monitoring':ab,ti OR 'video':ab,ti OR 'cam':ab,ti OR 'sensor':ab,ti OR 'senser':ab,ti OR 'robot':ab,ti OR 'robotics':ab,ti OR 'mhealth':ab,ti OR 'm-health':ab,ti OR 'ehealth':ab,ti OR 'e-health':ab,ti OR 'smartphone':ab,ti OR 'electronic device':ab,ti OR 'on-line':ab,ti OR 'online':ab,ti OR 'electronic learning':ab,ti OR 'e-learning':ab,ti OR 'internet-assisted':ab,ti OR 'internet-based learning':ab,ti OR 'short message service':ab,ti OR 'SMS':ab,ti OR 'reminder':ab,ti OR 'memory aid':ab,ti OR 'device':ab,ti
4	'medication compliance'/exp OR 'drug dose regimen'/exp OR 'drug administration'/exp OR 'medication adherence':ab,ti OR 'medication compliance':ab,ti OR 'drug compliance':ab,ti OR 'dosage adherence':ab,ti OR 'dosage compliance':ab,ti OR 'dose compliance':ab,ti OR 'dose adherence':ab,ti OR 'dosing

compliance':ab,ti OR 'dosing adherence':ab,ti OR 'drug adherence':ab,ti OR 'medication intake':ab,ti OR 'medication taking behavior':ab,ti OR 'patient compliance':ab,ti OR 'adherence':ab,ti OR 'medication therapy':ab,ti OR 'medication':ab,ti OR 'medication use':ab,ti OR 'refill adherence':ab,ti OR 'medication sheet':ab,ti

5 #1 AND #2 AND #3 AND #4

6 #5 AND LA English

Table 5. Database: Cochrane Library

Search No	Indexed and Keyword Terms
1	MeSH descriptor: [Aged] explode all trees OR MeSH descriptor: [Aging] explode all trees OR (Aged OR elder OR older adults OR Elderly OR Aging OR "older generation" OR seniors OR geriatric):ti,ab,kw
2	MeSH descriptor: [Cognitive Dysfunction] explode all trees OR MeSH descriptor: [Memory Disorders] explode all trees OR MeSH descriptor: [Cognition Disorders] explode all trees OR ("Cognition Disorders" OR "mild cognitive impairment" OR "Cognitive Dysfunction" OR MCI OR "cognitive decline" OR "cognitive impairment" OR cognition OR "mild neurocognitive disorder" OR "neurocognitive disorder" OR "early cognitive decline" OR "early onset Alzheimer's disease" OR "pre clinical Alzheimer's disease" OR "Memory Disorders"):ti,ab,kw
3	MeSH descriptor: [Technology] explode all trees OR MeSH descriptor: [Telemedicine] explode all trees OR MeSH descriptor: [Information Technology] explode all trees OR MeSH descriptor: [Communications Media] explode all trees OR MeSH descriptor: [Computer-Assisted Instruction] explode all trees OR MeSH descriptor: [Internet] explode all trees OR MeSH descriptor: [Multimedia] explode all trees OR MeSH descriptor: [Communication Aids for Disabled] explode all trees OR MeSH descriptor: [Robotics] explode all trees OR (Technology OR Internet OR technology based OR web based OR ICT OR "Information Technology" OR "information communication technology" OR telecare OR telehealth OR Telemedicine OR "assistive technology" OR "technology based" OR "Computer Assisted" OR "Computer based" OR "computer mediated" OR "web based" OR Digital OR virtual OR augmented OR media OR multimedia OR "electronic learning" OR e-learning OR "Communication Aids for Disabled" OR application OR app OR touchscreen OR device OR iPad OR mobile OR tablet OR tablets OR wearable OR wearables OR sensor OR senser OR robot OR Robotics OR mHealth OR m-health OR eHealth OR e-health OR Smartphone OR "electronic device" OR on-line OR online OR Internet-assisted OR "Internet-based learning" OR smart OR video OR cam OR monitoring OR monitor OR "Internet-based learning" OR "short message service" OR SMS OR reminder OR device OR "Memory Aid"):ti,ab,kw

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- 4 MeSH descriptor: [Patient compliance] explode all trees OR MeSH descriptor: [Treatment Adherence and Compliance] explode all trees OR MeSH descriptor: [Drug Monitoring] explode all trees OR MeSH descriptor: [Self Administration] explode all trees OR MeSH descriptor: [Medication Adherence] explode all trees OR ("Medication Adherence" OR "medication compliance" OR "drug compliance" OR "dosage adherence" OR "dosage compliance" OR "dose compliance" OR "Dose adherence" OR "dosing compliance" OR "dosing adherence" OR "drug adherence" OR "medication intake" OR "medication taking behavior" OR "patient compliance" OR "Self Administration" OR "Drug Monitoring" OR adherence OR "medication therapy" OR medication OR "medication use" OR "refill adherence" OR "medication sheet"):ti,ab,kw
- 5 #1 AND #2 AND #3 AND #4
- 6 #5 AND (Limit "Trials")
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