How did this h(app)en? An evolving research journey

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Introduction to the University of Strathclyde

A leading international technological university, inspired by its founding mission as a ‘place of useful learning’, that makes a positive difference to its students, its community and to societies worldwide.

To reach outside the University to make the world better educated, prosperous, healthy, fair and secure.

University of Strathclyde

- 3rd largest university in Scotland
- Founded in 1796 by Professor John Anderson, educational reformer
- The Place of Useful learning – "*Not knowledge for knowledge sake. We must make a difference and benefit mankind.*"
- Leading international technological university differentiated by:
  - the quality of our graduates
  - the quality of our research
  - our interaction with industry
- £350m campus development over 10 years
- Global community of around 144,000 alumni

Our Vision, Mission and Values

University of Strathclyde Science

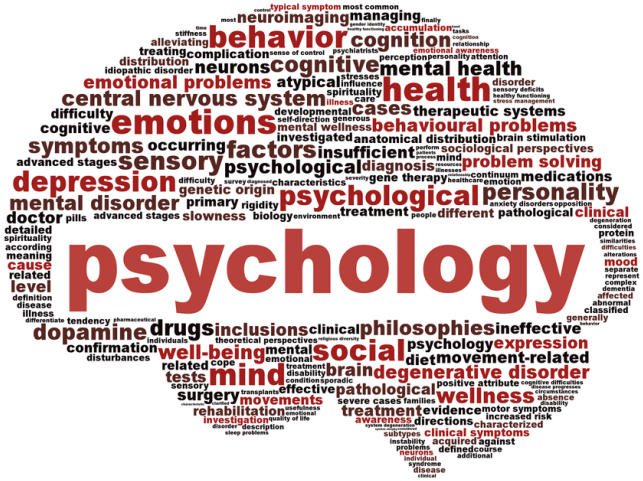
Our Vision	A leading international technological university, inspired by its founding mission, that makes a positive difference to the lives of its students, to society and to the world
Our Mission	From our foundation as a 'place of useful learning', we take it as our responsibility to research, teach and be of benefit to society – to reach outside the University to make the world better educated, prosperous, healthy, fair and secure
Our Values	People-oriented | Bold | Innovative | Collaborative | Ambitious

Why Research?

University of Strathclyde Science

The more that you read,
the more things you will know.
The more that you learn,
the more places you'll go.

-- Dr. Seuss


psychology
emotions
behavior
health
depression
psychological
personality
mental disorder
dopamine
drugs
social
mind
well-being
degenerative disorder
pathological
wellness
neuroimaging
managing
cognition
cognitive
mental health
emotional problems
central nervous system
therapeutic systems
behavioural problems
factors
sensory
problem solving
medications
clinical
philosophies
ineffective
expression
movement-related
brain
treatment
evidence
clinical symptoms

health
interventions
behaviour
public
change
methods
theory
activity
treatment
research
adherence
psychological
dietary
recommendations
snacking
physical
psychology
control
theories
services
apply
complex
improve
professional
systems
nutrition
advance
environmental
major

LIFECOURSE

Health
Research
Practitioners
improvement
improving
improved
quality
HSR
services
care
understand
dimensions
multidisciplinary
service
science
efficiency
distribution
policy
disciplines
public
direct
psychology
calls
continuing

Our strategic themes

- Advanced manufacturing & materials
- Energy
- Health & wellbeing
- Ocean, air & space
- Innovation & entrepreneurship
- Measurement science & enabling technologies
- Society & policy

Sub Themes
Better Medicines
Biomedical Imaging and Biophysics
Bio-nanotechnology and Sensors
Digital Health and Health Analytics
Health Interventions and Population Health
Living Well, Ageing Well
Medical Devices and Technologies
Rehabilitation

