

Appendix 1: Literature search strategy

MEDLINE

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R)

Search Strategy:

-
- 1 local area networks/
 - 2 exp telemedicine/
 - 3 (telemedicine or "tele health").tw.
 - 4 computer communication networks/
 - 5 internet/
 - 6 blogging/
 - 7 social media/
 - 8 electronic mail/
 - 9 search engine/
 - 10 ("remote communication*" or "remote consultation*").tw.
 - 11 information services/
 - 12 (ehealth or e-health or m-health or mhealth or "health informatics").tw.
 - 13 (internet or email or www or "world wide web" or virtual or "web site" or website).tw.
 - 14 (e-learning or elearning or telecommunicat\$).tw.
 - 15 databases, bibliographic/
 - 16 health information exchange/
 - 17 libraries, digital/
 - 18 ("computerised reminder\$" or "computerized reminder\$").tw.
 - 19 ("social media*" or "second life" or facebook* or youtube or twitter* or tweet* or webmd or linkedin or noodle or zotero or mendeley or refworks or endnote or picsearch or flickr or Skype or illuminate or upstream).tw.
 - 20 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19
 - 21 (clinician* or dentist* or doctor* or family practition* or general practition* or physician* or gyn?ecologist* or h?ematologist* or internist* or nurse* or obstetrician* or occupational therapist* or p?ediatrician* or pharmacist* or physiotherapist* or psychiatrist* or psychologist* or radiologist* or surgeon* or therapist* or counsel?or* or neurologist* or optometrist* or "health profession*" or health* personnel or "health care profession*" OR "health care personnel" or resident*).ti,ab.
 - 22 exp evidence-based medicine/
 - 23 clinical competence/
 - 24 professional competence/
 - 25 professional practice/
 - 26 guideline adherence/
 - 27 guidelines as topic/
 - 28 22 or 23 or 24 or 25 or 26 or 27
 - 29 randomized controlled trial.pt.
 - 30 controlled clinical trial.pt.
 - 31 randomized.ab.
 - 32 placebo.ab.
 - 33 clinical trials as topic.sh.
 - 34 randomly.ab.
 - 35 trial.ti.
 - 36 (control* adj8 trial*).ti,ab.
 - 37 (systematic: review or systematic: overview).ti,ab. or meta-analysis.pt,sh. or (meta-anal: or metaanal:).tw.
 - 38 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37
 - 39 exp animals/ not humans.sh.
 - 40 38 not 39
 - 41 20 and 21 and 28 and 40

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R)

Search Strategy:

-
- 1 (telemedicine or "tele health").tw.
 - 2 ("remote communication*" or "remote consultation*").tw.

- 3 (ehealth or e-health or m-health or mhealth or "health informatics").tw.
- 4 (internet or email or www or "world wide web" or virtual or "web site" or website).tw.
- 5 (e-learning or elearning or telecommunicat\$).tw.
- 6 ("digital librar*" or "electronic librar*").tw.
- 7 ("computerised reminder\$" or "computerized reminder\$").tw.
- 8 ("social media*" or "second life" or facebook* or youtube or twitter* or tweet* or webmd or linkedin or noodle or zotero or mendeley or reworks or endnote or picsearch or flickr or Skype or elluminate or upstream).tw.
- 9 email or internet or social media).ti,ab.
- 10 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9
- 11 ("clinical competence" or evidence-based or "professional competence" or guideline*).ti,ab.
- 12 (randomized or placebo or randomly).ab. or trial.ti. or (control* adj8 trial*).ti,ab. or (systematic: review or systematic: overview).ti,ab. or (meta-anal: or metaanal:).tw.
- 13 10 and 11 and 12
- 14 limit 13 to in process

COCHRANE CENTRAL

Database: EBM Reviews - Cochrane Central Register of Controlled Trials

Search Strategy:

-
- 1 (clinician* or dentist* or doctor* or "family practitio*" or "general practitio*" or physician* or gyn?ecologist* or h?ematologist* or internist* or nurse* or obstetrician* or "occupational therapist*" or p?ediatrician* or pharmacist* or physiotherapist* or psychiatrist* or psychologist* or radiologist* or surgeon* or therapist* or counsel?or* or neurologist* or optometrist* or "health* professional*" or health* personnel or "health care professional*" OR "health care personnel" or resident*).ti,ab.
 - 2 ("clinical practic*" or "clinical competenc*" or "professional practice" or "professional competenc*" or "guideline* adj3 adherence" or "evidence-based" or "evidence based").ti,ab.
 - 3 (phone* or texting or email* or email* or MSN* or SMS* or pda or "personal digital assistant*" or "smart phone*" or smartphone* or i-phone* or i phone* or tablet or computer* or internet or "information communication technolog*" or online or Virtual or "world wide web*" or "social media*" or "second life" or facebook* or youtube or twitter* or tweet* or webmd or linkedin or noodle or zotero or mendeley or reworks or endnote or picsearch or flickr or blog* or wiki or podcast* or "RSS feed*" or "really simple syndicat*" or "video conferenc*" or teleconference* or "real-time app*" or "real time app*" or Skype or illuminate or stream or "digital librar*" or "electronic librar*" or "electronic database*").ti,ab.
 - 4 1 and 2 and 3

EMBASE

Database: Embase Classic+Embase

Search Strategy:

-
- 1 local area network/
 - 2 exp telehealth/
 - 3 (telemedicine or "tele health").tw.
 - 4 computer network/
 - 5 internet/
 - 6 social media/
 - 7 e-mail/
 - 8 search engine/
 - 9 ("remote communication*" or "remote consultation*").tw.
 - 10 information service/
 - 11 (health or e-health or m-health or mhealth or "health informatics").tw.
 - 12 (internet or email or www or "world wide web" or virtual or "web site" or website).tw.
 - 13 (e-learning or elearning or telecommunicat\$).tw.
 - 14 exp bibliographic database/
 - 15 ("digital librar*" or "electronic librar*").tw.
 - 16 ("computerised reminder\$" or "computerized reminder\$").tw.
 - 17 ("social media*" or "second life" or facebook* or youtube or twitter* or tweet* or webmd or linkedin or noodle or zotero or mendeley or reworks or endnote or picsearch or flickr or Skype or elluminate or upstream).tw.
 - 18 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17
 - 19 (clinician* or dentist* or doctor* or family practitio* or general practitio* or physician* or gyn?ecologist* or h?ematologist* or internist* or nurse* or obstetrician* or occupational therapist* or p?ediatrician* or pharmacist* or physiotherapist* or psychiatrist* or psychologist* or radiologist* or surgeon* or therapist* or counsel?or* or neurologist* or

optometrist* or "health profession*" or health* personnel or "health care profession*" OR "health care personnel" or resident*).ti,ab.
 20 *evidence based medicine/ or *evidence based practice/ or *evidence based nursing/ or *evidence based emergency medicine/ or *evidence based dentistry/ or *evidence based practice center/
 21 *clinical competence/
 22 exp *professional competence/
 23 *good clinical practice/
 24 *practice guideline/
 25 20 or 21 or 22 or 23 or 24
 26 controlled clinical trial/
 27 randomized controlled trial/
 28 randomized.ab.
 29 placebo.ab.
 30 randomly.ab.
 31 trial.ti.
 32 (control* adj8 trial*).ti,ab.
 33 (systematic: review or systematic: overview).ti,ab. or meta-analysis.pt,sh. or (meta-anal: or metaanal:).tw.
 34 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33
 35 18 and 19 and 25 and 34

PsycINFO

Database: PsycINFO

Search Strategy:

 1 internet/
 2 computer mediated communication/
 3 cellular phones/
 4 electronic communication/
 5 social media/
 6 computer searching/
 7 mobile devices/
 8 telemedicine/
 9 teleconferencing/
 10 (telemedicine or "tele health").tw.
 11 online social networks/
 12 ("remote communication*" or "remote consultation*").tw.
 13 (ehealth or e-health or m-health or mhealth or "health informatics").tw.
 14 (internet or email or www or "world wide web" or virtual or "web site" or website).tw.
 15 (e-learning or elearning or telecommunicat\$).tw.
 16 automated information retrieval/
 17 computer searching/
 18 information technology/
 19 ("digital librar*" or "electronic librar*").tw.
 20 ("computerised reminder\$" or "computerized reminder\$").tw.
 21 ("social media*" or "second life" or facebook* or youtube or twitter* or tweet* or webmd or linkedin or noodle or zotero or mendeley or reworks or endnote or picsearch or flickr or Skype or elluminate or upstream).tw.
 22 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21
 23 (clinician* or dentist* or doctor* or family practition* or general practition* or physician* or gyn?ecologist* or h?ematologist* or internist* or nurse* or obstetrician* or occupational therapist* or p?ediatrician* or pharmacist* or physiotherapist* or psychiatrist* or psychologist* or radiologist* or surgeon* or therapist* or counsel?or* or neurologist* or optometrist* or "health profession*" or health* personnel or "health care profession*" OR "health care personnel" or resident*).ti,ab.
 24 clinical practice/
 25 professional competence/
 26 treatment guidelines/
 27 evidence based practice/
 28 24 or 25 or 26 or 27
 29 randomized.ab.
 30 placebo.ab.
 31 randomly.ab.
 32 trial.ti.

