

### **Evaluation for Active for Health**

NICHOLS, Simon <a href="http://orcid.org/0000-0003-0377-6982">https://shura.shu.ac.uk/21044/</a>

This document is the Presentation

### Citation:

NICHOLS, Simon (2017). Evaluation for Active for Health. In: HEPA Europe Conference 2017, Zagreb, Croatia, 15-17 November 2017. (Unpublished) [Conference or Workshop Item]

### **Copyright and re-use policy**

See <a href="http://shura.shu.ac.uk/information.html">http://shura.shu.ac.uk/information.html</a>

See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/322500249

### Evaluation for Active for Health

**Poster** · November 2017

CITATIONS

0

READS

20

#### 4 authors:



### Gabbi Frith

Sheffield Hallam University

**3** PUBLICATIONS **0** CITATIONS

SEE PROFILE



### Lindsey Reece

Sheffield Hallam University

10 PUBLICATIONS 6 CITATIONS

SEE PROFILE



### Simon Nichols

Sheffield Hallam University

12 PUBLICATIONS 17 CITATIONS

SEE PROFILE



### **Robert Copeland**

Sheffield Hallam University

**44** PUBLICATIONS **353** CITATIONS

SEE PROFILE

### Some of the authors of this publication are also working on these related projects:



Estimating changes in VO2peak within Cardiac Rehabilitation View project



The Active Everyday Project View project

# **Evaluation of Active For Health**

Frith, G., Roden, A., Atchinson, R., Copeland, R., Nichols, S., Reece, L.J.

Centre for Sport and Exercise Science, Sheffield Hallam University, Collegiate Hall, S10 2BP Rotherham Metropolitan Borough Council, Riverside House, S60 1QY National Centre for Sport and Exercise Medicine

BACKGROUND: "Active for Health" (AFH) is a robust physical activity (PA) and sport programme linking rehabilitation to community PA. The aim is to improve long term health and identify how PA pathways can contribute to the recovery from a long term condition (LTC). The purpose of this comprehensive evaluation is to understand the extent to which AFH is effective and cost effective in supporting and sustaining individuals into PA. It will also contribute to the existing PA evidence base around what is beneficial for patients and why. A mixed methods approach has been utilised and will:

- Recruit patients with LTCs across seven pathways including; stroke, cardiac, heart failure (HF), MSK, COPD, cancer, falls and fractures.
- Explore the impact of AFH on patient health and wellbeing at baseline, 3, 6 and 12 months capturing; quality of life (QoL), physical activity levels and patient activation.
- Capture participant experiences through qualitative interviews.

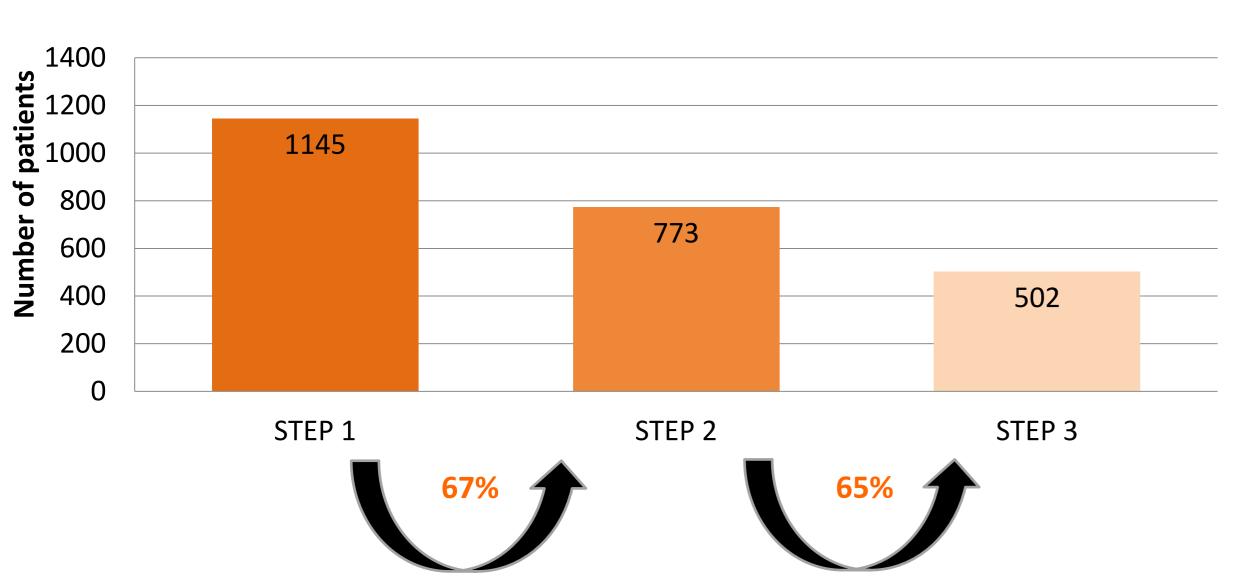
- Capture the feasibility and acceptability of AFH from the perspective of practitioners and key stakeholders.
- Evaluate utilisation of NHS services through patients self reported service use.
- Evaluate the process and project development through semi-structured interviews with all stakeholders, using a logic model at project start, 18 and 36 months.