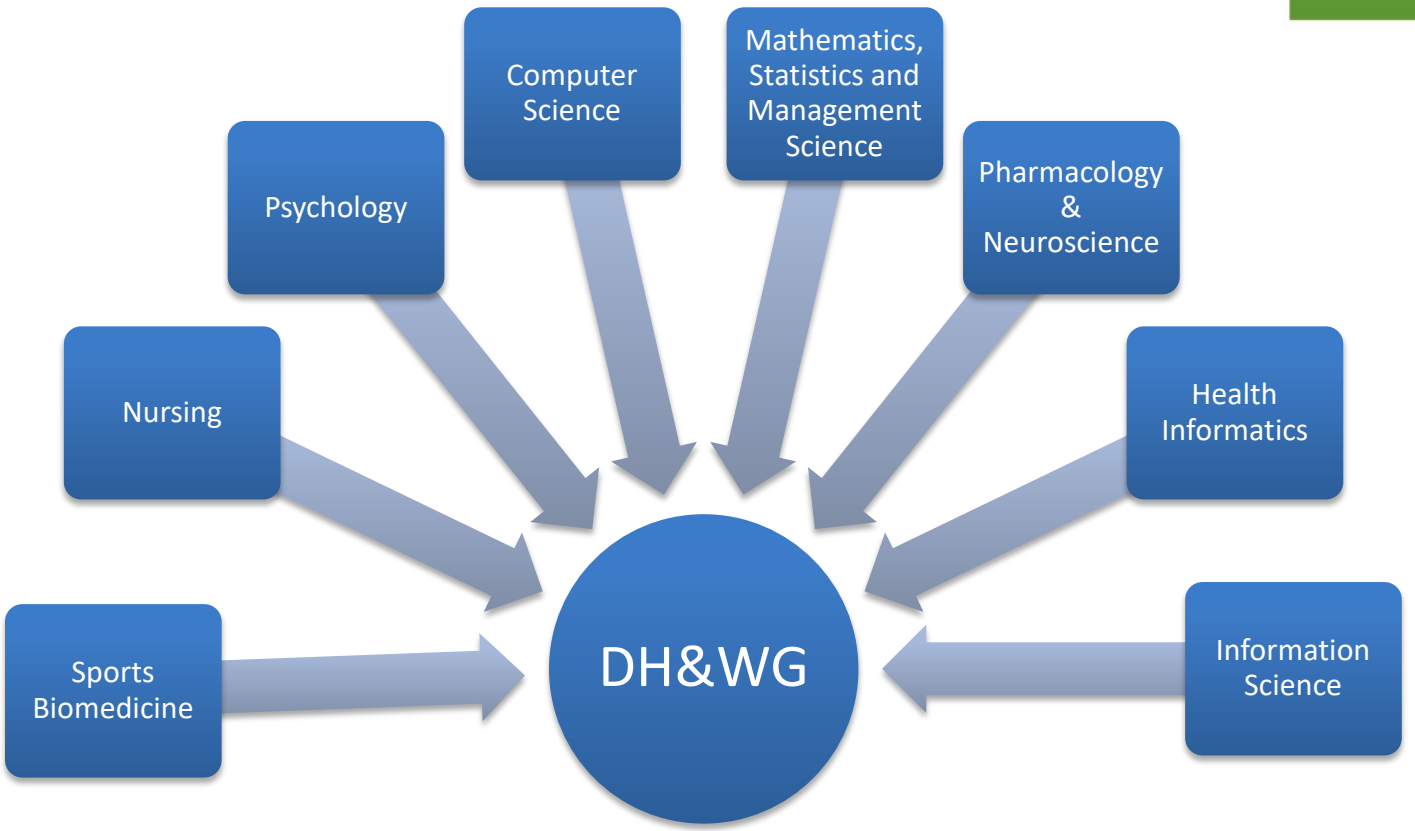
Health and Wellbeing

University of Strathclyde Science

- Research and expertise covering the **full lifespan**
- Examining biological, social, physical and mental health
- Looking at **individuals**, **communities,** and structures and **systems** around health and care
- Understanding and promoting **what keeps us well**
- Detecting risk earlier and **intervening at the right time** in the right ways
- Using **data and knowledge** to understand cohorts