33 (control* adj8 trial*).ti,ab.
34 (systematic: review or systematic: overview).ti,ab. or meta-analysis.pt,sh. or (meta-anal: or metaanal:).tw.
35 29 or 30 or 31 or 32 or 33 or 34
36 22 and 23 and 28 and 35

Appendix 2: List of excluded studies

Authors	Title	Published Year	Journal	Exclusion Reason
Adsett, J. A.; Mullins, R.; Page, K.; Hickey, A.	Heart education assessment and rehabilitation toolkit: Heart online. Translating research into practice	2014	European Journal of Heart Failure	Abstract
Ahern, D. K.; Stinson, L. J.; Uebelacker, L. A.; Wroblewski, J. P.; McMurray, J. H.; Eaton, C. B.	E-health blood pressure control program	2012	J Med Pract Manage	Wrong intervention
Allen, Marybeth; lezzoni, Lisa I.; Huang, Annong; et al.	Improving patient-clinician communication about chronic conditions: Description of an Internet-based nurse e-coach intervention	2008	Nursing Research	Wrong intervention
Batchelor-Murphy, M; Amella, E.J.; Zapka, J; Mueller, M; et al.	Feasibility of a web-based dementia feeding skills training program for nursing home staff	2015	Geriatric Nursing	Wrong intervention
Beattie, J.; Brady, L.; Tobias, T.	Improving clinician confidence and skills: piloting a web-based learning program for clinicians in supportive care screening of cancer patients	2014	J Cancer Educ	Wrong intervention
Becker, W. J.; Giammarco, R.; Wiebe, V.	Moving forward to improve migraine management in Canada	2007	Can J Neurol Sci	Abstract
Bell, J. A.; Patel, B.; Malasanos, T.	Knowledge improvement with web-based diabetes education program: brainfood	2006	Diabetes Technol Ther	Wrong intervention
Bereznicki, L. R.; Jackson, S. L.; Peterson, G. M.	Supervised patient self-testing of warfarin therapy using an online system	2013	J Med Internet Res	Wrong intervention
Berry, D. L.; Blumenstein, B. A.; Halpenny, B.; Wolpin, S.; Fann, J. R.; Austin-Seymour, M.; et al.	Enhancing patient-provider communication with the electronic self-report assessment for cancer: a randomized trial	2011	Journal of Clinical Oncology	Wrong intervention
Best, J.; Muzaffar, J.; Mitchell-Innes, A.	Quality of information available via the internet for patients with head and neck cancer: are we improving?	2015	Eur Arch Otorhinolaryngol	Wrong study design
Blankstein, R.; Cannon, C.; Udelson, J.	Update on pharmacological cardiac stress testing: efficacy, risk stratification and patient selection	2014	Am J Med	Abstract
Blazer, K; Christie, C; Uman, G; Weitzel, J	Impact of Web-Based Case Conferencing on Cancer Genetics Training Outcomes for Community-Based Clinicians	2012	Journal of Cancer Education	Wrong intervention
Blazer, Kathleen R.	Examining the Use of Distance-Mediated Case Conferencing for Case-Based Training in Clinical Cancer Genetics	2010	ProQuest LLC. Ed.D. Dissertation, University of California, Los Angeles	Wrong intervention
Blomberg, K.; Wengstrom, Y.; Sundberg, K.; Browall, M.;	Symptoms and self-care strategies during and six months after radiotherapy for prostate cancer - Scoping	2016	Eur J Oncol Nurs	Wrong study design

Isaksson, A. K.; Nyman, M. H.; et al.	the perspectives of patients, professionals and literature				
Blonstein, A. C.; Yank, V.; Stafford, R. S.; Wilson, S. R.; Rosas, L. G.; Ma, J.	Translating an evidence-based lifestyle intervention program into primary care: lessons learned	2013	Health Promot Pract		Wrong population
Bond, G. E.; Burr, R. L.; Wolf, F. M.; Feldt, K.	The effects of a web-based intervention on psychosocial well-being among adults aged 60 and older with diabetes: a randomized trial	2010	Diabetes Educator		Wrong population
Bonderup, A. M.; Hangaard, S. V.; Lilholt, P. H.; Johansen, M. D.; Hejlesen, O. K.	Patient support ICT tool for hypertension monitoring	2012	Stud Health Technol Inform		Wrong population
Borosund, E.; Cvancarova, M.; Moore, S. M.; Ekstedt, M.; Ruland, C. M.	Comparing effects in regular practice of e-communication and Web-based self-management support among breast cancer patients: preliminary results from a randomized controlled trial	2014	J Med Internet Res		Wrong population
Bradway, M.; Grottnland, A.; Blixard, H.; Giordanengo, A.; Arsand, E.	System for enabling clinicians to relate to a mobile health APP: Preliminary results of the norwegian trial in the EU FI-star project	2016	Diabetes Technology and Therapeutics		Abstract
Burgess, M.	Development of a website for multiple sclerosis: involving service users and providers	2008	British Journal of Neuroscience Nursing		Wrong intervention
Burns, P; Jones, SC.; Iverson, D; Caputi, P	Usability Testing of AsthmaWise With Older Adults	2015	CIN: Computers, Informatics, Nursing		Wrong population
Calvert, C.; Lal, S.; Stansfield, C.; McLaughlin, J.; Robinson, A.	A study evaluating clinicians' attitudes and preferences for a web-based IBD patient portal designed to facilitate self-management	2013	Journal of Crohn's and Colitis		Abstract
Carpenter, D. M.; Geryk, L. L.; Arrindell, C.; Tate, D.; Alexander, D. S.; Sage, A.; et al.	Adolescent, caregiver, and provider preferences for an asthma self-management app	2015	Journal of Adolescent Health		Abstract
Carrera, P.	Primary care transformation as a solution to the epidemic of chronic diseases	2012	Value in Health		Abstract
Carter, L.; Rukholm, E.; Kelloway, L.	Stroke education for nurses through a technology-enabled program	2009	J Neurosci Nurs		Wrong intervention
Chan, A. H. Y.; Reddel, H. K.; Apter, A.; Eakin, M.; Riekert, K.; Foster, J. M.	Adherence Monitoring and E-Health: How Clinicians and Researchers Can Use Technology to Promote Inhaler Adherence for Asthma	2013	Journal of Allergy and Clinical Immunology: In Practice		Wrong study design
Chawla, A. S.; Paul, A.; Horowicz-Mehler, N.; Faulkner, E. C.; Doyle, J. J.	Companion devices: Transformative mobile health technology towards improved patient care delivery	2015	Value in Health		Abstract
Chen, A. T.	Exploring online support spaces: Using cluster analysis to examine breast cancer, diabetes and fibromyalgia	2012	Patient Education & Counseling		Wrong population