ACTIVE FOR HEALTH - THE PROCESS: All pathways follow the same 3-step process; i) rehabilitation, ii) moving on and iii) keeping active. Initial referrals to STEP 2 are from rehabilitation services or a GP / Health professional.

- STEP 1 REHABILITATION: Lead exercise professionals will work directly with patients to motivate referrals from rehabilitation and acute services into AFH.
- STEP 2 MOVING ON: 12 week free programme of PA, tailored to the patient's condition.
- **STEP 3 KEEPING ACTIVE:** Patients are offered the opportunity to continue being active. These sessions will be suitable for their condition/abilities and aimed at continuing recovery.

**HEADLINE** OUTCOMES: Number of participants engaged in evaluation between November 2015 and June 2017 at baseline n = 695, 3 months n = 360, 6 months n = 224 and 12 months n = 78. This includes, 317 males and 378 females; the mean age was 65.44 years (SD = 13.55).

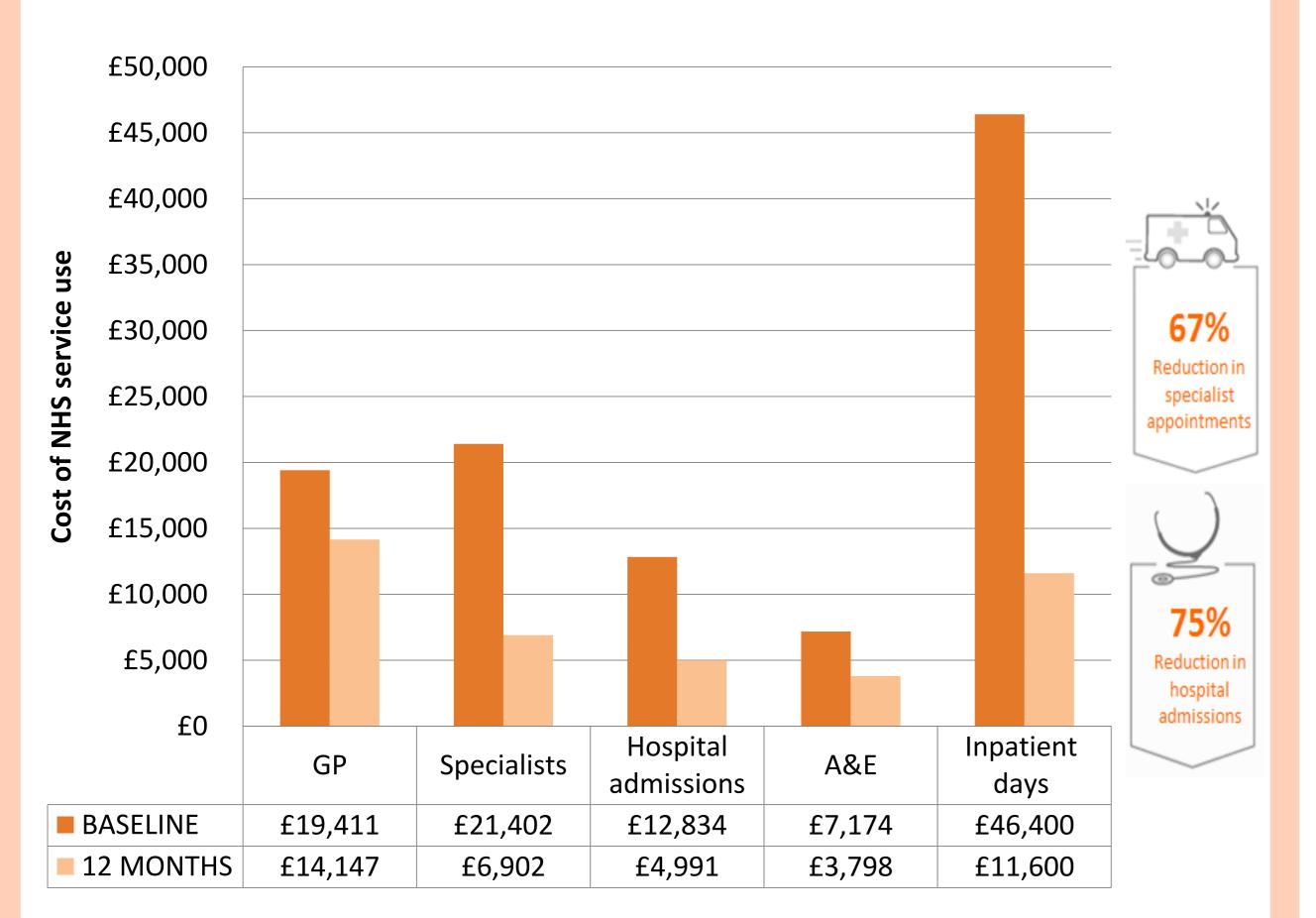
### The engagement of patients in the Active for Health programme between November 2015 to June 2017