HEALTH AND WELLBEING STRATEGIC THEME

University of Strathclyde Science



Science + Engineering + HASS + Business School

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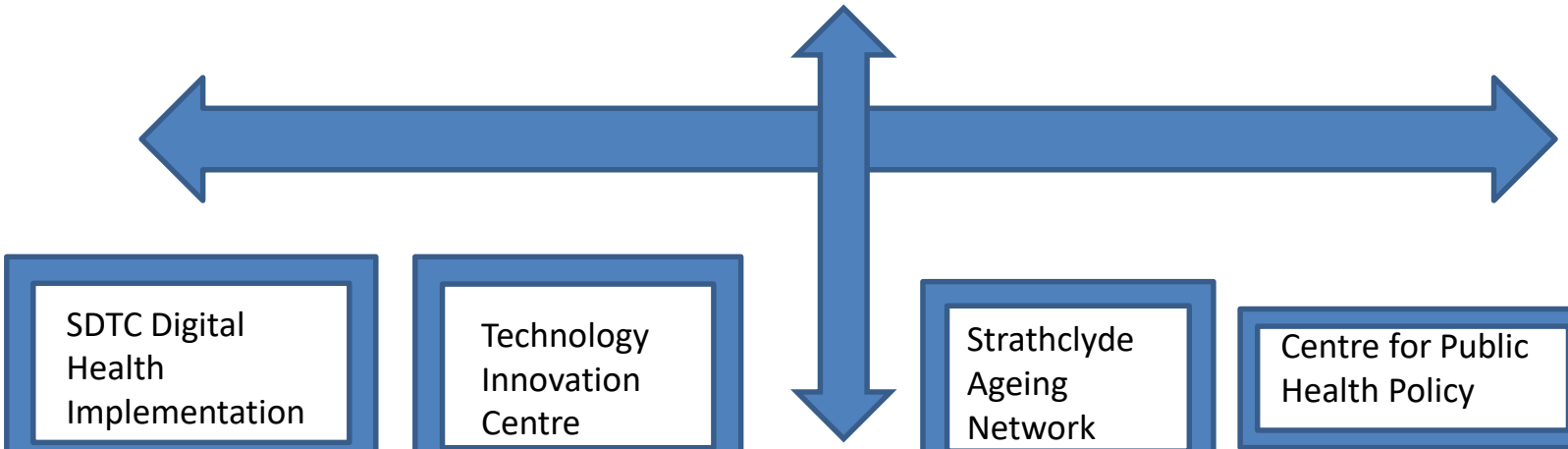
Science	Engineering	Business School	HASS



- SDTC Digital Health Implementation
- Technology Innovation Centre
- Strathclyde Ageing Network
- Centre for Public Health Policy
- Digital Health and Care Institute

Academia	Industry	NHS & Local Authorities	Third Sector	Government

Digital Health and Wellness Research Group (DHaWG)

University of Strathclyde Science

VISION/MISSION STATEMENT

'Developing person-centred and accessible digital health solutions that make a difference'

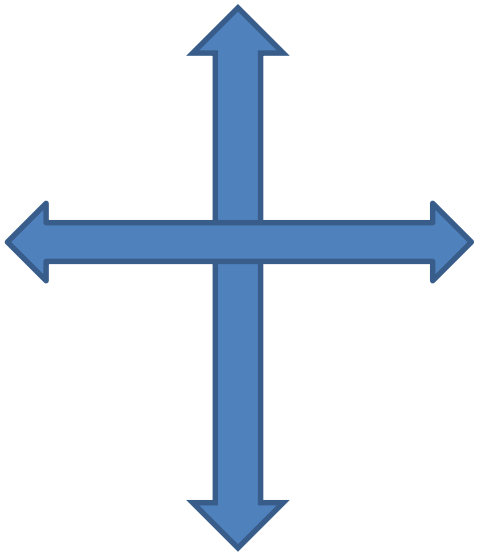
We are a world leading digital health and wellness group that designs, develops, implements and evaluates accessible real world health solutions. We are driven by user-centred design and work in partnership with key stakeholders to create smart and connected digital health technologies that have a positive impact on individuals, communities and organisations at scale.