support groups				
Chopra, V.; McMahon, L.	Readmissions, facebook and information sharing: Lessons learned for future paths	2011	Journal of Hospital Medicine	Abstract
Cox, A.; Illsley, M.; Knibb, W.; Lucas, C.; O'Driscoll, M.; Potter, C.; et al.	The acceptability of e-technology to monitor and assess patient symptoms following palliative radiotherapy for lung cancer	2011	Palliat Med	Wrong intervention
Crenshaw, K.; Curry, W.; Salanitro, A. H.; Safford, M. M.; Houston, T. K.; Allison, J. J.; et al.	Is physician engagement with Web-based CME associated with patients' baseline hemoglobin A1c levels? The Rural Diabetes Online Care study	2010	Acad Med	Wrong intervention
Davies, E.; Yeoh, K.	Attitudes of health professionals to patients who receive chemotherapy information from the internet and their discussion of internet information with patients	2010	Annals of Oncology	Abstract
Davis, S.; Oakley-Girvan, I.	mHealth Education Applications Along the Cancer Continuum	2015	Journal of Cancer Education	Wrong population
de Jongh, T.; Gurol-Urganci, I.; Vodopivec-Jamsek, V.; Car, J.; Atun, R.	Mobile phone messaging for facilitating self-management of long-term illnesses	2012	Cochrane Database of Systematic Reviews	Wrong intervention
de Jong, C. C.; Ros, W. J.; Schrijvers, G.	The effects on health behavior and health outcomes of Internet-based asynchronous communication between health providers and patients with a chronic condition: a systematic review	2014	J Med Internet Res	Wrong population
Dekker, N.; Hermens, R. P.; de Wilt, J. H.; van Zelst-Stams, W. A.; Hoogerbrugge, N.; Nagengast, F.; et al.	Improving recognition and referral of patients with an increased familial risk of colorectal cancer: Results from a randomized controlled trial	2015	Colorectal disease	Wrong intervention
Desimone, M. E.; Blank, G. E.; Virji, M.; Donihi, A.; DiNardo, M.; Simak, D. M.; et al.	Effect of an educational Inpatient Diabetes Management Program on medical resident knowledge and measures of glycemic control: a randomized controlled trial	2012	Endocr Pract	Wrong intervention
Diar Bakerly, N.; McCorkindale, S.; Patel, G.	The use of smartphone application (COPD assist) to support the implementation of local primary care guidelines on the management of patients with COPD	2014	Thorax	Abstract
Duffy, F. D.; Lynn, L. A.; Didura, H.; Hess, B.; Caverzagie, K.; Grosso, L.; et al.	Self-assessment of practice performance: Development of the ABIM practice improvement module (PIM SM)	2008	Journal of Continuing Education in the Health Professions	Wrong intervention
Duvvuri, V. R. S. K.; Jianhong, W.	Information and communication technology developments in asthma management: A systematic review	2007	Indian Journal of Medical Sciences	Wrong intervention
Dy, S. M.; Roy, J.; Ott, G. E.; McHale, M.; Kennedy, C.; Kutner,	Tell Us TM : A web-based tool for improving communication among patients, families, and	2011	Journal of Pain and Symptom Management	Wrong intervention

J. S.; Tien, A.	providers in hospice and palliative care through systematic data specification, collection, and use				
Eaton-Spiva, L.; Day, A.	Effectiveness of a computerized educational module on nurses' knowledge and confidence level related to diabetes	2011	J Nurses Staff Dev		Wrong intervention
Estrella, M. M.; Jaar, B. G.; Cavanaugh, K. L.; Fox, C. H.; Perazella, M. A.; Soman, S. S.; et al.	Perceptions and use of the national kidney foundation KDOQI guidelines: A survey of U.S. renal healthcare providers	2013	BMC Nephrology		Wrong intervention
Euller Ziegler, L.	Patient education, a full component of patient care in France : Impact of the new regulations-results of a national survey	2013	Annals of the Rheumatic Diseases. Conference: Annual European Congress of Rheumatology of the European League Against Rheumatism, EULAR		Abstract
Fairfield, K. M.; Chen, W. Y.; Colditz, G. A.; Emmons, K. M.; Fletcher, S. W.	Colon cancer risk counseling by health-care providers: perceived barriers and response to an Internet-based cancer risk appraisal instrument	2004	Journal of Cancer Education		Wrong intervention
Faiman, B. M.; Jacobsen, P.; Callahan, A.; Nadia, S.; Panzer, S. L.; Baz, R.	Feasibility of implementing innovative supportive care plans for symptom management in multiple myeloma	2015	Blood		Wrong intervention
Fenny, N.; Wolf, R.; Dimov, V.	Rapid growth of twitter use by allergists and immunologists for professional purposes	2012	Annals of Allergy, Asthma and Immunology		Abstract
Field, K. M.; Rosenthal, M. A.; Dimou, J.; Kaye, A.; Gibbs, P.; Drummond, K.	Neuro-oncology Multidisciplinary Team (MDT) meetings: An effective method of documentation and information dissemination	2009	Asia-Pacific Journal of Clinical Oncology		Abstract
Finkelstein, J.; Knight, A.; Marinopoulos, S.; Gibbons, M. C.; Berger, Z.; Aboumatar, H.; et al.	Enabling patient-centered care through health information technology	2012	Evid rep/technol assess		Wrong intervention
Fisher, EB.; Ballesteros, J; Bhushan, N; Coufal, MM.; Kowitt, SD.; McDonough, A. M; et al.	Key Features Of Peer Support In Chronic Disease Prevention And Management	2015	Health Affairs		Wrong intervention
Forrest, B.; Brinson, S.; Bavisotto, S. H.; Joyner, J. N.	Time to talk cardio communication tool use improves cardiovascular disease management behaviors and satisfaction	2011	Journal of Clinical Hypertension		Abstract
Gaggioli, A.; Pallavicini, F.; Morganti, L.; Serino, S.; Scaratti, C.; Briguglio, M.; et al.	Experiential virtual scenarios with real-time monitoring (interreality) for the management of psychological stress: a block randomized controlled trial	2014	J Med Internet Res		Wrong intervention
Ganschow, P. S.; Hahn, E. A.;	Innovative multimedia methods to enhance patient-	2013	Journal of General Internal		Abstract

Jacobs, E. A.	centered care in underserved populations		Medicine	
Gilmour, J. A.; Huntington, A.; Broadbent, R.; Strong, A.; Hawkins, M.	Nurses' use of online health information in medical wards	2012	J Adv Nurs	Wrong intervention
Giordano, A.; Lugaresi, A.; Martinelli, V.; Granella, F.; Confalonieri, P.; Trojano, M.; et al.	Developing and testing of the "Sapere Migliora" information aid for newly diagnosed ms patients (#50)		Multiple sclerosis (Houndmills, Basingstoke, England)	Abstract
Glasgow, R. E.; Dickinson, P.; Fisher, L.; Christiansen, S.; Toobert, D. J.; Bender, B. G.; et al.	Use of RE-AIM to develop a multi-media facilitation tool for the patient-centered medical home	2011	Implement Sci	Wrong intervention
Gogovor, A.; Visca, R.; Symeonidis, I.; Ahmed, S.	Informing the design of a chronic pain webbased self-management portal	2013	Pain Research and Management	Abstract
Goodrich, D. E.; Buis, L. R.; Janney, A. W.; Ditty, M. D.; Krause, C. W.; Zheng, K.; et al.	Integrating an internet-mediated walking program into family medicine clinical practice: a pilot feasibility study	2011	BMC Med Inf Decis Mak	Wrong intervention
Goulding, E.; Dopke, C.; Michaels, T.; Aneja, M.; Martin, C.; Bank, A.; Begale, M.; Mohr, D.	User-centered development and field testing of livewell: A smart phone application for bipolar disorder	2015	Neuropsychopharmacology	Abstract
Greenhalgh, T.; Hinder, S.; Stramer, K.; Bratan, T.; Russell, J.	Adoption, non-adoption, and abandonment of a personal electronic health record: case study of HealthSpace	2010	BMJ	Wrong intervention
Gregory, J.; Robling, M.; Bennert, K.; Channon, S.; Cohen, D.; Crowne, E.; et al.	Development and evaluation by a cluster randomised trial of a psychosocial intervention in children and teenagers experiencing diabetes: the DEPICTED study	2011	Health Technol Assess	Wrong intervention
Guarino, H.; Moore, S.; Rosenblum, A.; Marsch, L.	Provider perspectives on the potential utility of technology-based tools in the treatment of chronic pain	2015	Journal of Pain	Abstract
Guattery, D.; Pegus, C.; Eslava, S.; Winfield, D.	The important role of the health care provider during a human factors trial when developing a new remote monitoring device for self- management of diabetes	2009	Canadian Journal of Diabetes	Abstract
Gubert, E.; Pal, K.; Dack, C.; Murray, E.	Developing a computer-based selfmanagement programme for people with Type 2 diabetes: User perspectives	2012	Diabetic Medicine	Abstract
Gund, A.; Lindecrantz, K.; Schaufelberger, M.; Patel, H.; Sjoqvist, B. A.	Attitudes among healthcare professionals towards ICT and home follow-up in chronic heart failure care	2012	BMC Med Inf Decis Mak	Wrong intervention
Gutteling, J. J.; Busschbach, J. J.; de Man, R. A.; Darlington, A. S.	Logistic feasibility of health related quality of life measurement in clinical practice: results of a prospective study in a large population of chronic liver	2008	Health Qual Life Outcomes	Wrong intervention

