Appendix 2
Overview of e-learning approaches

Citation	Aim of e-learning / duration / theory	Participants	E-learning methods	Type of interaction	Accreditation / Assessment
Barber et al., 2010	-To improve knowledge and utilisation of occupational asthma guidelines in primary health care -One hour duration -No theory identified	-783 primary health care professionals (not specified)	-Online self-directed learning using web-based resources	Asynchronous	BMJ Accredited Formative assessment
Bekkers et al., 2010	-To enhance the quality of antibiotic prescribing amongst primary health care practitioners -Duration not indicated -Theory of planned behaviour	-244 general practitioners and nurse practitioners	-Online self-directed learning, reflection, interactive presentations and practice-based seminars, simulated SPs, web forum	Mixed: asynchronous & synchronous	-STAR programme accreditation -Formative assessment
Buriak et al., 2015	-To improve education on cancer survivorship -Duration not indicated -Theory of planned behaviour	229 physicians, 213 nurse practitioners, 1,367 nurses	Online self-directed learning using patient based case scenarios	Asynchronous	-Professional body accreditation -Formative assessment
Cuggia et al., 2006	-To improve information sharing between primary health care professionals -Duration not indicated -No theory identified	General practitioners and nurses (numbers not specified)	Online self-directed learning, real-time interactions and teleconsultations	Mixed asynchronous & synchronous	-Accreditation not mentioned -Formative assessment
Degryse et al., 2009	-to improve knowledge about the diagnosis of dementia -Five hour duration -Discovery learning theory	26 general practitioners and nurses	- Online self-directed learning Interactive software, simulated patient cases	Asynchronous	-Accreditation not mentioned -Formative assessment
Docherty & Sandhu, 2006	-To improve knowledge of interprofessional diabetes care -No duration indicated -No theory identified	35 general practitioners and nurses	-Online self-directed learning, residential workshop, online learning, interactive exercises	Mixed asynchronous & synchronous	-University accreditation -Summative assessment
Fox et al., 2001	-To improve understanding of	111 post primary health care	-Online self-directed learning	Asynchronous	-Accreditation not mentioned

	change management concepts and principles for primary health care professionals -12 week duration -Theories of change management	professionals (unspecified)	exercises		-Formative assessment
Gensichen et al., 2009	To improve the understanding of e-learning approaches for primary healthcare professionals -No duration indicated -No theory identified	76 primary healthcare professionals (unspecified)	Unspecified	Asynchronous	-Accreditation not mentioned -Assessment not mentioned
Halabisky et al., 2010	-To enhance collaborative practice among healthcare teams in long term care homes -8½ hour duration -Change management	59 family physicians, nurses, nurse practitioners and pharmacists	Online activities, audio/video clips, worksheets, face-to- face team contact)	Mixed asynchronous & synchronous	-Accreditation not mentioned -Formative assessment
Hannon et al., 2012	-Improve the diagnosis and management of Chronic Fatigue Syndrome (CFS) in primary health care -Duration not indicated -No theory identified	44 participants (general practitioners, practice nurses CFS specialists, carers, patients	Blended learning, (podcasts, soundbites, diagnostic descriptions, patient interface, management options)	Asynchronous	-Accreditation not mentioned -Assessment not mentioned
James et al., 2011	-To educate practitioners in the safe use of insulin -One hour duration -No theory identified	31,089 participants (general practitioners, nurses, pharmacists, others – not specified)	Online self-directed learning using audio-visual resources	Asynchronous	-Accreditation not mentioned -Summative assessment
Jenkins et al., 2014	-To improve interprofessional pain management education in primary and community care settings -14 week duration -Theories of adult learning	24 general practitioners, 10 nurses, 10 pharmacists, four physiotherapists	Online self-directed learning using critical reflections, case studies, blog postings	Mixed asynchronous & synchronous	- University accreditation -Summative assessment
Kang et al., 2015	-To enhance the management of chronic disease for primary	27 family physicians and seven nurse	Blended learning (learning objectives, clinical	Mixed asynchronous & synchronous	-Professional body accreditation

	healthcare providers -13 week duration -No theory identified	practitioners	rotations, mentorship)		-Summative assessment
Macfarlane et al., 2000	To increase understanding of epidemiology for primary health care practitioners -Duration not indicated -No theory identified	Not clear	Online self-directed learning using interactive software	Asynchronous	-Accreditation not mentioned -Assessment not mentioned
Maloney et al., 2015	To improve knowledge and practice of using social media -Duration not indicated -No theory identified	317, physicians, physiotherapists , podiatrists and others (not specified)	Online self-directed learning using a range of web-based resources	Asynchronous	-Accreditation not mentioned -Assessment not mentioned
Marsh-Tootle et al., 2011	To improve and sustain knowledge and screening for Amblyopia in primary health care -Duration not indicated -Theories of adult learning	136 primary health care providers (not specified)	Online self-directed learning using case based web-based modules, videos and animations	Asynchronous	-Accreditation not mentioned -Formative assessment
Pereira et al., 2015	-To improve the management of alcohol abuse in primary health care -9 hour duration -No theory identified	67 primary health care professionals (not specified)	Online self-directed learning, web-conferences, face-to-face conferences, videos, text, e-chats, audio chats	Mixed asynchronous & synchronous	-University accreditation -Summative assessment
Robinson et al., 2011	-To improve confidence and knowledge about providing rural healthcare -24 week duration -Constructivist theory	75 participants including nurses, occupational therapists, psychologists and social workers	Online self-directed learning, interactive exercises, moderated discussion forums, chat forums, telephone, video conferencing	Mixed asynchronous & synchronous	-Accreditation not mentioned -Formative assessment
Robson, 2009	-To combine learning strategies with published guidelines with the intention of changing practice -Duration not indicated -Theories of adult	45 general practitioners and practice nurses	Online self-directed learning (web-based resources)	Asynchronous	-Accreditation not mentioned -Formative assessment

	learning				
Rudolf et al., 2010	To develop practitioners to work effectively with parents of babies and pre-school children in the prevention of childhood obesity -2 day duration -Family partnership model	137 primary practitioners (health visitors, nurses, outreach workers, centre managers, family support workers)	Online learning, using web-based activities, face-to-face interactions, website and resource toolkit	Asynchronous	-Accreditation not mentioned -Formative assessment
Russell et al., 2006	-To improve knowledge of primary health care practice -1-2 year duration (part-time MSc) -Constructionist theory	Primary healthcare practitioners (not specified)	Online self-directed learning and e-based interactive learning	Mixed asynchronous & synchronous	-University accreditation -Summative assessment
Sandars & Langlois, 2005	-To understand the role of e-learning approaches in primary health care -Duration not indicated -No theory identified	Not mentioned	-Self-directed learning, online materials, resources	Mixed asynchronous & synchronous	-Accreditation not mentioned -Assessment not mentioned
Tapia-Coyner et al., 2013	-To improve knowledge of chronic kidney disease -Duration not indicated -No theory identified	-844 participants from medicine, nursing, nutrition, social work	-Online self-directed learning, virtual tutors, face-to-face interaction with health experts	Mixed asynchronous & synchronous	-Professional body accreditation -Summative assessment