Understanding Patient and Service needs

e.g. service mapping, UCD, co-design

Consumer wellness

e.g. wearables, apps, tracking and monitoring



Health and Social Care Technologies and systems

e.g. PHRs, clinical decision support, remote monitoring, telehealth

Understanding Data

Analytics, machine learning, ethics, governance, personalisation

PhD Studentship Opportunities @ Strathclyde

University of Strathclyde Science

https://www.strath.ac.uk/studywithus/scholarships/

https://www.strath.ac.uk/studywithus/postgraduateresearchopportunities/

https://ben.mis.strath.ac.uk/pguserprofile/control/enterDetailsPage

- £4,327 fees per year for home/EU students
- 51 posts currently available for EU fee status students (funded studentships)
- Funding usually covers fees and annual stipend of approx. £15k per annum for 42 months (3.5 years)

Doctoral Training Centres at Strathclyde

https://www.strath.ac.uk/dtcs/

- Centres for Doctoral Training provide supportive 4-year programmes which integrate world class research teams with pioneering external partnerships in an interdisciplinary environment.
- By increasing the proportion of our postgraduate research students studying within Doctoral Training Centre environments (internally and externally funded), we continue to provide an innovative and engaging student experience for researchers at Strathclyde

- Digital Health Implementation & Analytics Doctoral Training Centre
- Funded PhD studentships

Welcome

We're a leading, international technological university located in the heart of Glasgow, Scotland's biggest city. We believe in useful learning, which guides our research, our learning and teaching and the way we work with businesses and organisations.

We have a long history of welcoming student from Finland both on exchange and for full undergraduate and postgraduate courses.

At the moment we have approximately 50 Finnish students at Strathclyde studying across all four faculties but we'd love to see more of you here.

We welcome applications from well qualified students.

Nordic Society

The Nordic Society is open to all Nordics and Nordic-minded people. Its aim is to connect people across nationalities and cultures, and to help full-time and exchange students make friends while abroad.

The society meets roughly once every two weeks somewhere in the city centre to get together for social activities. The society has arranged events such as pub and sub crawls, dinner parties, and joint activities with other societies (eg Strathclyde International Society and Glasgow Uni Nordic Society).

You can also find the society on Facebook.

Entry requirements

Undergraduate

We recognise a wide range of European qualifications, including the Ylioppilastutkintotodistus/Studentexamensbetyg and the International Baccalaureate.

For some degree programmes, we may expect you to have studied specific subjects within the Ylioppilastutkintotodistus/Studentexamensbetyg. For example, where we ask applicants taking Scottish Qualifications Authority (SQA) Highers for a specific subject(s), we may ask you for the same subject(s).

For entry with the Ylioppilastutkintotodistus/Studentexamensbetyg we require a grade of between 4-6.

Postgraduate

Kandidaatti 2/3 or 3/5.

For further information on entry requirements, please contact our representative Ciorstan MacGregor (c.macgregor@strath.ac.uk).

Researcher Development Programme (RDP)

- enhance your research activities at Strathclyde
- build your confidence by developing research-related and transferable skills
- identify and plan your own personal training package
- help fulfil your potential and succeed in a highly competitive employment market

https://www.strath.ac.uk/media/cross-functional/rdp/documents/RDP_Brochure_2018_FINAL.pdf.pagespeed.ce.swL2wNtXyY.pdf