	patients			
Haase, K. R.; Loiselle, C. G.	Oncology team members' perceptions of a virtual navigation tool for cancer patients	2012	Int J Med Inf	Wrong intervention
Hanson, Tabitha K.; Aleman, Martha; Hart, Lacey; Yawn, Barbara	Increasing Availability to and Ascertaining Value of Asthma Action Plans in Schools Through Use of Technology and Community Collaboration	2013	Journal of School Health	Wrong intervention
Hariharan, J.; Rehm, J.; Kaho, J.; Bragg, D.	Using multi-media to teach medical students diabetes management and enhance clinical skills	2011	Journal of General Internal Medicine	Abstract
Harper, R.; Donnelly, R.; Burke, M.	Telemonitoring for type 2 diabetes-Di@I-log	2010	Diabetic Medicine	Abstract
Harth, C.; Xue, Y.; Yang, J.	Internet teaching of the neurologic examination and OSCE performance in the neurology clerkship	2015	Neurology	Abstract
Hartmann, C. W.; Sciamanna, C. N.; Blanch, D. C.; Mui, S.; Lawless, H.; Manocchia, M.; et al.	A website to improve asthma care by suggesting patient questions for physicians: qualitative analysis of user experiences	2007	J Med Internet Res	Wrong intervention
Haze, K. A.; Lynaugh, J.	Building patient relationships: a smartphone application supporting communication between teenagers with asthma and the RN care coordinator	2013	Comput Inform Nurs	Wrong intervention
Hefelfinger, J.; Brady, T. J.; Berkold, J.; Goldstein, M.; Bonilla, E.; Brick, M.; et al.	Reaching out to physical therapists: Results of a survey on physical therapists preferences for learning about evidence-based community programs	2014	Arthritis and Rheumatology	Abstract
Heinrich, E.; de Nooijer, J.; Schaper, N. C.; Schoonus-Spit, M. H.; Janssen, M. A.; de Vries, N. K.	Evaluation of the web-based Diabetes Interactive Education Programme (DIEP) for patients with type 2 diabetes	2012	Patient Education & Counseling	Wrong population
Hoffman, J; Salzman, C; Garbaccio, C; Burns, SP.; Crane, D; et al.	Use of on-demand video to provide patient education on spinal cord injury	2011	Journal of Spinal Cord Medicine	Wrong population
Hope, S.; Greenwell, K.; Murphy, J.; Corbett, S.; Forster, R.	Development of inflammatory bowel disease information service	2011	Journal of Crohn's and Colitis	Abstract
Howren, M.; van Liew, Julia R.; Christensen, Alan J.	Advances in patient adherence to medical treatment regimens: The emerging role of technology in adherence monitoring and management	2013	Social and Personality Psychology Compass	Wrong intervention
Hughes, T.; Fu, K.; Fajardo, M.; Isaacson, R.	Age-related memory loss and alzheimer's disease: A randomized, interactive web-based educational intervention study	2013	Neurology. Conference: 65th American Academy of Neurology Annual Meeting San Diego, CA United States. Conference Start	Abstract
Hunt, Caralise W.; Sanderson, Bonnie K.; Ellison, Kathy Jo	Support for Diabetes Using Technology: A Pilot Study to Improve Self-Management	2014	MEDSURG Nursing	Wrong population

Hunt, C. W.	Technology and diabetes self-management: An integrative review	2015	World J Diabetes	Wrong population
Hurley, M. V.; Carter, A.; Carter, D.; Hughes, L.; Mhuiri, A. N.; Walsh, N. E.	Delivering escape-pain (enabling self-management and coping of arthritic pain through exercise)-an online guide for healthcare professionals	2014	Arthritis and Rheumatology	Abstract
Hussainy, S. Y.; Marriott, J. L.; Beattie, J.; Nation, R. L.; Dooley, M. J.	A palliative cancer care flexible education program for Australian community pharmacists	2010	Am J Pharm Educ	Wrong intervention
In't Veen, J.; Mennema, B.; Van Noort, E.	Online self-management in patients with COPD or asthma: With or without the healthcare provider?	2012	European Respiratory Journal. Conference: European Respiratory Society Annual Congress	Abstract
Jacob, E.; Pavlish, C.; Duran, J.; Stinson, J.; Lewis, M. A.; Zeltzer, L.	Facilitating patient provider communications using wireless technology	2012	American Journal of Hematology	Abstract
Jerant, A.; Kravitz, R. L.; Rooney, M.; Amerson, S.; Kreuter, M.; Franks, P.	Effects of a tailored interactive multimedia computer program on determinants of colorectal cancer screening: a randomized controlled pilot study in physician offices	2007	Patient Educ Couns	Wrong population
Jerant, A.; Kravitz, R. L.; Sohler, N.; Fiscella, K.; Romero, R. L.; Parnes, B.; et al.	Sociopsychological tailoring to address colorectal cancer screening disparities: a randomized controlled trial	2014	Annals of family medicine	Wrong population
Jimbo, M.; Shultz, C. G.; Nease, D. E.; Feters, M. D.; Power, D.; Ruffin 4th, M. T.	Perceived barriers and facilitators of using a Web-based interactive decision aid for colorectal cancer screening in community practice settings: findings from focus groups with primary care clinicians and medical office staff	2013	Journal of medical Internet research	Wrong intervention
Jiwa, M.; Halkett, G.; Meng, X.; Pillai, V.; Berg, M.; Shaw, T.	Supporting patients treated for prostate cancer: a video vignette study with an email-based educational program in general practice	2014	J Med Internet Res	Wrong intervention
Joshi, V. K.	Creation of a mouth-cancer website and online support group	2005	British Journal of Healthcare Computing & Information Management	Wrong study design
Kern, R.; Haase, R.; Eisele, J. C.; Thomas, K.; Ziemssen, T.	Designing an Electronic Patient Management System for Multiple Sclerosis: Building a Next Generation Multiple Sclerosis Documentation System	2016	Interact J Med Res	Wrong intervention
Khurana, L.; Durand, E.; Gary, S.; Otero, T.; Hall, C.; Dallabrida, S.	Patient preference for using technology to track and self-manage osteoarthritis	2015	Arthritis and Rheumatology. Conference: American College of	Abstract

			Rheumatology/Association of Rheumatology Health Professionals Annual Scientific Meeting, ACR/ARHP
Khurana, L.; Durand, E.; Gary, S.; Otero, T.; Hall, C.; Dallabrida, S.	Preferences for using phone calls, text messaging, and email to communicate with physicians among patients with four chronic diseases	2015	Value in Health Abstract
Khurana, L.; Gary, S.; Vazquez, V.; Otero, A. V.; Dallabrida, S. M.; Arnera, V.	Diabetes patient preferences for using technology to communicate with physicians	2015	Diabetes Technology and Therapeutics Abstract
Kim, H. A.; Bae, Y. D.; Seo, Y. I.	Arthritis information on the Web and its influence on patients and physicians: A Korean study	2004	Clinical and Experimental Rheumatology Wrong intervention
Kim, H. S.; Hwang, Y.; Lee, J. H.; Oh, H. Y.; Kim, Y. J.; Kwon, H. Y.; et al.	Future prospects of health management systems using cellular phones	2014	Telemed J E Health Wrong intervention
Kirkovits, T.; Wuerstlein, R.; Drewes, C.; Schiltz, D.; Bauerfeind, I.; Goldmann-Posch, U.; et al.	New ways of caring for patients with breast cancer: Acceptance of eHealth among breast cancer patients and medical professionals	2014	European Journal of Cancer Abstract
Ko, G. T.; So, W. Y.; Tong, P. C.; Le Coguiec, F.; Kerr, D.; Lyubomirsky, G.; et al.	From design to implementation--the Joint Asia Diabetes Evaluation (JADE) program: a descriptive report of an electronic web-based diabetes management program	2010	BMC Med Inf Decis Mak Wrong intervention
Kruijssen, V.; Staa, A.; Dwarswaard, J.; Mennema, B.; Adams, S A.; Veen, J	Use of Online Self-Management Diaries in Asthma and COPD: A Qualitative Study of Subjects' and Professionals' Perceptions and Behaviors	2015	Respiratory Care Wrong intervention
Kumar, N.; Garg, N.; Venkatraman, A.; Pandey, A.	Are video sharing websites a useful source of information on hypertension?	2014	Journal of the American Society of Hypertension Abstract
Kwiatek, R.; Powell, C.; Faulkner, J.; True, B.	The fibromyalgia Australia website: A new paradigm for productive community management	2013	Internal Medicine Journal Abstract
LaBresh, K. A.; Ellrodt, A. G.; Gliklich, R.; Liljestrand, J.; Peto, R.	Get with the guidelines for cardiovascular secondary prevention: pilot results	2004	Arch Intern Med Wrong intervention
Laloo, C.	"There's a pain app for that": Promoting pain self-management among adolescents and young adults	2013	Pain Research and Management Abstract
Lee, R.; Whitley, H. P.	Use of social media to support patients with diabetes mellitus	2014	Consultant Pharmacist Wrong population
Leveille, S. G.; Mejilla, R.; Ngo, L.; Fossa, A.; Elmore, J. G.; Darer, J.; et al.	Do Patients Who Access Clinical Information on Patient Internet Portals Have More Primary Care Visits?	2016	Medical Care Wrong population