# Use of healthcare services

- Costs of the 12 week programme were calculated for each participant (£105).
- Use of key healthcare services at baseline and 12 months were recorded including; GP visits, access to specialists, admission to A&E, admissions to hospital and inpatient days. An economic analysis was completed on 78 participants.
- Using the reference costs provided by the Department of Health (2016), cost per visit to these services was calculated. Use of healthcare services reduced considerably from baseline (£107,221) to 12 months (£41,428) resulting in a cost saving of £65,793 for 78 participants (£843.37 per participant).

# Costs to the NHS for use of healthcare services from baseline - 12 months



FUNCTIONAL

**SPORT** 

**ENGLAND** 

places \*\*
people

Rotherham

Sheffield

Hallam university and Exer

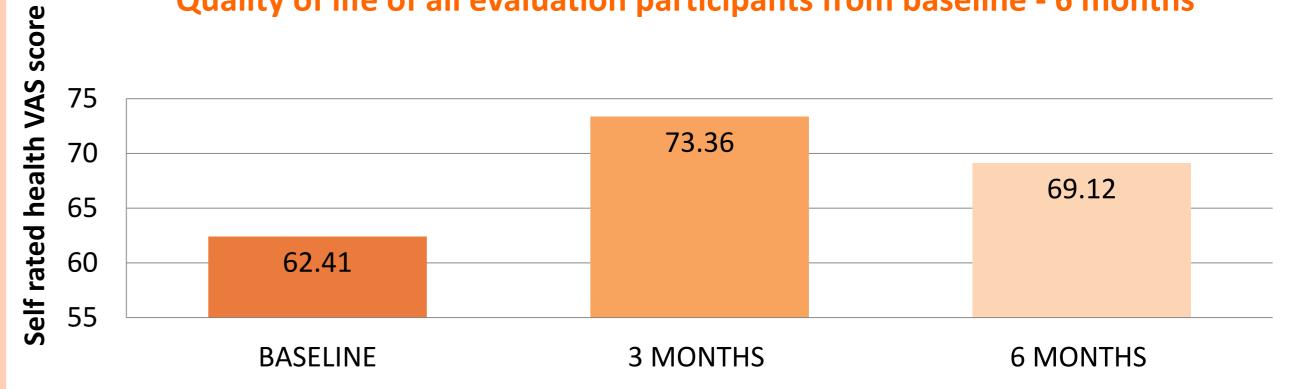
Centre for Sport

and Exercise

### **Quality of life**

- Quality of Life (QoL) scores are measured using the EQ-5D-3L. The EQ visual analogue scale (VAS) was implemented to measure self-rated health (0 = worst imaginable health through to 100 = best imaginable health).
- The QoL VAS score increased following the 12 week AFH programme, from baseline (62.41) to 3 months (73.36) and demonstrates a notable difference. At 6 months patients rated their health higher (69.12) than before they had engaged in AFH.