Researcher Development Programme

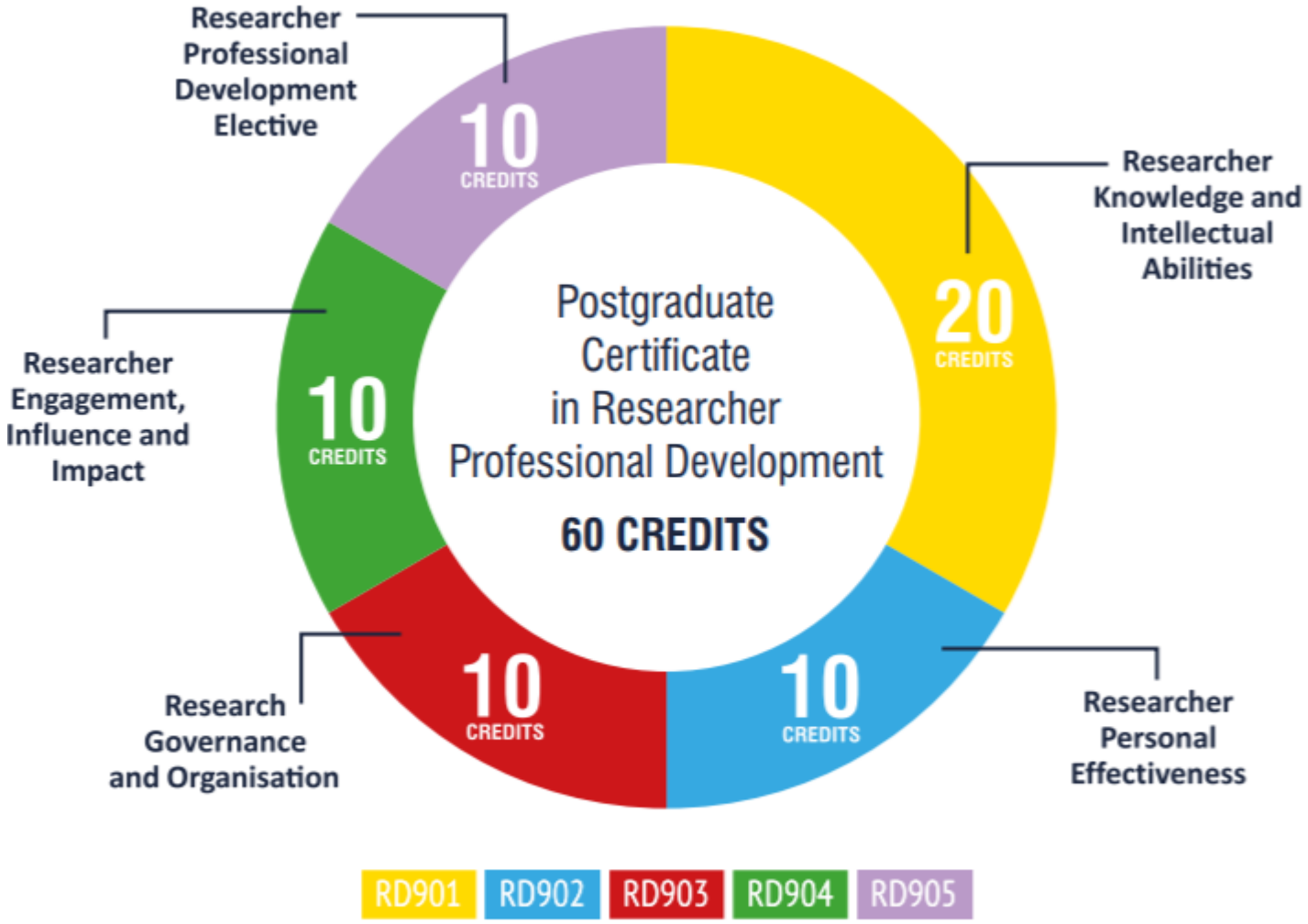
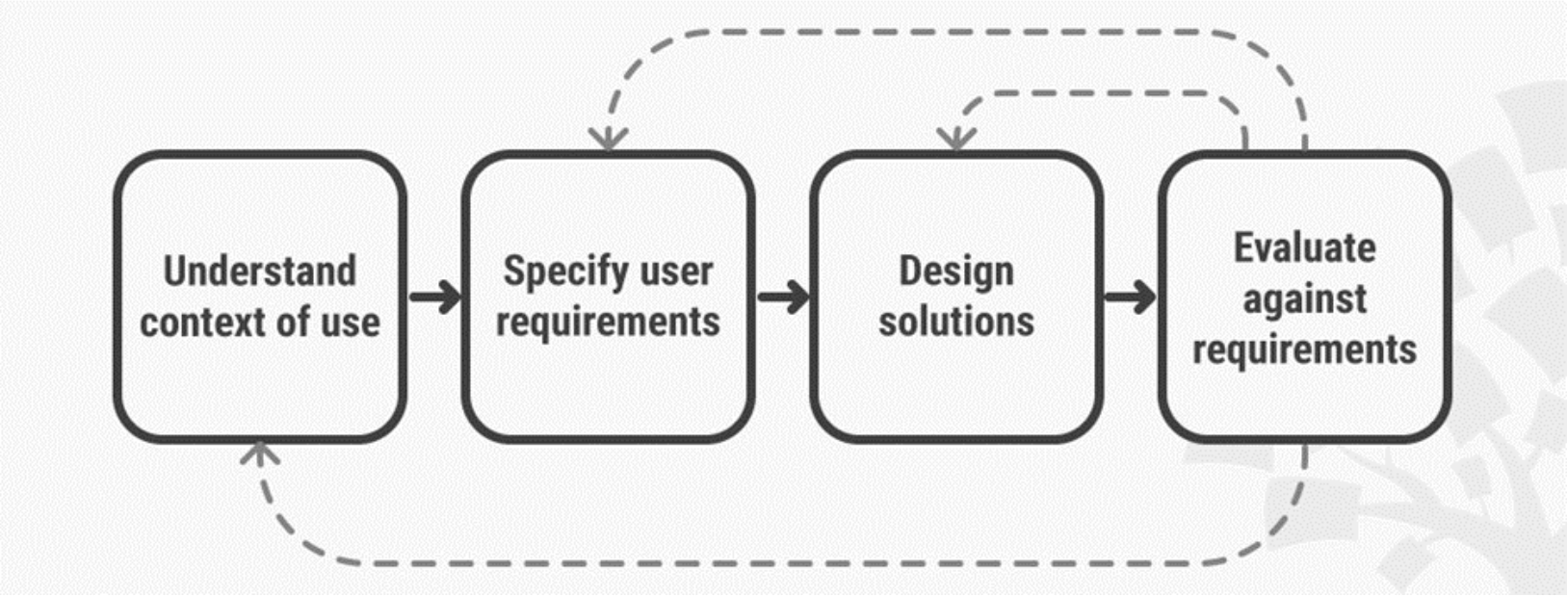