Lin, C. A.; Neafsey, P. J.; Anderson, E.	Advanced practice registered nurse usability testing of a tailored computer-mediated health communication program	2010	CIN: Computers, Informatics, Nursing	Wrong intervention
Linn, A. J.; van Weert, J. C. M.; Smit, E. G.; Perry, K.; van Dijk, L.	1+1=3? The systematic development of a theoretical and evidence-based tailored multimedia intervention to improve medication adherence	2013	Patient Education and Counseling	Wrong study design
Loiselle, C. G.; Haase, K.; Peters, O.; Girouard, L.	The promise of virtual navigation in cancer care: Is there concordance between patients' and health care providers' views?	2011	Psycho-Oncology	Abstract
Magnezi, R.; Grosberg, D.; Novikov, I.; Ziv, A.; Shani, M.; Freedman, L. S.	Characteristics of patients seeking health information online via social health networks versus general Internet sites: a comparative study	2015	Inform Health Soc Care	Wrong population
Mahmood, R. Z.; Grossi, J.; Koelling, T. M.	Pilot study examining heart failure patient internet use and adherence to a web based portal designed to support self-care	2013	Circulation: Cardiovascular Quality and Outcomes. Conference: American Heart Association's Quality of Care and Outcomes Research in Cardiovascular Disease and Stroke	Abstract
Mallow, JA.; Theeke, LA.; Barnes, ER.; Whetsel, T; Mallow, BK.	Using mHealth Tools to Improve Rural Diabetes Care Guided by the Chronic Care Model	2014	Online Journal of Rural Nursing & Health Care	Wrong population
Marco, J.; Barba, R.; Losa, J. E.; De La Serna, C. M.; Sainz, M.; Fernandez Lantigua, I.; De La Serna, J. L.	Advice from a medical expert through the internet on queries about AIDS and hepatitis: Analysis of a pilot experiment	2006	PLoS Medicine	Wrong population
Marton, Christine	Consumer health 2.0 in Canada: tweeting about cancer	2012	Journal of the Canadian Health Libraries Association (JCHLA)	Wrong population
Massoudi, B. L.; Olmsted, M. G.; Zhang, Y.; Carpenter, R. A.; Barlow, C. E.; Huber, R.	A web-based intervention to support increased physical activity among at-risk adults	2010	J Biomed Inform	Wrong intervention
McLaughlin, M; Nam, Y; Gould, J; Pade, C; Meeske, KA.; Ruccione, KS.; et al.	A videosharing social networking intervention for young adult cancer survivors	2012	Computers in Human Behavior	Wrong population
McTigue, K. M.; Conroy, M. B.; Simkin-Silverman, L. R.; Tudorascu, D. L.; Hess, R.; Fischer, G.; et al.	Provider response to online self-management support for obesity integrated with primary care	2014	Journal of General Internal Medicine	Abstract

Moretti, A.; Rossi, A.; Gutierrez, M.; Grassi, W.	Rheumatology nursing: An italian experience of e-learning	2012	Annals of the Rheumatic Disease. Conference: Annual European Congress of Rheumatology of the European League Against Rheumatism, EULAR	Abstract
Nakamura, M.; Nakahira, M.; Tokunaga, K.; Murakami, Y.; Kinoshita, C.; Okino, Y.	Development of online education program for certified chemotherapy nurses regarding molecular targeted therapy	2015	Annals of Oncology	Abstract
Nwalie, J.; Kaan, A.	An evaluation of virtual heart: Internet based heart failure self management	2012	Canadian Journal of Cardiology	Abstract
Ong, S.; Jassal, V.; Seto, E.; So, S.; Uddin, A.; Shier, A.; et al.	Mobile self-management system for CKD patients: Conceptual framework and design principles	2014	American Journal of Kidney Diseases	Abstract
O'Reilly, D. J.; Bowen, J. M.; Sebaldt, R. J.; Petrie, A.; Hopkins, R. B.; Assasi, N.; et al.	Evaluation of a chronic disease management system for the treatment and management of diabetes in primary health care practices in Ontario: an observational study	2014	Ont Health Technol Assess Ser	Wrong intervention
Ormandy, P.; Vlaminc, H.; Harrington, M.; Forest, M.; Visser, R.	A new internet resource for chronic kidney disease patients	2006	EDTNA/ERCA Journal of Renal Care	Wrong study design
Pace, A.; Villani, V.; Focarelli, S.; Benincasa, D.; Benincasa, A.; Carapella, C. M.; et al.	Telemedicine and palliative care in neuro-oncology: Web assistance for symptoms management and end of life support	2013	Neuro-Oncology	Abstract
Park, J. H.; Park, C. S.; Jang, H. J.	Development and pilot testing of smartphone based self-management application for adult asthma	2015	European Respiratory Journal. Conference: European Respiratory Society Annual Congress	Abstract
Parmanto, B.; Pramana, G.; Yu, D. X.; Fairman, A. D.; Dicianno, B. E.; McCue, M. P.	iMHere: A Novel mHealth System for Supporting Self-Care in Management of Complex and Chronic Conditions	2013	JMIR Mhealth Uhealth	Wrong intervention
Patel, M. R.; Shah, S.; Cabana, M.; Sawyer, S. M.; Toelle, B.; Mellis, C.; et al.	Translation of evidence-based asthma interventions: Physician asthma care education (PACE) program in the united states and Australia	2012	American Journal of Respiratory and Critical Care Medicine. Conference: American Thoracic Society International Conference, ATS	Abstract
Pelayo-Alvarez, M.; Perez-Hoyos, S.; Agra-Varela, Y.	Clinical effectiveness of online training in palliative care of primary care physicians	2013	J Palliat Med	Wrong intervention

Peters, S.; Abotseng, L.; Faleatua, R. J.; Harvey, S.; Mulligan, H.	Experiences of health care professionals with the training and delivery of the self-management program "Minimise Fatigue, Maximise Life" for persons with MS	2014	Multiple Sclerosis	Abstract
Plaete, J.; Crombez, G.; DeSmet, A.; Deveugele, M.; Verloigne, M.; De Bourdeaudhuij, I.	What do general practitioners think about an online self-regulation programme for health promotion? Focus group interviews	2015	BMC Fam Pract	Wrong intervention
Rabin, B. A.; Gaglio, B.; Sanders, T.; Nekhlyudov, L.; Dearing, J. W.; Bull, S.; et al.	Predicting cancer prognosis using interactive online tools: a systematic review and implications for cancer care providers	2013	Cancer Epidemiol Biomarkers Prev	Wrong intervention
Raptis, D. A.; Graf, R.; Peck, J.; Mouzaki, K.; Patel, V.; Skipworth, J.; et al.	Development of an electronic web-based software for the management of colorectal cancer target referral patients	2011	Inform Health Soc Care	Wrong intervention
Requarth, J. A.	MyCareLibrary.org: A website containing imageguided palliative care information for patients and physicians	2015	Journal of Vascular and Interventional Radiology	Abstract
Revenas, A.; Martin, C.; C, H. Opava; Brusewitz, M.; Keller, C.; Asenlof, P.	A Mobile Internet Service for Self-Management of Physical Activity in People With Rheumatoid Arthritis: Challenges in Advancing the Co-Design Process During the Requirements Specification Phase	2015	JMIR Res Protoc	Wrong intervention
Richardson, J.; De Paul, V.; Officer, A.; Wilkins, S.; Letts, L.; Bosch, J.; et al.	An evidence based intervention for stroke rehabilitation in the home environment: A knowledge translation study	1046	Physiotherapy	Abstract
Robinson, J. K.; Alam, M.; Ashourian, N.; Khan, M.; Kundu, R.; Laumann, A. E.; et al.	Skin cancer prevention education for kidney transplant recipients: a systematic evaluation of Internet sites	2010	Prog Transplant	Wrong study design
Rodgers, P. T.	Helping patients with diabetes: resources from the National Diabetes Education Program	2012	J Am Pharm Assoc (2003)	Wrong study design
Salbach, N.; Jaglal, S.; Rappolt, S.; Bayley, M.; Burnett, D.; Judd, M.; et al.	Feasibility and impact of a multi-component education intervention on improving self-efficacy to implement evidence-based practice among physiotherapists in stroke rehabilitation	2011	Physiotherapy (United Kingdom)	Abstract
Sanfelix-Genoves, J.; Peiro, S.; Sanfelix-Gimeno, G.; Hurtado, I.; Pascual de la Torre, M.; Trillo-Mata, J. L.; et al.	Impact of a multifaceted intervention to improve the clinical management of osteoporosis. The ESOSVAL-F study	2010	BMC Health Serv Res	Wrong study design
Saraiya, B.; Johnson, R. W.; Avvento, P.	Google chat as an online innovative, personalized communication skills training program	2013	Journal of Pain and Symptom Management	Abstract
Savas, J. A.; Huang, K. E.; Tuchayi, S. M.; Feldman, S. R.	Understanding the influence of social media in medicine: lesson learned from Facebook	2014	Dermatol Online J	Wrong population
Silva, A. P.; Bertoni, V. D.; Mulvey, T. M.; Sampaio, C.	Quality-of-care implications of improving physician communication through a Web-based tool (Teamwork)	2012	Journal of Clinical Oncology. Conference:	Abstract