# Quality of life of all evaluation participants from baseline - 6 months



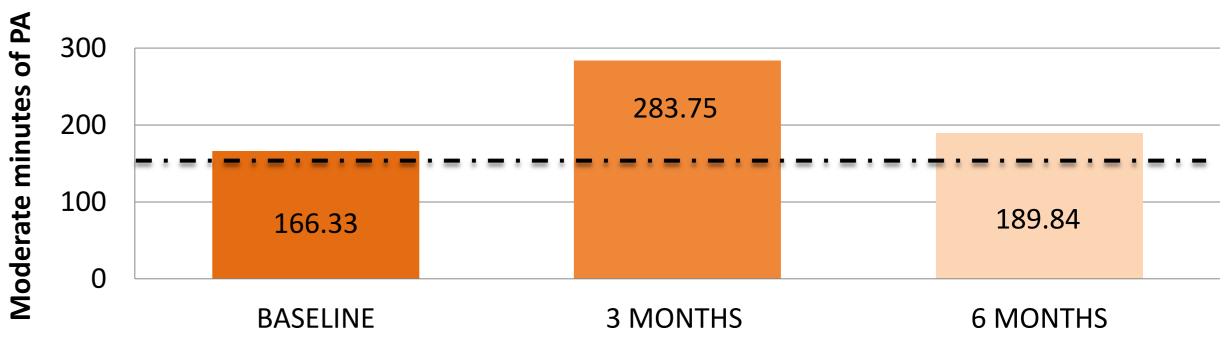
# Quality adjusted life years and costs to NHS

- The economic evaluation of 78 participants, showed significant improvements in mean VAS scores (p < 0.05) from 63.67 at baseline to 68.36 at 12 month follow-up. There was also an improvement of participants with optimal levels of QoL in their perceived mobility, usual activities, pain and anxiety/ depression from baseline to 12 months.
- Participants mean Quality Adjusted Life Years (QALY) showed significant improvements (p < 0.05) from 0.67 at baseline to 0.75 at 12 months.
- The Cost-savings per QALY gain was significantly higher at 12 month when compared to that at baseline (p < 0.05).
- The difference in Cost-savings per QALY (£1333.97) out-weighted the cost of exercise programme (£105) within 12 months, representing a significant change (p<0.05).
- The economic analysis will be re-evaluated on completion at 3 years when we have a larger sample of data.

# **Physical activity**

- Self-reported physical activity levels were measured using the IPAQ. Levels of moderate activity from baseline (166.33) to 3 months (283.75) show an increase.
- There is a decrease in moderate PA at 6 months (189.94); however a full analysis will be presented in December 2018 to infer any explanations for this. The dotted line represents the physical activity recommendations from the Chief Medical Officers (CMO, 2011) - 150 minutes moderate intensity activity per week.
- Research demonstrates that risk reductions for LTCs routinely occur when individuals meet or achieve above the CMO recommended physical activity guidelines.

## Average moderate activity IPAQ scores



# **PATIENT STORIES SO FAR:**

A number of case studies have captured some of the physical and psychosocial benefits found from patients attending the AFH programme including; increased confidence, increased mobility, improved energy levels and improved mental health. Initial findings offer a promising insight into the holistic impact of the AFH programme on patients' lives. A full report will be issued December 2018.



"My sciatica has not returned and my recovery and ongoing health is mostly down to my new exercise regime, I have not required any medication or prescriptions for any aches or pains in my body"

"I am able to stretch further in all directions and can exert myself more before becoming out of breath. I also recover faster from exercise and feel less aches and pains in my body"

"Attending the classes has given me more confidence to believe I might actually return to work"

# **CONTACT DETAILS:**

Gabbi Frith: Evaluation Researcher - g.frith@shu.ac.uk

Rebecca Atchinson: Active for Health Lead - Rebecca. Atchinson@rotherham.gov.uk

Amy Roden: Active for Health Project Co-ordinator - amy.roden@rotherham.gov.uk

REFERENCES: Davies, S., Burns, H., Jewell, T., & McBride, M. Start Active, Stay Active. A report on physical activity for health from the four home countries' Chief Medical Officers. 2011. Department of Health. (2016). Reference Costs. Retrieved from: https://www.gov.uk/government/uploads/system/uploads/system/uploads/attachment\_data/file/577083/Reference\_Costs\_2015-16.pdf

NATIONAL CENTRE FOR