Figure 2: Name, code, and credit value of the five PG Cert RPD classes

User Based Research

Including people in the full system design, development and evaluation lifecycle



Who?
Dr Lisa McCann
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@Lisa_McCann_

What?
Health Services Researcher
Qualitative, RCTs, Mixed Methods, Evaluation
Patient experience
Co-Design / Collaborative Methods

Where?
Department of Computer and Information Sciences (LT13:04)

University of Strathclyde Science

The eSMART Study @eSMART_EU

What?
Development, design and evaluation of Person-Centred Digital Health interventions

The development of an e-Prehabilitation system of care to support young adults diagnosed with cancer

National AF and ScotCap Evaluations (AF work package lead)

Adapting the Advanced Symptom Management System (ASyMS) to record patient symptoms and improve care following surgery for colorectal cancer

VR environments for young men with DMD

Digital Support for young people experiencing bereavement

- Close monitoring of chemotherapy toxicity is important.
- Close monitoring can ensure prompt symptom management, quality care, maximum treatment benefit, and improved patient outcomes.
- Patient-reported outcome (PRO) measures can play a key role.

Randomised controlled trial to evaluate **e**lectronic **S**ymptom **Ma**nagement using the Advanced Symptom Management System (ASyMS) **R**emote **T**echnology for patients with cancers: **eSMART**

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Funded by EU FP7 Grant

€5,999,991

https://www.strath.ac.uk/science/computerinformationsciences/esmart/

@eSMART_EU

- **5** countries in Europe, **13** clinical sites
- **Consortium Partners: 11 European and 1 US**
- Patients with breast cancer, colorectal cancer or lymphoma receiving chemotherapy
- Complete 2019