			ASCO's Quality Care Symposium	
Singh, AG.; Singh, S; Singh, P	YouTube for Information on Rheumatoid Arthritis -- A Wakeup Call?	2012	Journal of Rheumatology	Wrong population
Slater, H.; Davies, S.; Milne, G.; Kelso, J.; Slattery, M.; Briggs, A.	The painhealth website: A western australian policy-into-practice initiative to deliver holistic, consumer-focused best-evidence pain management for people with musculoskeletal pain	1410	Physiotherapy	Abstract
Smits, R.; Bryant, J.; Sanson-Fisher, R.; Tzelepis, F.; Henskens, F.; Paul, C.; et al.	Tailored and integrated Web-based tools for improving psychosocial outcomes of cancer patients: the DoTTI development framework	2014	J Med Internet Res	Wrong study design
Steele Gray, C.; Khan, A. I.; Kuluski, K.; McKillop, I.; Sharpe, S.; Bierman, A. S.; et al.	Improving Patient Experience and Primary Care Quality for Patients With Complex Chronic Disease Using the Electronic Patient-Reported Outcomes Tool: Adopting Qualitative Methods Into a User-Centered Design Approach	2016	JMIR Res Protoc	Wrong intervention
Steinberg, J. D.; Curbelo, M. C.; Rojas, G.; Martinez, A. D.; Carra, A. J.	Argentine's experience in developing and implementing a blog, as a tool for better interaction between multiple sclerosis patients and their doctors	2014	Multiple Sclerosis	Abstract
Steinberg, P. L.; Wason, S.; Stern, J. M.; Deters, L.; Kowal, B.; Seigne, J.	YouTube as source of prostate cancer information	2010	Urology	Wrong intervention
Stell, A.; Sinnott, R.	The ENSAT registry: a digital repository supporting adrenal cancer research	2012	Stud Health Technol Inform	Wrong intervention
Stephen, J. E.; Christie, G.; Flood, K.; Golant, M.; Rahn, M.; Rennie, H.; et al.	Facilitating online support groups for cancer patients: the learning experience of psycho-oncology clinicians	2011	Psychooncology	Wrong intervention
Storni, Cristiano	Diabetes self-care in-the-wild: Design challenges for personal health record systems and self-monitoring technologies	2014	Information Technology & People	Wrong intervention
Sundin, E.; Blidberg, K.; Carlsson, A.	Empowerment and support for a healthier life style	2015	Annals of the Rheumatic Diseases	Abstract
Taite, A.; Minard, J.; Ferrone, M.; Liciskai, C.; To, T.; Loughheed, M. D.	AsthmaLife portal: Supporting clinical care and research at the point of care	2015	European Respiratory Journal. Conference: European Respiratory Society Annual Congress	Abstract
Teixeira, L.; Saavedra, V.; Ferreira, C.; Sousa Santos, B.	Improving the management of chronic diseases using web-based technologies: an application in hemophilia care	2010	Conf Proc IEEE Eng Med Biol Soc	Wrong intervention
Testa, M. A.; Simonson, D. C.	Physician and patient usability of a web-based mobile-	2011	Diabetes	Abstract

health diabetes management system				
Thirumurthi, S.; Ross, W. A.; Lum, P.; Pande, M.; Miller, E.; Lee, J.; et al.	When patients watch a video, physicians see more adenomas: An educational bowel preparation video improves adenoma detection RATES	2015	Gastrointestinal Endoscopy	Abstract
Thomson, A.; Davis, A.; Paterson, A.; Giovannoni, G.; Schmierer, K.	Designing an information resource to explain diagnostic lumbar puncture and promote best practice	2015	European Journal of Neurology	Abstract
Urowitz, S.; Wiljer, D.; Dupak, K.; Kuehner, Z.; Leonard, K.; Lovrics, E.; et al.	Improving diabetes management with a patient portal: a qualitative study of diabetes self-management portal	2012	Journal of medical Internet research	Wrong intervention
van der Eijk, M.; Faber, M. J.; Aarts, J. W.; Kremer, J. A.; Munneke, M.; Bloem, B. R.	Using online health communities to deliver patient-centered care to people with chronic conditions	2013	J Med Internet Res	Wrong study design
van der Weegen, S.; Verwey, R.; Spreeuwenberg, M.; Tange, H.; van der Weijden, T.; de Witte, L.	The development of a mobile monitoring and feedback tool to stimulate physical activity of people with a chronic disease in primary care: a user-centered design	2013	JMIR Mhealth Uhealth	Wrong intervention
Vargas-Lombardo, M.; Jipsion, A.; Alvarez, H.; Ruiz, E. M.; Mora, E. V.	Scope of information communications technology in the health of diabetes patients in poor rural zones of panama through holistic, interactive, and persuasive model to facilitate self-care of diabetes patients	2010	Diabetes Technol Ther	Wrong study design
Verdonck-De Leeuw, I.; Cnossen, I. C.; Van Uden-Kraan, C. F.; Eerenstein, S. E.; De Bree, R.; Leemans, C. R.	Development of a self-management portal for patients after total laryngectomy	2013	Supportive Care in Cancer	Abstract
Verwey, R.; van der Weegen, S.; Tange, H.; Spreeuwenberg, M.; van der Weijden, T.; de Witte, L.	Get moving: the practice nurse is watching you! A case study of the user-centred design process and testing of a web-based coaching system to stimulate the physical activity of chronically ill patients in primary care	2012	Informatics in Primary Care	Wrong intervention
Voncken-Brewster, V.; Tange, H.; Moser, A.; Nagykaldi, Z.; de Vries, H.; van der Weijden, T.	Integrating a tailored e-health self-management application for chronic obstructive pulmonary disease patients into primary care: a pilot study	2014	BMC Fam Pract	Wrong intervention
Weitzman, E. R.; Kelemen, S.; Garvey, K. C.	Social networking for care improvement and panel management	2013	Diabetes	Abstract
Whitehouse, S. R.; Lam, P. Y.; Balka, E.; McLellan, S.; Deevska, M.; Penn, D.; et al.	Co-Creation With TickiT: Designing and Evaluating a Clinical eHealth Platform for Youth	2013	JMIR Res Protoc	Wrong intervention
Wiecha, J. M.; Adams, W. G.	BostonBreathes: an RCT to improve pediatric asthma care with a home-based interactive website for patient education, monitoring, and clinical teamwork	2007	AMIA Annu Symp Proc	Abstract
Wildevuur, S. E.; Simonse, L. W.	Information and communication technology-enabled	2015	J Med Internet Res	Wrong study design

	person-centered care for the "big five" chronic conditions: scoping review			
Woodbury, M.G; Botros, M; Kuhnke, J.L.; Greene, J	Evaluation of a peer-led self-management education programme PEP Talk: Diabetes, Healthy Feet and You	2013	International Wound Journal	Wrong population
Wuerstlein, R.; Kirkovits, T.; Drewes, C.; Schiltz, D.; Bauerfeind, I.; Haidinger, R.; et al.	eHealth in modern breast cancer treatment: New possibilities in communication between patients, doctors and nursing staff	2015	Cancer Research. Conference: 37th Annual CTRC AACR San Antonio Breast Cancer Symposium San Antonio, TX United States.	Abstract
Wurstlein, R.; Kirkovits, T.; Drewes, C.; Bauerfeind, I.; Goldmann-Posch, U.; Schiltz, D.; et al.	eHealth in modern patient-caregiver-communication: Use of modern media in breast cancer patients and their physicians	2014	Oncology Research and Treatment	Abstract

