Strength and Balance awareness in practice and Cascade Trainers for effective implementation

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ProFouND WP5 Objectives

- To create a network of trained OEP leaders and Cascade Trainers in falls prevention and management of exercise across Europe

- LLT Cascade Trainers (CTs) will be accredited to:
  - provide evidence based falls prevention exercise interventions to a variety of different client groups, and to
  - deliver, standardised and endorsed training themselves to new OEP leaders in their region

- Creation of this network and standardization of delivery across regions will ensure effectiveness and reach
Cascade Training with a focus on strength and balance exercise

Physical Activity Recommendations highlight the need for additional strength and balance training activities over and above the moderate physical activity messages.

Recommendations for effective intervention:
WHO PA Guidelines 2008, Canadian Society for Exercise Physiology 2011
Achieving the guidelines

- Moving More Often
- Moving regularly and frequently

Increased benefits

Increased physical activity

Meeting the guidelines
Exercise to Prevent Falls

Exercise *could* help fallers in a number of ways:

- Reducing Falls (or injurious falls)
- Reducing known Risk Factors for Falls
- Reducing Fractures? (or changing the site of fracture)
- Increasing Quality of Life & Social Activities
- Improving bone density
- Reducing Fear
- Reducing Institutionalisation

Results

Sherrington et al.,
JAGS 2008

Favours exercise    Favours control

17% reduction in falls

Overall (I-squared = 61.5%, p = 0.000)
What makes the difference?

• Greatest effects of exercise on fall rates from interventions including:
  – Highly challenging balance training
  – High dose (>50 hours)
  – Strengthening exercise
  – NO brisk walking program

  – Tailored and progressed

Sherrington et al., JAGS 2008 & NBSW 2011
Falls prevention in the UK

- **Otago Home Exercise Programme (OEP)**
  - 1 yr; 3 x p/w; 6 home visits (physiotherapist, nurse) to progress and tailor exercise but otherwise unsupervised
  - 6 mths; 3 x p/w (1 p/w group, 2 p/w home) exercise instructor
  - 12 wks – better balance outcomes in groups than home

- **Falls Management Exercise Programme (FaME/PSI)**
  - 9 mths; 3 x p/w (one group, two home); standing strength and balance plus floorwork
  - 6 months, increased MVPA, reduces falls – primary prevention

Falls Prevention EXERCISE PATHWAY

Falls Assessment
Identification of a falls problem and screening to determine risk factors *

Motivation Pathway

Home based exercise programme
OTAGO

OTAGO / FaME exercise classes
(Community based)

Chair Based Exercise Class
(Community based)

Balance and Safety Group
(PSI/FaME/OTAGO - Rehab based)
12 weeks

Exercise Referral Scheme
12 weeks

Community based classes for older people

October 2007

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Later Life Training: Otago Exercise Programme Leader (OEP)

- Developed with OEP Researchers Campbell & Robertson
- Trained 1800 OEP Leaders since 2006 - physiotherapists, occupational therapists, rehabilitation and technical assistants, exercise instructors, nurses, social care workers.
- **Recommended in:**
  - *Department of Health Prevention Package, DoH 2009*
  - *Royal College of Physicians Audit of Falls Exercise Services, RCP 2012*
  - *Age UK Expert Series on Falls Prevention Exercise – following the evidence, Age UK, 2013*
- **41%** of falls services have a qualified **OEP** leading exercise (RCP, 2013).
Cascade Training Objectives

• 3-5 Cascade Trainers identified in 10-15 regions/countries (physiotherapists/qualified exercise instructors)

• Training in evidence based falls prevention exercise
  – Otago Exercise Programme (Campbell & Robertson et al. 1997, 2001 etc)
  – Motivation to exercise (Yardley et al. 2007)
  – Elements of FaME programme (Skelton et al. 2005)

• At end of three years at least 40 trained CTs who will deliver training in their local regions
  – Extending reach > thousands of older people

• Quality assurance, fidelity checked & CPD provided
Pre-course online learning (10-15 hours)
Manuals; Narrated Powerpoints; Videos; Worksheets
Cascade Training

• Face to face training (5 days)
  – Practical Workshops
  – Become an OEP Leader
  – Become a Cascade Trainer
  – Assessments (do themselves and how to run them)
Training in tutor delivery

- How to run the courses locally
- Training on leading workshops and skills on management of training
- Timetable and delivery styles
- Assessment criteria and assessment skills
- Paperwork (health & safety, registers, assessment paperwork etc)
- How to “sell” the course and advertise
- What is available as support from LLT
CTs trained
7 countries
19 regions
44 CTs

+ 30 new OEP Leaders trained by CTs in Germany & Greece

Lund, Sweden – April 2015
Benefits of CT

• Strengthen links with other organisations
  – raise awareness of falls prevention
  – train them to deliver Otago exercises within their settings
  – primary prevention and follow on after rehabilitation
  – selling point for what they offer seniors

• Widen referral on options after patients leave rehabilitation
  – to continue strength and balance training for effective duration (confidence to suggest transition on after they leave therapy)

• Hub for falls prevention awareness events
• Widen reach of effective exercise for older people in their regions
Home Exercise Booklets

- Home exercise booklets translated
- [http://www.profound.eu.com](http://www.profound.eu.com)
- 13 languages
Endorsement in the regions

- Germany – 6 insurance companies have accepted OEP training onto database allowing 70-80% reimbursement of costs for patients
- Sweden – working with health ministry and local regions to endorse the training
- Greece – work in progress, Hellenic Society of Physiotherapy
- Norway – work in progress

- Working with EC Stakeholders of ProFouND to gain endorsement
For ProFouND / Europe?

• We have reached our target to train at least 40 Cascade Trainers.
  – Can each of them reach at least 100 older people with evidence based falls prevention exercise?
  – Can we embed this training into national systems?
  – Can each of the new CTs train at least 20 new OEP leaders a year?

• If each of these new OEP leaders reached at least 100 older people, we will have the potential reach of 84,000 new older people receiving evidence based exercise within 2 years....
Questions

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