European Journal of Oncology Nursing 26 (2017) 63–82

Contents lists available at ScienceDirect

European Journal of Oncology Nursing

journal homepage: www.elsevier.com/locate/ejon

The assessment and management of chemotherapy-related toxicities in patients with breast cancer, colorectal cancer, and Hodgkin's and non-Hodgkin's lymphomas: A scoping review

Patricia Fox [a, *], Andrew Darley [a], Eileen Furlong [a], Christine Miaskowski [b], Elisabeth Patiraki [c], Jo Armes [d], Emma Ream [e], Constantina Papadopoulou [f], Lisa McCann [f], Nora Kearney [g], Roma Maguire [f]

Received: 22 May 2017 | Revised: 31 May 2018 | Accepted: 11 June 2018

DOI: 10.1111/ecc.12890

ORIGINAL ARTICLE

WILEY European Journal of Cancer Care

Development and preliminary testing of a brief clinical tool to enable daily monitoring of chemotherapy toxicity: The Daily Chemotherapy Toxicity self-Assessment Questionnaire

Roma Maguire[1] | Grigorios Kotronoulas[2] | Peter T. Donnan[3] | Catherine Paterson[4] | Lisa McCann[1] | John Connaghan[1] | David G. G. Di Domenico[5] | Nora Kearney[6]

JMIR Cancer 2019 | vol. 5 | iss. 1 | e10813 | p.1
(page number not for citation purposes)

Original Paper

Adaptation and Implementation of a Mobile Phone–Based Remote Symptom Monitoring System for People With Cancer in Europe

Eileen Furlong[1], HDipOnc, MSc, PhD; Andrew Darley[1], BA (Mod), MSc; Patricia Fox[1], BNS, MA, PhD; Alison Buick[1], BSc, PhD; Grigorios Kotronoulas[2], RN, BSN, MSc, PhD; Morven Miller[2], BA (Hons), MSc, PhD; Adrian Flowerday[3], BSc, CEng; Christine Miaskowski[4], RN, PhD, FAAN; Elisabeth Patiraki[5], RN, BSc, PhD; Stylianos Katsaragakis[5], RN, BSN, MSc, PhD; Emma Ream[6], BSc, MSc, PhD; Jo Armes[6], BSc, MSc, PhD; Alexander Gaiger[7], MD; Geir Berg[8,9], RN, MNSc, PhD; Paul McCrone[10], PhD; Peter Donnan[11], BA, BSc (Hons), MSc, PhD; Lisa McCann[2], BSc (Hons), MSc, PhD; Roma Maguire[2], BN, MSc (Med Sci), PhD

eSMART

University of Strathclyde Science

Open Access Protocol

BMJ Open

The eSMART study protocol: a randomised controlled trial to evaluate electronic symptom management using the advanced symptom management system (ASyMS) remote technology for patients with cancer

Roma Maguire,[1] Patricia A Fox,[2] Lisa McCann,[1] Christine Miaskowski,[3] Grigorios Kotronoulas,[1] Morven Miller,[1] Eileen Furlong,[2] Emma Ream,[1] Jo Armes,[4] Elisabeth Patiraki,[5] Alexander Gaiger,[6] Geir V Berg,[7] Adrian Flowerday,[8] Peter Donnan,[9] Paul McCrone,[10] Kathi Apostolidis,[11] Jenny Harris,[4] Stylianos Katsaragakis,[5] Alison R Buick,[2] Nora Kearney[1]

Using Virtual Reality to support Young People with complex health care needs

University of Strathclyde Science

- **VR to support transition from child to adult care services**
  - Created VR replica of new Hospice bedroom to increase familiarity prior to move.
  - Longer term: Create more Hospice surroundings in VR & assess reductions in anxiety associated to moving to new care environments via VR exposure.

- **VR to create environment enriched experiences for wheelchair users**
  - Created VR forest walk & adventure including ladder climb to a tree house.
  - Longer term: Build more interactive components and additional environments.

- **User needs and user requirements central to development & usability evaluations**
  - Wheelchair users
  - Breathing apparatus
  - Muscle wasting illness – headset weight, alternative controllers
  - Walking height perspective v wheelchair height perspective

The Prince & Princess of Wales Hospice

University of Strathclyde Science

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