Appendix 3: Methodological quality of included studies

RCTs	
Wiecha J (2015)	
Strengths	Limitations
<ul style="list-style-type: none"> • The study addressed an appropriate and clearly focused question • The assignment of subjects to treatment groups was randomized • Investigators were blinded to participants intervention groups during the study period 	<ul style="list-style-type: none"> • While the study was randomized, there was no mention of how this was performed • There was no mention of how randomization was concealed • The study was not designed to blind participants to intervention group • Unclear whether intervention and control groups were similar at the start of the study as no details were provided for the health professional sample • Unclear whether the tool used to assess the health professional population was validated • Unclear whether health professionals dropped out before the completion of study • The study was carried out at a single site
Cohort Studies	
Anhøj J (2004)	
Strengths	Limitations
<ul style="list-style-type: none"> • The study addressed an appropriate and clearly focused question • The study indicated how many of the people asked to take part did so • The outcomes were clearly defined • The method of assessment of exposure is reliable as a some questions were stratified by level of experience with LinkMedica 	<ul style="list-style-type: none"> • The study had a low response rate (26.8%) • Some questions were only provided to participants who indicated they had ample experience in using LinkMedica • It was unclear what the primary outcome of this study was • The tool used to measured subjects was not validated • Only one survey was sent out at one time point (no follow-up assessment) • No subgroup analyses were performed • No statistical analyses were performed
Gupta S (2011) and Gupta (2012)	
Strengths	Limitations
<ul style="list-style-type: none"> • The study addressed an appropriate 	<ul style="list-style-type: none"> • The study had a low response rate

<p>and clearly focused question</p> <ul style="list-style-type: none"> • The study had a high response rate (83%) • The study indicated how many of the people asked to take part did so • The outcomes were clearly defined • Subgroup analyses by profession were assessed • The method of assessment was reliable with a validated tool (SUS) • Confounding was considered through considering differences by profession and conducting focus groups to address barriers to using the Wiki tool 	<p>(26.8%)</p> <ul style="list-style-type: none"> • Some questions were only provided to participants who indicated they had ample experience in using the discussion forum • It was unclear what the primary outcome of this study was • The tool used to measure subjects was not validated • Only one survey was sent out at one time point (no follow-up assessment) • Only descriptive analyses were performed
--	--

Qualitative Studies

Anttila M (2008)

Strengths	Limitations
<ul style="list-style-type: none"> • There was a clear statement of the aims of the research • The qualitative methodology was appropriate • the recruitment strategy appropriate to the aims of the research (multi-centre sites) • the data was collected in a way that addressed the research issue with introductory sessions and open ended survey • Ethical issues were taken into consideration • The data analysis sufficiently rigorous as data went through several coding processes • There was clear statement of findings 	<ul style="list-style-type: none"> • Unclear why the investigators decided to use surveys rather than focus group or interviews • Unclear whether the relationship between researcher and participants was adequately considered as the researcher selected a research contact from each ward to disseminate material and surveys • Unclear whether data analysis was done by one assessor or multiple

Nordfelt S (2012)

Strengths	Limitations
<ul style="list-style-type: none"> • There was a clear statement of the aims of the research • The qualitative methodology was appropriate • the data was collected in a way that addressed the research issue as two reviewers assessed and categorized 	<ul style="list-style-type: none"> • Unclear why the investigators decided to use surveys to have participants respond to two open ended questions rather than focus group or interviews • Unclear whether the recruitment strategy was appropriate to the aims of the research as no details were provided

<p>the essays</p> <ul style="list-style-type: none"> • The data analysis sufficiently rigorous as multiple researchers, summarized into tentative themes, discrepancies resolved through discussion • There was clear statement of findings 	<ul style="list-style-type: none"> • Unclear whether the relationship between researcher and participants was adequately considered • Unclear whether ethical issues were taken into consideration as there was no mention of consent or ethics approval
---	--

Nordqvist C (2009)

Strengths	Limitations
<ul style="list-style-type: none"> • There was a clear statement of the aims of the research • The qualitative methodology was appropriate • The data was collected in a way that addressed the research issue as the investigators used interviews • The data collected in a way that addressed the research issue as interview was conducted by an experienced sociologist • The interviewer did not start studying the use of information technology in patient care until the analysis had been complete • Interviews were coded into themes • There was clear statement of findings 	<ul style="list-style-type: none"> • Unclear how participants were recruited • Unclear whether ethics approval was sought, or if interviewees gave verbal consent • Data were coded by one reviewer

Oh H (2011)

Strengths	Limitations
<ul style="list-style-type: none"> • There was a clear statement of the aims of the research • There was clear statement of findings 	<ul style="list-style-type: none"> • Unclear whether qualitative methodology was appropriate • Unclear why investigator used structured interviews with mostly close-ended question rather than focus groups or open interviews • Recruitment strategy was not described for health professional participants • Limited information was provided on how data was collected, though it did state a structured interview was used • There was no mention of the relationship of researcher and participants • No mention of whether informed consent was obtained, ethics approval

sought

- Limited details on analysis and whether any coding was performed

Appendix 4: Summary of participant baseline characteristics in included studies

Author (year)	Participant Characteristics*	
Anhøj J (2004)	Physician, n (%)	127 (97%)
	Nurse, n (%)	4 (3%)
	Male, n (%)	4 (80%)
	Female, n (%)	1 (20%)
	Age, mean (SD)	51 (6.63)
Anttila M (2008)	Registered Nurses, (%)	56%
	Practical Nurses, (%)	41%
	Female, (%)	58%
	Male, (%)	42%
	Age, range (mean)	26 to 64 years (41 years)
Gupta S (2011) and Gupta (2012)	Asthma educators, n (%)	5 (25%)
	Physician, n (%)	6 (30%)
	Pulmonologists, n (%)	9 (45%)
	Male, n (%)	11 (61)
	Age, n (%)	
	<30 years	0
	30–39 years	4 (22%)
	40–49 years	10 (56%)
	50–59 years	4 (22%)
	≥60 years	0
	Average number of years in practice (SD)	16 (8%)
	Practice location	
	Suburban, n (%)	1 (6%)
	Urban, n (%)	16 (89%)
	Mixed, n (%)	1 (6%)
	Practice type	
	Group, n (%)	14 (78%)
	Solo, n (%)	4 (22%)
	Practice setting	
Academic, n (%)	11 (61%)	
Community, n (%)	7 (39%)	
Average number of patients with asthma seen each month (SD)	52 (30%)	
Prior experience preparing an AAP, n (%)	16 (89%)	
Nordfelt S (2012)	Not reported	
Nordqvist C (2009)	Physician, n (%)	7 (35%)
	Nurse specialists in diabetes, n (%)	8 (40%)
	Nurse**, n (%)	1 (5%)
	Dieticians, n (%)	2 (10%)
	Social welfare officers, n (%)	2 (%)
Oh H (2011)	Physician, n (%)	4 (20%)
	Outpatient nurse, n (%)	1 (5%)
	Inpatient nurse, n (%)	20 (80%)
Wiecha J (2015)	Physician, n (%)	13 (93%)
	Nurse practitioner, n (%)	1 (7%)
	Female,%	61%
	Located in urban practice area,%	95%
	Age, mean, n (%)	45 years

Appendix 5: Summary of findings of included studies

Author (year)	Outcome (Theoretical Model)	Analysis	Findings	Authors' Conclusions
Anhøj J (2004)	Perceived Usefulness (TAM2)	Descriptive and Qualitative	<p><i>Do you think that there is a need for Internet tools like LinkMedica in medical practice?</i></p> <p>Yes: 96 (73%) No: 35 (27%) Total: 131 (100%)</p>	<p>"The self-selected survey responses and in-depth interviews indicated that LinkMedica is generally considered a trustworthy and reliable site by both patients and doctors. However, there was a contrast between users' positive perception of LinkMedica and their unwillingness to use the site for more than short periods. The primary reason for this was that LinkMedica did not fit into their everyday lives because of technical and psychological aspects. A number of recommendations to improve LinkMedica are suggested." (p.1)</p>
			<p><i>Do you ever use LinkMedica in collaboration with your patients?</i></p> <p>I have looked at it-but did not find it useful: 4 (3%) No-but I would like to try: 29 (22%) Total: 130 (99%)</p>	
			<p>Interviews (n=5) "GPs themselves are not confident PCusers, they find it very difficult to instruct the patients in the system" (p. 10)</p> <p>"Patients benefit from using LinkMedica. The system helps patients understand their disease, improves compliance, and reduces symptoms. Furthermore, LinkMedica stresses the patient's own responsibility for his other disease" (p. 10)</p>	

			<p>“GPs themselves, however , found that using LinkMedica was difficult” (p. 10)</p> <p>“GPs have a positive attitude towards the system, their use of it is influenced by external factors such as time and economy” (p. 10)</p> <p>“It needs to be adapted to the conditions of the users, so it becomes a natural and integrated part of their everyday lives” (p. 13)</p>	
Anttila M (2008)	Perceived Usefulness (TAM2)	Qualitative	<p>“Nurses experienced the IT portal as a broad information source for patients” (p. 150)</p> <p>“The IT education was a self-help aid for patients” (p. 150)</p> <p>“The IT education was useful to patients when their mental state was good” (p. 150)</p> <p>“Nurses experienced the portal as supporting patients’ self-management abilities because it enabled autonomous access to information and could be used independently outside the education sessions” (p. 150)</p> <p>“IT education was a motivating method because of the interesting experiences gained in the course of using it” (p. 151)</p> <p>“The portal was a supportive, fast and thorough information source which was pleasant for nurses to use” (p. 151)</p>	<p>“Systematic patient education using information technology is a promising method of patient-centred care which supports nurses in their daily work. However, it must fit in with clinical activities, and nurses need some guidance in understanding its benefits. The study data can be used in policymaking when developing methods to improve the transparency of information provision in psychiatric nursing.” (p.147)</p>
	Perceived Ease of Use (TAM2)	Qualitative	<p>“Absence of IT skills was an obstacle in patients’ use of the portal as it required technology skills” (p. 152)</p> <p>“Due to the long home-page address of the portal for research purposes, it was difficult for patients to get into the portal itself” (p. 152)</p>	

			“Nurses did not feel comfortable with IT and saw it as difficult” (p. 152)	
Environmental context and resources (TDF)	Qualitative		“Inadequate resource as it took too much time away from their basic work” (p. 152) “Nurses did not feel comfortable with IT and saw it as difficult” (p. 153) “No space for it as there was not always a quiet room available containing a computer and Internet connection” (p. 152)	
Intention to use (TAM2)	Qualitative		“Some nurses did not want to educate patients via IT or they did not have any experience in it, while some had no opinion about it or had only slight experience of it through the research training” (p. 152) “Because of the lack of practice, it had no chance of becoming routine” (p. 152)	
Gupta S (2011) and Gupta (2012)	Perceived Usability (TAM2)	Descriptive	Development stage: the mean SUS (range from 0 to 100) was 72.2 (SD 10.2) 75.0 (SD 8.16) for pulmonologists; 76.2 (SD 11.1) for PCPs; 66.7 (SD 5.77) for CAEs; 70.0 (SD 13.5) for patients Wiki stage: (overall) mean SUS score was 75.9 (SD 19.6)	“We have developed an AAP through a rigorous methodology that included all relevant stakeholders and considered user preferences, the best evidence and expert opinion not only for content, but also for appearance and usability. Our systematic development process and results would favor this AAP over most existing AAPs for clinical implementation.” (p.414)(28)
Perceived Usefulness (TAM2)	Descriptive		<i>The chat room feature was useful to communicate with other participants</i> Disagree: 10% Neutral: 17% Agree: 73%	
			<i>I found it useful to have a "comments" field under each selection</i> Disagree: 6%	

		Neutral: 19% Agree: 75%
		<i>I am satisfied with the overall asthma action plan that was created</i> Disagree: 9% Neutral: 11% Agree: 80%
		<i>The wiki tool was an effective way to design an asthma action plan</i> Disagree: 11% Neutral: 11% Agree: 77%
Perceived Ease of Use (TAM2)	Descriptive	<i>I was able to make the format/visual changes that I wanted to</i> Disagree: 15% Neutral: 12% Agree: 74%
		<i>I found the logon process easy</i> Disagree: 11% Neutral: 6% Agree: 83%
		<i>The tool webpage loaded and updated too slowly</i> Disagree: 77% Neutral: 14% Agree: 9%
		<i>I would be able to use the asthmas actin plan that was created</i> Disagree: 6% Neutral: 3% Agree: 91%
Environmental context and resources (TDF)	Descriptive	<i>If my schedule permitted I would have used the site more often</i> Disagree: 20% Neutral: 31% Agree: 49%
Intention to Use		<i>I would be willing to use a wiki tool to design visual media</i>

	(TAM2)		<i>in the future</i> Disagree: 11% Neutral: 3% Agree: 86%	
	Knowledge (TDF)		<i>The chat room feature allowed me to understand the preferences of other participants</i> Disagree: 13% Neutral: 20% Agree: 67%	
	Social influences (TDF)		<i>There were certain participants whose opinions were more influential than others</i> Disagree: 37% Neutral: 37% Agree: 26%	
	Beliefs about capabilities (TDF)		<i>I was able to make more changes and suggestions through this web-based process than I would have been able to in a face-to-face group discussion</i> Disagree: 29% Neutral: 34% Agree: 37%	
Nordfelt S (2012)	Perceived Usefulness (TAM2)	Qualitative	“Respondents thought that it mostly functioned well. Users considered the design easy to understand. Practitioners found it to be a manageable tool when seeking information. The information was easily accessible to everyone: wherever there was a computer, the information was close by” (p. 7)	“Practitioners expressed positive perceptions toward a tailored open Web portal. They suggested that future benefits could be derived from systems that integrate factual information and online dialogues between practitioners and patients (ie, exchanging information for everyone’s benefit).” (p.1)
	Environmental context and resources (TDF)		“Problems that respondents perceived when using the website comprised a range of factors, such as technical problems, lack of time, inadequate computer experience, a lack of commitment, a lack of computer access, and disorganized information” (p. 7)	
	Output Quality (TAM2)		“Viewed the Web portal as a source of scientifically sound information and advice that is available to several	

			categories of professionals, as well as patients and their significant others" (p. 7)	
	Perceived Ease of Use (TAM2)		"Easy access to the website made it useful for everyone, including new staff, students, school and preschool staff, primary-care and other hospital staff" (p. 7)	
	Intention to Use (TAM2)		"Practitioners felt safe in recommending the website because they knew that the information was produced by, and the practitioners were part of, a multi-professional community" (p. 7)	
Nordqvist C (2009)	Beliefs about consequences (TDF)	Qualitative	"Clinicians were confident that the portal's use in diabetes care would extend beyond the clinics, in addition to being a part of the internal routine of the clinics" (p. 4)	"Experienced clinical practitioners working in diabetes teams exhibited positive attitudes towards a Web 2.0 portal tailored for young patients with type 1 diabetes and their parents. The portal included provision of third-party information, as well as practical and social means of support. The practitioners' early and active participation provides a possible explanation for these positive attitudes. The findings encourage close collaboration with all user groups when implementing Web 2.0 systems for the care of young patients with chronic diseases, particularly type 1 diabetes. The study also highlights the need for efforts to educate clinical practitioners in the use of Web publishing, social networking, and other Web 2.0 resources. Investigations of attitudes towards implementing similar systems in the care of adults with chronic diseases are warranted." (p.1)
	Perceived Usefulness (TAM2)		"It facilitated closer interaction between diabetes teams and families" (p. 5) "Newly updated diabetes information would be available to families at any time" (p. 5)	

	Social/professional role and identity (TDF)		“Several interviewees also pointed out that it was unclear whether current legislation permitted email contact with patients, while others were uncertain about this but expected email communication to be safe” (p. 5)	
	Job Relevance (TAM2)		“Several interviewees expressed that a locally shared source of reliable information, such as references to verified websites, would be a great support to their work with patients, assuming that it was regularly updated” (p. 5)	
	Environmental context and resources (TDF)		“Lack of time and how to deal with this problem was an issue often raised during the interviews. Several interviewees expected the portal to save time in the execution of some routine tasks and when providing general information” (p. 6)	
Oh H (2011)	Perceived Usefulness (TAM2)	Qualitative	<p>“Regarding causes, symptoms, diagnosis, treatments, and prognosis of gout, 80%–88% of the experts indicated that such information was useful to understand gout” (p. 338)</p> <p>“Regarding self-management techniques, 84% of the gout experts indicated satisfaction” (p. 338)</p> <p>“88% of the experts responded that the website was useful in the understanding of patients’ gout-related experiences” (p. 338)</p> <p>“44% of the experts opined that the website aroused their interest” (p. 338)</p> <p>“Further information on diet and gout progress/medications was suggested by 60% of experts” (p. 338)</p>	“Program contents and ease of site navigation (http://goutin.kr) were found to be appropriate and satisfactory to both patient and expert groups” (p.333)
	Perceived Ease of Use (TAM2)		“Results of evaluation of ease of site navigation and content access showed that experts were highly satisfied” (p. 340)	
	Intention to Use (TAM2)		“All subjects indicated a willingness to use the website frequently” (p. 338)	

Wiecha J (2015)	Perceived Usefulness (TAM2)	Descriptive	<p><i>The discussion board was an effective way to communicate with my patient(s):</i> Mean score of 5.6</p> <p><i>The feedback from Asthma Specialist posted to the discussion board was useful in helping me to manage my asthma patient(s):</i> Mean score of 6.3</p> <p>All answers rated on Likert scale 0-10 (0=Strongly Disagree to 10=Strongly Agree), SD not reported</p>	<p>“Multidimensional web-based educational, monitoring, and communication platform may have positive influences on pediatric patients’ asthma-related knowledge and use of asthma preventer medications” (p.1)</p>
-----------------	-----------------------------	-------------	--	--